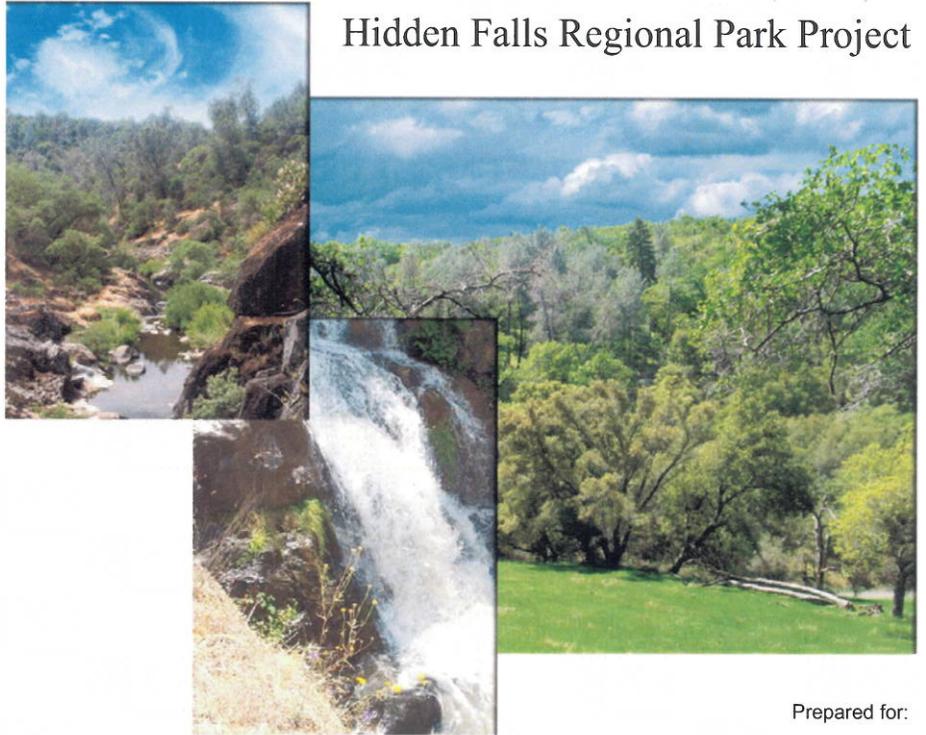


Public Draft
Environmental Impact Report

Hidden Falls Regional Park Project



Prepared for:
Placer County
Department of Facility Services
11476 C Avenue
Auburn, CA 95603

Attn: Andy Fisher
(530) 889-6819

Prepared by:
EDAW
2022 J Street
Sacramento, CA 95811

Contact:
Debra Bishop
Project Manager
916/414-5818

June 2009

EDAW | AECOM

TABLE OF CONTENTS

Chapter	Page
ACRONYMS AND ABBREVIATIONS	vi
1.0 INTRODUCTION	1-1
1.1 Type and Purpose of the Draft Environmental Impact Report	1-1
1.2 Scope of the EIR and Effects Found Not to be Significant	1-1
1.3 Definition of Baseline.....	1-4
1.4 Significance Criteria	1-4
1.5 Project Background and History.....	1-4
1.6 Definition of Terms	1-6
1.7 Project Review and CEQA Process	1-7
2.0 EXECUTIVE SUMMARY	2-1
2.1 Summary Description of the Proposed Project and Alternatives.....	2-1
2.2 Alternatives to the Proposed Project.....	2-4
2.3 Environmental Impacts and Mitigation	2-6
3.0 PROJECT DESCRIPTION.....	3-1
3.1 Project Location.....	3-1
3.2 Characteristics of the Project Area	3-1
3.3 Project Objectives	3-1
3.4 Description of the Proposed Project	3-5
3.5 Uses Not Addressed in this EIR	3-11
3.6 Trail and Facility Construction.....	3-12
3.7 Long-term Maintenance	3-13
3.8 Ongoing Management Activities.....	3-13
3.9 Intended Uses of this EIR.....	3-15
4.0 LAND USE AND AGRICULTURAL RESOURCES	4-1
4.1 Environmental Setting	4-1
4.2 Regulatory Setting	4-5
4.3 Impacts.....	4-9
4.4 Mitigation Measures	4-15
5.0 SOILS, GEOLOGY, AND SEISMICITY	5-1
5.1 Environmental Setting	5-1
5.2 Regulatory Setting	5-8
5.3 Impacts.....	5-11
5.4 Mitigation Measures	5-16
6.0 CULTURAL RESOURCES	6-1
6.1 Existing Conditions	6-1
6.2 Regulatory Setting	6-13
6.3 Impacts.....	6-16
6.4 Mitigation Measures	6-20

TABLE OF CONTENTS

Chapter	Page
7.0 VISUAL RESOURCES.....	7-1
7.1 Environmental Setting	7-1
7.2 Regulatory Setting	7-11
7.3 Impacts.....	7-12
7.4 Mitigation Measures	7-17
8.0 TRANSPORTATION AND CIRCULATION.....	8-1
8.1 Environmental Setting	8-1
8.2 Regulatory Setting	8-4
8.3 Impacts.....	8-5
8.4 Mitigation Measures	8-12
9.0 AIR QUALITY	9-1
9.1 Environmental Setting	9-1
9.2 Regulatory Setting	9-12
9.3 Impacts.....	9-23
9.4 Mitigation Measures	9-32
10.0 NOISE.....	10-1
10.1 Environmental Setting	10-1
10.2 Regulatory Setting	10-9
10.3 Impacts.....	10-14
10.4 Mitigation Measures	10-21
11.0 HYDROLOGY AND WATER QUALITY	11-1
11.1 Environmental Setting	11-1
11.2 Regulatory Setting	11-4
11.3 Impacts.....	11-8
11.4 Mitigation Measures	11-13
12.0 BIOLOGICAL RESOURCES.....	12-1
12.1 Environmental Setting	12-1
12.2 Regulatory Setting	12-21
12.3 Impacts.....	12-25
12.4 Mitigation Measures	12-32
13.0 PUBLIC SERVICES AND UTILITIES	13-1
13.1 Environmental Setting	13-1
13.2 Regulatory Setting	13-2
13.3 Impacts.....	13-4
13.4 Mitigation Measures	13-9
14.0 HAZARDOUS MATERIALS AND HAZARDS	14-1
14.1 Environmental Setting	14-1
14.2 Regulatory Setting	14-2
14.3 Impacts.....	14-5
14.4 Mitigation Measures	14-9

TABLE OF CONTENTS

Chapter	Page
15.0 OTHER CEQA-REQUIRED SECTIONS	15-1
15.1 Alternatives.....	15-1
15.2 Significant Environmental Effects that Cannot be Avoided.....	15-14
15.3 Significant Irreversible Environmental Changes.....	15-16
15.4 Growth-Inducing Effects	15-16
15.5 Cumulative Impacts.....	15-17
16.0 REPORT PREPARERS.....	16-1
16.1 Placer County, Department of Facility Services.....	16-1
16.2 EDAW, Inc — Prime Consultant	16-1
16.3 Kd Anderson—Traffic Engineering Consultant.....	16-1
16.4 Psomas—Civil Engineering Subconsultant.....	16-1
17.0 REFERENCES AND PERSONS CONSULTED	17-1
17.1 References	17-1
17.2 Persons Consulted.....	17-14

Appendices

A	Notice of Preparation
B	Traffic Report
C	Traffic Safety Report
D	Air Quality
E	Noise Modeling
F	Water Demand Calculation Report
G	Rare Plant Survey
H	Special-Status Wildlife Species with the Potential to Occur in the Hidden Falls Project Area and its Vicinity

Exhibits

3-1	Vicinity Map.....	3-2
3-2	Project Location Map	3-3
3-3	Big Hill Area Conservation Areas.....	3-4
3-4	Proposed Hidden Falls Park Features.....	3-6
4-1	Land Use Designations in the Project Vicinity	4-2
4-2	Zoning Designations in the Project Vicinity	4-4
4-3	Farmland Map	4-7
4-4	Williamson Act Contract Map.....	4-8
5-1	Project Area Topography	5-2
5-2	Soil Types in the Project Area.....	5-4

TABLE OF CONTENTS

Chapter	Page
<u>Exhibits - Continued</u>	
7-1a	View of Surrounding Areas to the West from the Existing Ranch House 7-2
7-1b	View of Surrounding Areas to the South from the Existing Ranch House 7-2
7-2	Nearby Ridgetop Home with Views into the Project Area 7-3
7-3	Key Observation Points Location Map 7-4
7-4	Simulated View of Facility Development Zone – View Looking Southeast from Key Observation Point 1 7-5
7-5	Simulated View of Facility Development Zone – View Looking Northeast from Key Observation Point 2 7-5
7-6	Simulated View of Facility Development Zone – View Looking North from Key Observation Point 3 7-6
7-7	Simulated View of Facility Development Zone – View Looking North from Key Observation Point 4 7-6
7-8	Simulated View of Facility Development Zone – View Looking Northwest from Key Observation Point 5 7-7
7-9	Simulated View of Facility Development Zone – View Looking Northwest from Key Observation Point 6 7-7
7-10	Simulated View of Facility Development Zone – View Looking West from Key Observation Point 7 7-8
7-11	Simulated View of Facility Development Zone – View Looking Southwest from Key Observation Point 8 7-8
7-12	Simulated View of Facility Development Zone – View Looking Southwest from Key Observation Point 9 7-9
7-13	Simulated View of Facility Development Zone – View Looking Southeast from Key Observation Point 10..... 7-9
7-14	Simulated View of Facility Development Zone – View Looking Southwest from Key Observation Point 11..... 7-10
8-1	Roadways in the Project Vicinity 8-2
10-1	Sound Wave Properties 10-1
10-2	Typical Noise Levels..... 10-3
10-3	Ambient Noise Measurement Locations 10-8
11-1	Watershed Hydrology Topo Map..... 11-2
12-1a	Vegetation Communities within the Spears Ranch Property 12-3
12-1b	Vegetation Communities Along Garden Bar Road and Access Road..... 12-5
12-2	Location of Brandegee’s Clarkia and Sierra Monardella in the Spears Ranch Property..... 12-13
15-1	Potential Adjoining Projects WP: this needs to be replaced 15-19
15-2	Daily Traffic Volumes without Proposed Project 15-24
15-3	Daily Traffic Volumes Year 2027 plus Proposed Project 15-25

TABLE OF CONTENTS

Chapter	Page
Tables	
1-1	Hidden Falls Trail Forum Members and Affiliations 1-5
2-1	Summary of Access Phasing 2-3
2-2	Summary of Environmental Impacts and Mitigation Measures 2-7
3-1	Summary of Park Access Phasing 3-8
3-2	Agency Roles and Responsibilities 3-15
5-1	Regional Fault Activity 5-6
5-2	Soil Grading Amounts by Facility Type 5-13
6-1	Native American Contacts Provided by the Native American Heritage Commission 6-8
6-2	Cultural Resources Documented during the Cultural Resources Surveys..... 6-9
6-3	Preliminary NRHP/CRHR Resource Eligibility..... 6-17
8-1	Existing Daily Traffic Volumes and Levels of Service..... 8-3
8-2	Existing Intersection Levels of Service..... 8-3
8-3	Level of Service Definitions..... 8-4
8-4	Trip Generation Forecast..... 8-9
8-5	Existing plus Project Peak Hourly Intersection Levels of Service..... 8-9
8-6	Existing plus Project Daily Traffic Volumes and Levels of Service..... 8-10
9-1	Summary of Annual Ambient Air Quality Data (2004–2006)..... 9-6
9-2	Summary of Ambient Air Quality Standards and Western Placer County Designations..... 9-7
9-3	Summary of Modeled Short-Term Daily Emissions of Criteria Air Pollutants and Precursors Associated with Project Construction (Unmitigated)..... 9-27
9-4	Summary of Modeled Long-Term Emissions Associated with Project Operation 9-29
10-1	Subjective Reaction to Changes in Noise Levels of Similar Sources 10-4
10-2	Human Response to Different Levels of Groundborne Vibration..... 10-6
10-3	Existing Ambient Noise Levels..... 10-7
10-4	Summary of Modeled Existing Vehicular Traffic Noise Levels..... 10-9
10-5	State Noise Compatibility Guidelines, by Land Use Category 10-10
10-6	Allowable L_{dn} Noise Levels Within Specified Zone Districts Applicable to New Projects Affected by or Including Nontransportation Noise Sources 10-11
10-7	Maximum Allowable Noise Exposure for Transportation Noise Sources 10-13
10-8	On-Site Sound Level Standards in the Placer County Noise Ordinance 10-14
10-9	Typical Construction-Equipment Noise Levels 10-16
10-10	Comparison of Modeled Existing and Existing Plus Project Vehicular Traffic Noise Levels..... 10-19
10-11	Typical Vibration Levels of Construction Equipment 10-20
10-12	Comparison of Modeled Existing and Existing Plus Project Plus Mitigation Measure Vehicular Traffic Noise Levels 10-21

TABLE OF CONTENTS

Chapter	Page
---------	------

Tables - Continued

12-1	Fish Present in Coon Creek and the ESC/NCC.....	12-8
12-2	Fish Sampling Results From Coon Creek (Spring 2005).....	12-9
12-3	Special-Status Plants Known or Potentially Occurring in the Project Area.....	12-12
12-4	Special-Status Fish and Wildlife Species with Potential to Occur in the Project Area.....	12-17
15-1	Summary of Alternatives Analysis.....	15-15
15-2	Background Traffic Growth.....	15-22
15-3	Year 2027 Cumulative Daily Traffic Volumes and Levels of Service.....	15-23
15-4	Cumulative (Year 2027) Intersection LOS.....	15-23
15-5	Comparison of Modeled Cumulative and Cumulative Plus Project Vehicular Traffic Noise Levels ...	15-28

ACRONYMS AND ABBREVIATIONS

40 CFR	Title 40 of the Code of Federal Regulations
AATCM	Airborne Toxic Control Measure
AB	Assembly Bill
ADT	average daily traffic
AG	Agriculture
APCO	Air Pollution Control Officer
AQAP	<i>Air Quality Attainment Plan</i>
AQMDs	air quality management districts
ARB	California Air Resources Board
ASTM	American Society for Testing and Materials
ATCM	airborne toxics control measure
-B	Building Site
BACT	best available control technology for toxics
Basin Plans	water quality control plans
BMP	best management practice
BOD	biochemical oxygen demand
CAA	federal Clean Air Act
CAAA	federal Clean Air Act Amendments of 1990
CAAQS	California ambient air quality standards
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CBC	California Building Code

CCAA	California Clean Air Act
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH ₄	methane
CHABA	Committee of Hearing, Bio Acoustics, and Bio Mechanics
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent
County	Placer County
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
dBA/DD	dBA per doubling of distance
dbh	diameter at breast height
DEIR	draft environmental impact report
Delta	Sacramento–San Joaquin Delta
DFG	Department of Fish and Game
DHS	Department of Health Services
DOC	California Department of Conservation
DPS	distinct population segment
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
eastbound	EB
EFH	essential fish habitat
EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act of 1973
ESC	East Side Canal
ESU	evolutionary significant unit
F	Farm
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FHWA-RD-77-108	Traffic Noise Prediction Model
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration

General Plan	Placer County General Plan
GHGs	greenhouse gases
GIS	geographic information system
GLO	General Land Office
GWP	global warming potential
HAPs	hazardous air pollutants
HEPA	High Efficiency Particulate Air
Hz	Hertz
in/sec	inches per second
KOPs	Key observation points
lb/day	pounds per day
L _{dn}	Day-Night Noise Level
L _{eq}	Equivalent Noise Level
LESA	Land Evaluation Site Assessment
L _{max}	Maximum Noise Level
L _{min}	Minimum Noise Level
LOS	level of service
L _x	Statistical Descriptor
M	magnitude
MACT	maximum available control technology for toxics
MCL	Maximum contaminant level
mgd	million gallons per day
MLD	Most Likely Descendant
MPN/100 ml	Most Probable Number per 100 milliliters
Mw	Moment Magnitude
N ₂ O	nitrous oxide
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NB	northbound
NCC	Natomas Cross Canal
NCIC	North Central Information Center
NEHRP	National Earthquake Hazards Reduction Program
NEHRPA	National Earthquake Hazards Reduction Program Act
NESHAP	national emissions standards for HAP
NID	Nevada Irrigation District
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO ₂	nitrogen dioxide
NOP	notice of preparation
NO _x	oxides of nitrogen

NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OAP	<i>Ozone Attainment Plan</i>
°F	Fahrenheit
OSHA	Occupational Safety and Health Administration
ozone	photochemical smog
PAH	polycyclic aromatic hydrocarbons
Park	Hidden Falls Regional Park
PCAPCD	Placer County Air Pollution Control District
PCCP	Placer County Conservation Plan
PCEHD	Placer County Environmental Health Division
PG&E	Pacific Gas and Electric Company
Placer Legacy Program	Placer Legacy Open Space and Agricultural Preservation Program
PM ₁₀	respirable particulate matter
PM _{2.5}	Fine particulate matter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppm	part per million
PPV	peak particle velocity
PRC	Public Resources Code
proposed project, or project	Hidden Falls Regional Park Project
RCRA	Resource Conservation and Recovery Act of 1976
RMS	root mean square
ROG	reactive organic gases
RWD	report of waste discharge
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SENL	Single Event [Impulsive] Noise Level
SFNA	Sacramento Federal Nonattainment Area
SIP	state implementation plan
SO ₂	sulfur dioxide
southbound	SB
SO _x	oxides of sulfur
SR	State Route
SRA	Shaded riverine aquatic
SVAB	Sacramento Valley Air Basin
SWRCB	State Water Resources Control Board
T	Timberland
TAC	toxic air contaminant
TAG	Trail Advisory Group

TCM	transportation control measure
tpy	tons per year
TSS	total suspended solids
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VdB	velocity decibels
VMT	vehicle miles traveled
VOC	volatile organic carbon
WDR	Waste Discharge Requirements
WWTP	Wastewater Treatment Plant
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
$\mu\text{in}/\text{sec}$	microinch per second

1.0 INTRODUCTION

This document is a draft environmental impact report (EIR) on the proposed Hidden Falls Regional Park Project (proposed project, or project). It has been prepared by the Placer County (County) Department of Facility Services in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (14 California Code of Regulations [CCR] Section 15000 et seq.). As specified in Section 15367 of the State CEQA Guidelines, the public agency that has the principal responsibility for carrying out or approving a project is the lead agency for CEQA compliance. The County is the lead agency under CEQA, because it has the principal responsibility for approving and carrying out the project and is the primary source of funding and grant recipient for funding of the proposed project. The County Planning Commission is responsible for certifying and approving the EIR for the proposed project. This document has been prepared in accordance with the County Planning Department's format for EIRs (Placer County 2006).

1.1 TYPE AND PURPOSE OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

1.1.1 TYPE OF EIR

In accordance with Section 15161 of the State CEQA Guidelines, this document is a project EIR that examines the environmental impacts of a specific proposed project. As a project EIR, this document examines the potential environmental effects of all phases of the project: planning, construction, and operation.

1.1.2 PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

A state or local public agency must comply with CEQA when it undertakes an activity that may cause a direct physical change in the environment or a reasonably foreseeable indirect change in the environment. The County has prepared this EIR to meet the requirements of CEQA. An EIR is an informational document used to inform agency decision makers and the general public of any significant environmental effects of a project, identify feasible ways to mitigate the significant effects, and describe reasonable alternatives to the project that can reduce environmental impacts. As required by CEQA, the County will consider the information presented in the EIR when determining whether to approve the proposed project.

1.2 SCOPE OF THE EIR AND EFFECTS FOUND NOT TO BE SIGNIFICANT

1.2.1 SCOPE AND ORGANIZATION OF THIS ENVIRONMENTAL IMPACT REPORT

Pursuant to CEQA and the State CEQA Guidelines, a lead agency shall focus an EIR's discussion on significant environmental effects and may limit discussion on other effects to brief explanations about why they are not significant (PRC Section 21002.1, State CEQA Guidelines Section 15143). Furthermore, indication of the manner in which significant impacts can be feasibly mitigated or avoided is included among the purposes of an EIR. A determination of which impacts would be potentially significant was made for this project based on review of the information presented in the 2005 initial study prepared for the project, comments received as part of the public review process for the project, and additional research and analysis of relevant project data by environmental professionals.

SCOPE OF THIS ENVIRONMENTAL IMPACT REPORT

This EIR presents an analysis of a range of environmental impact topics associated with implementation of the proposed project. The County has determined that the proposed project has the potential to result in environmental impacts on the following resources, which are addressed in detail in this EIR:

- ▶ Land Use and Agricultural Resources (Chapter 4.0)
- ▶ Soils, Geology, and Seismicity (Chapter 5.0)
- ▶ Cultural Resources (Chapter 6.0)
- ▶ Visual Resources (Chapter 7.0)
- ▶ Transportation and Circulation (Chapter 8.0)
- ▶ Air Quality (Chapter 9.0)
- ▶ Noise (Chapter 10.0)
- ▶ Hydrology and Water Quality (Chapter 11.0)
- ▶ Biological Resources (Chapter 12.0)
- ▶ Public Services and Utilities (Chapter 13.0)
- ▶ Hazardous Materials and Hazards (Chapter 14.0)

ORGANIZATION OF THIS DOCUMENT

This EIR is organized as follows:

Chapter 1.0, “Introduction,” summarizes the purpose, need, objectives, and scope of the proposed project; describes the purpose of the EIR and provides an overview of the environmental review process for the project; discusses agency roles and authorities; and provides details on project scoping.

Chapter 2.0, “Summary,” summarizes the conclusions of the environmental analysis.

Chapter 3.0, “Project Description,” describes the project’s location; discusses the project’s background, history, and objectives; and explains the components and features of the proposed project, including construction techniques and schedule.

Chapter 4.0, “Land Use and Agricultural Resources,” describes the environmental setting, regulatory setting, and impacts of the proposed project on land use, planning, and agricultural resources.

Chapter 5.0, “Soils, Geology, and Seismicity,” describes the environmental setting, regulatory setting, and impacts of the proposed project on soils, geology, and seismicity and provides mitigation measures for potentially significant effects.

Chapter 6.0, “Cultural Resources,” describes the environmental setting, regulatory setting, and impacts of the proposed project on cultural resources and provides mitigation measures for potentially significant effects.

Chapter 7.0, “Visual Resources,” describes the environmental setting, regulatory setting, and impacts of the proposed project on aesthetics and visual resources and provides mitigation measures for potentially significant effects.

Chapter 8.0, “Transportation and Circulation,” describes the environmental setting, regulatory setting, and impacts of the proposed project on traffic and transportation and provides mitigation measures for potentially significant effects.

Chapter 9.0, “Air Quality,” describes the environmental setting, regulatory setting, and impacts of the proposed project on air quality and provides mitigation measures for potentially significant effects.

Chapter 10.0, “Noise,” describes the environmental setting, regulatory setting, and impacts of the proposed project related to noise and provides mitigation measures for potentially significant effects.

Chapter 11.0, “Hydrology and Water Quality,” describes the environmental setting, regulatory setting, and impacts of the proposed project on hydrology and water quality and provides mitigation measures for potentially significant effects.

Chapter 12.0, “Biological Resources,” describes the environmental setting, regulatory setting, and impacts of the proposed project on biological resources and provides mitigation measures for potentially significant effects.

Chapter 13.0, “Public Services and Utilities,” describes the environmental setting, regulatory setting, and impacts of the proposed project on public services and utilities and provides mitigation measures for potentially significant effects.

Chapter 14.0, “Hazardous Materials and Hazards,” describes the environmental setting, regulatory setting, and impacts of the proposed project on hazardous materials and hazards and provides mitigation measures for potentially significant effects.

Chapter 15.0, “Other CEQA Sections,” describes the alternatives considered and eliminated for the proposed project; alternatives selected for further analysis, and the evaluation of the environmental effects of those alternatives; significant unavoidable effects on the environment; irreversible or irremediable commitments of resources; growth-inducing effects; and cumulative impacts.

Chapter 16.0, “Report Preparers,” lists individuals who participated in the preparation of this EIR, presented according to organization and agency.

Chapter 17.0, “References and Persons Consulted,” lists the sources of information cited throughout this EIR.

1.2.2 EFFECTS FOUND NOT TO BE SIGNIFICANT

Based on preliminary environmental review of the project, it was determined that the proposed project would not result in significant impacts in three resource areas. Therefore, the following resource areas do not require further analysis in this EIR:

- ▶ Population, Employment, and Housing
- ▶ Mineral Resources
- ▶ Recreation

These resource areas are described briefly below.

POPULATION, EMPLOYMENT, AND HOUSING

The proposed project would not involve the construction of new homes or businesses or the extension of new roads or infrastructure serving residential or job-forming uses. It would not involve the displacement of any existing housing, including affordable housing. The proposed project would not result in the disruption or division of an established community, including low-income or minority communities. Implementation of the proposed project would occur in phases, and work would be performed by one or more crews from the California Conservation Corps, licensed contractors, volunteers, and/or County staff. These activities would generate short-term employment opportunities; however, the work would be temporary and occur over several years, with certain activities starting and stopping for shorter durations within that time period. Because of the limited number and type of jobs that would be generated and the temporary nature of those jobs, the proposed project would have very little effect on employment in the region. Therefore, the proposed project would have little to no effect on population, employment, or housing. These topics will not be discussed further in this EIR.

MINERAL RESOURCES

The proposed project would not result in the loss of any known mineral resources, nor would it impede or interfere with the establishment or continuation of existing mineral extraction operations, and the project area is not delineated as a locally important mineral recovery site. It would not result in the loss of available known

mineral resources that would be of value to the region or residents of the state. Given these findings, implementation of the proposed project would have no effect with regard to mineral resources; therefore, mineral resources will not be discussed further in this EIR.

RECREATION

The proposed project would provide more opportunities for recreation within the county. The majority of the project area is not currently used for recreation, and the only existing recreational use in the project vicinity is the Didion Ranch portion of Hidden Falls Regional Park (Park). The proposed facilities would connect to the Didion Ranch portion of the Park once completed and, therefore, would provide a larger trail system than currently exists. Because the proposed project involves construction of regional-park facilities, it would not cause an increase in use of any existing neighborhood or regional parks, and it has the potential to alleviate overuse of other parks in the county. The environmental effects of constructing the recreational facilities associated with the proposed project are the subject of this EIR. Additionally, the proposed project would not require the construction or expansion of other recreational facilities not discussed in this EIR. Therefore, the proposed project would have a beneficial effect on recreational opportunities within the county and create no adverse effects on other recreation resources. Given these factors, recreation will not be discussed further in this EIR.

1.3 DEFINITION OF BASELINE

According to Section 15125 of the State CEQA Guidelines, baseline conditions are normally defined as the physical environmental conditions in the vicinity of the project as they exist at the time that the notice of preparation (NOP) is published. Therefore, for the purposes of this document the baseline conditions are defined as the conditions that existed in the project vicinity as of June 2007. This baseline condition was used as the basis for determining the level of significance of impacts of the proposed project.

1.4 SIGNIFICANCE CRITERIA

Placer County's CEQA checklist and the environmental checklist in Appendix G of the State CEQA Guidelines were the primary sources of environmental questions considered in developing significance criteria for this EIR. Significance criteria for each resource area are listed under the impacts heading in each chapter (Chapters 4.0 through 14.0).

1.5 PROJECT BACKGROUND AND HISTORY

1.5.1 PROJECT BACKGROUND

The entire Hidden Falls Regional Park, when completed, would include two adjoining properties, Spears Ranch and Didion Ranch. Together, these two adjoining parcels would make up the 1,200-acre Park. On December 23, 2003, Placer County acquired the 979-acre¹ Spears Ranch, and on November 5, 2004, the County acquired the 221-acre Didion Ranch through the Placer Legacy Open Space and Agricultural Conservation Program (Placer Legacy Program) for park and open space purposes. The Placer Legacy Program was created in 2000 to implement the open space and natural resource goals and policies of the *Placer County General Plan* (General Plan) and to allow the community to retain its unique natural heritage, minimize conflicts between conservation and economic development, and enhance the prosperity of current and future residents.

The Didion Ranch portion of the Park was opened to the public in October 2006 and includes approximately 7 miles of natural surface trails available for non motorized multiple-use, a concrete handicapped accessible trail, a paved access road via Mears Drive, a 50-stall paved parking lot, gravel equestrian parking area, restroom, picnic

¹ The acreage for Spears Ranch has been updated from 961 acres to 979 acres based on more accurate assessor's parcel information. The project boundary has not been modified.

areas, 12,000-gallon emergency water storage tank and hydrant, helistop, informational kiosks, and directional signage.

The Placer Legacy Program and all associated actions operate under the following guidelines:

- ▶ All actions are voluntary; only willing buyers and willing sellers participate.
- ▶ The Placer Legacy Program is based on the existing General Plan and community plans and therefore does not require land-use or zoning changes.
- ▶ The program is non-regulatory; no new regulations will be adopted to meet the objectives of the program.

Presently, a number of ongoing land management and maintenance activities are being performed throughout the Hidden Falls property including establishment of shaded fuel breaks, perimeter access clearing, ranch road maintenance and stabilization, and cattle management by the former owner of the Spears Ranch.

The proposed trail system on the Spears Ranch portion of the Park is based, in part, on input from the Hidden Falls Trail Forum. Members of the Trail Forum and their affiliations are described below in Table 1-1.

Table 1-1 Hidden Falls Trail Forum Members and Affiliations	
Name	Affiliation
Kathy Dombrowski	Loomis Basin Horseman’s Association
Pat Gibbs	Loomis Basin Horseman’s Association
Jim Haagen-Smit	IMBA/FATRAC
Kathy Haagen-Smit	IMBA/FATRAC
Doug Houston	IMBA/FATRAC
Jim Howard	California Conservation Corps/High School Cross Country Coach
Janet Peterson	Action Coalition for Equestrians
Jessica Pierce	Placer Land Trust
Clark Smith	Sun City Lincoln Hills Hiking Club
Jim Crowfoot	Sun City Lincoln Hills Hiking Club
Phil Hendricks	EDAW Trail Specialist
Sandy Spurgeon	Placer County Department of Facility Services Parks and Grounds Division
Andy Fisher	Placer County Department of Facility Services Parks and Grounds Division
Source: Placer County 2008	

1.5.2 HISTORY OF ENVIRONMENTAL REVIEW AND AREAS OF CONTROVERSY

In September 2004, a mitigated negative declaration was adopted for the Didion Ranch portion of the Park to satisfy the requirements of CEQA. Therefore, existing uses on the Didion Ranch portion of the Park are not included as part of the proposed project in this EIR. However, because expansion of the Didion Ranch parking area and relocation of the existing helistop are modifications to existing uses within the Park, they will be covered in this EIR. In 2006, the County initiated the environmental review process for the proposed project and prepared a preliminary initial study.

To further evaluate potential significant environmental effects associated with the proposed project, the County decided to prepare an EIR for the project pursuant to CEQA. The County issued the NOP on June 16, 2007, to inform public agencies and the general public of its intention to prepare an EIR on the proposed project. The NOP included a brief project description, a summary of the scoping and public-review process, and an outline of the probable environmental impacts of the proposed project. The NOP was mailed to 613 property owners in the vicinity of the Park. The County held a public scoping and informational meeting on June 28, 2007, in Auburn, California. The comments presented at the meeting were used by the County in determining the scope and content of this EIR. Appendix A of this EIR contains a copy of the NOP.

COMMENTS AND AREAS OF CONTROVERSY

The following list presents the main topics of concern raised during the NOP scoping process and the chapters of this EIR in which these issues are addressed:

- ▶ Traffic and safety along Garden Bar Road (Chapter 8.0)
- ▶ Increased risk of wildfire (Chapter 14.0)
- ▶ Public safety related to hunting (Chapter 14.0)

As provided in law, CEQA analyses focus on the physical environmental effects of a project, not the social or economic effects, unless the social and economic effects lead indirectly to a physical change in the environment (State CEQA Guidelines Section 15064[e]). The analyses included in Chapters 4.0 through 14.0 of this EIR address both direct and indirect effects related to the potential physical effects of the project. Comments that address management issues (e.g., trespassing, illegal activity) are discussed in Chapter 3.0, "Project Description."

In addition to the CEQA scoping process, County staff presented information on the proposed project and received comments at 13 Municipal Advisory Council meetings throughout western Placer County in the summer and fall of 2007. The proposed project was generally well received by the Municipal Advisory Council members with questions predominantly concerning the timing of Park availability to the public and the nature of amenities to serve respective user groups. Questions and comments at the Rural Lincoln Municipal Advisory Council included concerns similar to those expressed during the CEQA scoping process.

1.6 DEFINITION OF TERMS

This EIR uses several standard terms as follows:

- ▶ *Reservation-based Event* is an organized function consistent with passive recreation and/or educational purposes conducted in the Park involving fewer than 200 people on-site at a given time, not including regular use of the Park. Reservation-based events would be regulated by the Placer County Parks Division Reservation System. Reservation-based events are also differentiated from daily use and would be held by groups applying for a reserved portion of the Park. The County would provide 2 weeks notification to CalFire of any events that would have greater than 30 vehicles and/or between 100 and 200 participants. Daily use groups not requesting reserved portions of the Park would not be considered events. The number of participants would, however, be restricted as a result of parking limitations.
- ▶ *Large event* is an organized function conducted within the Park involving more than 200 people on-site at any given time, not including regular use of the Park. Size, timing, duration, and other variables related to these events are not known at this time, therefore, consistent with other County Park operations, these would be required to obtain a Temporary Event Permit from the County and would undergo separate environmental review prior to authorization of the large event. Parking would also be a limiting factor for large events.
- ▶ *Didion Ranch parking area expansion* includes expansion of the existing parking area on the Didion Ranch portion of the Park from 55 parking spaces (i.e., 50 for cars, five for trucks and trailers) to 82 (i.e., up to 25

additional paved stalls and 12 additional truck and trailer spaces), and relocation of the existing helistop adjacent to the parking area immediately south of the existing helistop.

- ▶ *Proposed project* is the set of actions proposed to be carried out in Hidden Falls Regional Park Project, which would involve improvement of access, the Didion Ranch parking area expansion, construction and maintenance of multiple-use, natural-surface trails, and implementation of other recreational facilities within the Spears Ranch portion of Hidden Falls Regional Park.
- ▶ *Park* is Hidden Falls Regional Park (Spears Ranch and Didion Ranch).
- ▶ *Project area* is the 979-acre Spears Ranch portion of the Park, Garden Bar Road from Mt. Pleasant Road to the Park entrance, and the parking area in the Didion Ranch portion of the Park.
- ▶ *No impact* means no change from existing conditions.
- ▶ *Less-than-significant impact* means no substantial adverse change in the physical environment. (No mitigation measures are needed.)
- ▶ *Potentially significant impact* means a potential effect that may cause a substantial adverse change in the environment. (Mitigation is recommended, because potentially significant impacts are treated in the same way as significant impacts in the CEQA process.)
- ▶ *Significant impact* means a substantial adverse change in the physical environment. (Consideration of feasible mitigation is required.)
- ▶ *Significant and unavoidable impact* means a substantial adverse change in the physical environment that cannot feasibly be avoided, even with the implementation of all feasible mitigation.

1.7 PROJECT REVIEW AND CEQA PROCESS

1.7.1 AGENCY REVIEW AND CEQA PROCESS

This EIR will be used by the County and other agencies to fulfill the requirements of CEQA. It will also be used as an informational document by other federal, state, and local agencies that may have a direct interest in the proposed project. The County has the principal responsibility for approving and carrying out the project and for ensuring that the requirements of CEQA have been met; therefore, it is the lead agency under CEQA. The County is also the agency with the first discretionary action of the proposed project and is the primary recipient of funding for the project.

A CEQA responsible agency is a public agency that proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or Negative Declaration. Responsible agencies include all public agencies other than the lead agency which have discretionary approval power over the project (State CEQA Guidelines Section 15381). State responsible agencies that may issue permits on or review the proposed project are the Central Valley Regional Water Quality Control Board and California Department of Fish and Game.

CEQA defines certain trustee agencies as those that have state-mandated responsibilities for natural resources that are held in trust for the people of California (State CEQA Guidelines Section 15386). In addition to its role as a responsible agency for streambed alteration agreements, the California Department of Fish and Game is a trustee agency that has jurisdiction over natural resources in the state that could be affected by the project, including the state's fish and wildlife resources and designated rare or endangered native plants.

Federal agencies that may issue permits on the proposed project or review the proposed project are the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and U.S. Army Corps of Engineers.

1.7.2 PUBLIC REVIEW PERIOD

This EIR is being distributed to agencies and individuals to ensure that interested parties have an opportunity to express their comments about the potential environmental effects of the proposed project, and to ensure that information pertinent to project approval is provided to agency decision-makers. This EIR is being distributed for a 45-day review period through July 31, 2009. Comments on the EIR should be sent to the following address no later than 5 p.m. on July 31, 2009:

Maywan Krach
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603
(530) 745-3132
Fax (530) 745-3003

Comments may also be submitted by e-mail to <cdraecs@placer.ca.gov>. If comments are provided via e-mail, please include the project title in the subject line, attach comments in Microsoft Word format, and include the commenter's U.S. Postal Service mailing address.

Paper copies of the document are also available for review at the County offices, Auburn Library, Lincoln Library, and Placer County Clerk-Recorder's Office at the following addresses:

Auburn Library
350 Nevada Street
Auburn, CA 95603

Placer County Clerk-Recorder's Office
2954 Richardson Drive
Auburn, CA 95603

Lincoln Library
590 Fifth Street
Lincoln, CA 95648

Placer County Department of Facility Services Office
2855 2nd Street
Auburn, CA 95603

Electronic copies of the EIR can be downloaded from the County's website at:
<http://www.placer.ca.gov/CommunityDevelopment/EnvCoordSvcs/EnvDocs.aspx>

2.0 EXECUTIVE SUMMARY

2.1 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT AND ALTERNATIVES

SUMMARY OF PROPOSED PROJECT

The Hidden Falls Regional Park Project (proposed project, or project) involves access and passive recreation improvements at a regional park proposed by the Placer County (County) Department of Facility Services. The County has the principal responsibility for approving and carrying out the proposed project and is the primary source of funding for the proposed project. The proposed project would include improvement of access, and construction of a multiple-use, natural-surface trail system and other passive recreational facilities that would be located within Hidden Falls Regional Park (Park). The Park is located in Placer County between north Auburn and the City of Lincoln.

It is anticipated that project features would be constructed in phases as funding becomes available. Specific features and uses that are proposed as part of the project are as follows:

1. Approximately 14 miles of new multiple-use, natural-surface trails in addition to more than 10 miles of existing ranch roads for hikers, mountain bikers, and equestrians within the Spears Ranch portion of the Park. Exhibit 3-4 depicts the planned trail system designed by County staff and consultants with input from the Hidden Falls Trails Forum. This trail map would guide initial construction. However, this project anticipates the ability of the County to make adjustments to the trail network to promote desirable user patterns and other operational needs subject to avoidance of sensitive areas and adherence to applicable permit requirements;
2. Trail and bridge connections to other public trails near the Park property (in addition to the trail network constructed on-site);
3. American's with Disabilities (ADA) accessible trails including access for ADA vehicles;
4. Development of a nature/cultural education/commercial kitchen/conference center at the existing ranch house or other suitable location within the facility development zone;
5. Bridge crossings over Coon Creek and other drainages to support the trail network, provide emergency access, and connect to the existing trail system within the Didion Ranch portion of the Park;
6. Culvert and rock-lined stream crossings over intermittent drainages to support the trails network;
7. Permanent restroom facilities with low-flow toilets, portable, holding tank and/or vault type restroom facilities, and associated septic/water systems and pipelines in addition to existing facilities and septic systems, as required to accommodate Park uses;
8. Groundwater wells for drinking water and restrooms in addition to the existing facilities, as required to accommodate Park needs;
9. Fire suppression facilities including helistops (i.e., flat unpaved area for emergency helicopter landing) and an emergency water system;
10. Equestrian facilities (e.g., horse watering facilities, hitching posts);
11. Picnic areas throughout the Park to accommodate use, including covered pavilions;

12. Benches and rest areas throughout the Park;
13. Enclosed bear-proof trash receptacles throughout the Park to accommodate use;
14. Suitable landscaping around parking areas and restrooms;
15. Improvements to facilitate public access to viewing areas (e.g., pond-side boardwalk);
16. A disc golf course may be developed that would generally coincide with areas of shaded fuel breaks and other upland areas where the foot traffic pattern would not impact sensitive areas and/or would be beneficial to ongoing vegetation management/fire risk reduction objectives;
17. Drinking fountains;
18. Designated fishing locations along Coon Creek and/or ponds developed in coordination with the California Department of Fish and Game (DFG);
19. New fishing ponds developed in conjunction with the fuel load reduction and/or grazing plans and in coordination with DFG;
20. Film and theater production, subject to County Film Permit requirements;
21. Managed hunting of legal game during times of Park closure. Hunting would be allowed for up to two 2-day seasons per year with 10 hunting permits being issued per season or through depredation permits (e.g., for feral pigs);
22. Interpretive programs, including signage, displays, and/or guided tours;
23. A group camping area with one or more formalized fire pits, a group tent area, and/or bunkhouses for scheduled, supervised overnight use within the facility development zone;
24. Support restoration of various habitats within the Park;
25. Construction of parking areas for automobiles and horse trailers and expansion of the Didion Ranch parking area;
26. Use of the Park for grazing, educational classes, camps and field trips, and
27. Reservation-based events consistent with passive recreation and nature enjoyment such as cross-country training and meets. Reservation-based events with an aggregate of less than 200 people on-site at any given time not including regular use of the Park, would obtain reservations through the standard reservation system of the Placer County Parks Division. The County Parks Reservation System would work to ensure that event traffic in combination with day use traffic would not exceed parking capacity. To that end, event reservations may include exclusion of events during times of peak day use, restrictions on the number and type of vehicles attending events, or other suitable measures. Any large events that would exceed the capacity of the on-site restrooms would need to supply portable toilets, and large events that exceed 200 individuals on-site at any given time or exceed parking capacity would be required to obtain a Temporary Event Permit from the County Community Development Resources Agency. Size, timing, duration, and other variables related to these large events are not known at this time, therefore, consistent with other County Park operations, these would undergo separate environmental review as part of the permit application process.

Vehicle access to the Park would be expanded in phases as funding becomes available. Prior to allowing expanded vehicle access for each phase, the corresponding road and parking improvements would be completed as described in Table 2-1.

Table 2-1 Summary of Park Access Phasing	
Permitted Access	Corresponding Improvements
PHASE 1	
<ul style="list-style-type: none"> ▶ Trail and emergency access system would be completed throughout the Park and opened for daily public use via existing Mears entrance ▶ Daily public vehicle access would be restricted to existing Mears entrance ▶ Didion Ranch parking area would be expanded from 55 parking spaces to up to 82 parking spaces (i.e., up to 25 additional paved stalls and 12 additional truck and trailer spaces) including relocating the adjacent helistop. ▶ Garden Bar entrance would continue to be used by County employees, tenants, contractors, consultants, utility providers, maintenance trucks, fire and law enforcement personnel without additional improvements ▶ Development of existing ranch house may proceed during Phase 1 ▶ Occasional classroom sized groups would be permitted to access site through Garden Bar entrance on appointment basis (gates would be opened and closed behind groups) ▶ A handicap-placard-only parking area may be constructed near the emergency access bridge. Park use would be regulated through the Placer County Parks Division reservation system. 	<ul style="list-style-type: none"> ▶ Prior to allowance of classroom sized groups, a new public access gate and approximately 200 feet of connecting road to existing access road would be constructed at the intersection of Garden Bar Road near the existing access road (as applicable per the terms of the Purchase and Sale Agreement with the Spears family). ▶ Prior to allowance of classroom sized groups, a 48 inch high 12.5-gauge woven wire field fence would be constructed along both sides of access road between Garden Bar Road and Park entrance (as applicable per the terms of the Purchase and Sale Agreement with the Spears family). ▶ Prior to allowance of classroom sized groups, two cattle guards would be installed at each end of the access road between Garden Bar Road and the Park entrance (as applicable per the terms of the Purchase and Sale Agreement with the Spears family). ▶ Up to 25 additional paved parking stalls and up to 12 additional equestrian parking stalls may be developed at the existing Mears entrance (Placer County 2003).
PHASE 2	
<p>In addition to Phase 1 Access:</p> <ul style="list-style-type: none"> ▶ Daily public automobile access would be allowed to the new parking area at western end of property via Garden Bar Road. ▶ Equestrian trailers would be excluded from the western parking area and from entering the Park via Garden Bar Road. Equestrians would continue to enter the Park via Mears entrance. ▶ Reservation-based events consistent with passive recreation and education with 200 attendees or less at one time would be allowed by County Parks Division reservation. ▶ Use of ranch house for educational and/or meeting purposes would remain regulated by County Parks Division reservation system and/or use agreements. 	<p>In addition to Phase 1 Improvements:</p> <ul style="list-style-type: none"> ▶ New parking area would be constructed at western end of property to include 50 stall paved parking lot and gravel overflow area. ▶ Widen Garden Bar Road from Mt. Pleasant Road to access road to 18 feet of hard surface with 2-foot shoulders where feasible subject to County review and approval. ▶ Vertical curves along Garden Bar Road would be improved in accordance with traffic safety report recommendations subject to County review and approval. ▶ Signing and striping improvements along Garden Bar Road would be made in accordance with traffic safety report recommendations subject to County review and approval. ▶ Improve the access road from Garden Bar Road to the western parking area to 24 feet wide all weather surface with 2 foot shoulders where feasible subject to County review and approval 1. ▶ Install a gate between the western parking area and the ranch house to prevent unrestricted vehicle access beyond parking area into remainder of property.

PHASE 3	
<p>In addition to Phase 1 and 2 Access:</p> <ul style="list-style-type: none"> ▶ Daily public access for equestrian trailers would be allowed to the western parking area via Garden Bar Road. 	<p>In addition to Phase 1 and 2 improvements:</p> <ul style="list-style-type: none"> ▶ A gravel equestrian staging area would be constructed adjacent to the new paved parking area to allow parking for up to 20 horse trailers. ▶ Widen Garden Bar Road from Mt. Pleasant Road to the access road to 20 feet of hard surfacing with 2-foot shoulders where feasible subject to County review and approval. ▶ Horizontal curves along Garden Bar Road would be improved in accordance with traffic safety report recommendations subject to County review of improvement plans.
<p>¹ In areas along Garden Bar Road and the access road from Garden Bar Road to the Park entrance where the County determines that status trees, significant rock outcroppings, and other valuable natural features within the proposed widening corridor should be preserved, or where adequate road right-of-way does not currently exist and is not obtainable through market value based willing seller negotiations, alternatives such as turnouts, striping, and/or signage may be considered and approved in lieu of full width widening for those discreet areas.</p>	

Based on current usage patterns and estimated increase in usage corresponding to expanded amenities, it is anticipated that the project could generate as many as 128 weekday and 230 weekend vehicle round trips per day.

PROJECT LOCATION

The proposed project would occur between north Auburn and the City of Lincoln in Placer County, in the Sierra Nevada foothills approximately 40 miles northeast of Sacramento. The approximately 1,200-acre Park consists of the properties formerly known as Spears Ranch (979 acres) and Didion Ranch (221 acres). The project area is situated along Coon Creek and is south of the Bear River. Garden Bar Road is located to the west; Mt. Vernon and Mt. Pleasant Roads are to the south; Bell and Hubbard Roads are to the east; and private property is located to the north.

PROJECT ALTERNATIVES

Four alternatives—the No Project Alternative, the Single-Track Trails Alternative, the Dispersed Recreation Alternative, and the Reduced Access Alternative—are evaluated in Chapter 15.0, “Other CEQA Sections.” Table 15-1 in Chapter 15.0 provides a comparison of the alternatives; brief descriptions of each alternative are provided below.

2.2 ALTERNATIVES TO THE PROPOSED PROJECT

NO PROJECT ALTERNATIVE (ALTERNATIVE 1)

The No Project Alternative assumes that the proposed trail system and other recreational facilities would not be constructed. Existing trails within the Didion Ranch portion of the Park would continue to be used for recreation, and the Spears Ranch portion of the Park would not be open to the public. The project area would continue to be managed by the County according to the goals set forth in the Placer Legacy Program. This alternative would not help meet the demand for recreational facilities in Placer County, specifically hiking, biking, equestrian trail riding, and nature/cultural interpretation and education. Because no trails or related facilities would be constructed under this alternative, the impacts associated with the proposed project on biological resources; cultural resources; visual resources, transportation and circulation; air quality; noise; soils, geology, and seismicity; hydrology and water quality; public services and utilities; and hazardous materials and hazards would not occur. The No Project Alternative would also have little to no impact on land use and agriculture; population, employment, and housing; and mineral resources. This alternative would not have the beneficial effect on recreation that would result from implementing the proposed project.

SINGLE-TRACK TRAILS ALTERNATIVE (ALTERNATIVE 2)

For the Single-Use Trails Alternative, the proposed natural-surface trails and recreational facilities would be constructed as described for the proposed project; however, the trails would be designed as narrower hiking trails, not multiple-use trails. There would be no equestrian facilities (e.g., watering troughs, tie rails) within the Spears Ranch portion of the property, and the parking area constructed on the Spears Ranch portion of the property would be smaller and would not include larger spaces for horse trailers. Public access would be provided for automobiles via Garden Bar Road and Mears Drive; however, no horse trailers would be allowed access to the Spears Ranch portion of the Park. The existing trails in the Didion Ranch portion would continue to be multiple-use. Improvements would be made to Garden Bar Road to allow access by automobiles, but no additional road improvements would be made to accommodate horse trailers. Garden Bar Road would continue to be used by County staff for maintenance and for access by emergency vehicles. Impacts of the Single-Track Trails Alternative are described below by resource topic.

This alternative would include narrower trails and no equestrian facilities because the equestrian use would not be included as a use of the Spears Ranch portion of the Park. Therefore, this alternative would have less of an impact than the proposed project on soils, geology, and seismicity; hydrology and water quality; biological resources; visual resources; transportation and circulation; air quality; hazards and hazardous materials; and noise. This alternative would have similar impacts to the proposed project on land use and agriculture; population, employment, and housing; mineral resources; cultural resources; and public services and utilities. This alternative would provide less recreational benefit than the proposed project, because the trails would not be provided for bicycle or equestrian use.

DISPERSED RECREATION ALTERNATIVE (ALTERNATIVE 3)

For the Dispersed Recreation Alternative, no recreational facilities would be constructed; however, the proposed Park would be open to the public. The Park would be multiple-use under this alternative and hiking, biking, and equestrian use would be allowed, but recreation would be dispersed throughout the Park and would not follow any constructed trails; volunteer trails would be expected to develop. Under this alternative, a gravel parking area would be provided on the Spears Ranch portion of the Park and the paved parking area would continue to be available on the Didion Ranch portion of the Park. No motorized access would be provided beyond designated parking areas. Access to the Park would be provided for automobiles and horse trailers via Garden Bar Road and Mears Drive.

This alternative would include fewer recreational facilities than the proposed project because no trails or other recreational facilities would be constructed. Therefore, it would have fewer construction-related impacts, which would result in less of an impact on air quality, public services, and transportation and circulation. This alternative would have similar impacts on land use and agriculture; population, employment, and housing; mineral resources; visual resources; and hazards and hazardous materials. Operation of this alternative would have more of an impact on cultural resources; geology, soils, and seismicity; hydrology and water quality; and biological resources than the proposed project.

REDUCED ACCESS ALTERNATIVE (ALTERNATIVE 4)

Under the Reduced Access Alternative, the proposed natural-surface multiple-use trails and related recreational amenities would be constructed as described for the proposed project; however, no public access to the Park would be provide via Garden Bar Road. Automobile, equestrian, and bus access would continue to be provided via Mears Drive and the existing Didion Ranch parking area would be expanded to accommodate increased use. If access is only provided via Mears Drive, the Didion Ranch parking area would need to be expanded beyond the proposed expansion under the proposed project to accommodate the increase in use. Garden Bar Road would continue to be used by County staff for maintenance and for emergency vehicle access. Impacts of the Reduced Access Alternative are described below by resource topic.

This alternative would not include construction associated with improvements to Garden Bar Road. Therefore, this alternative would have less of an impact than the proposed project on soils, geology, and seismicity; hydrology and water quality; biological resources; visual resources; air quality; hazards and hazardous materials; and noise. This alternative would have similar impacts to the proposed project on land use and agricultural resources; population, employment, and housing; mineral resources; cultural resources; transportation and circulation; and public services and utilities. This alternative would provide less recreational benefit than the proposed project, because the less public access and parking would be provided for the Park.

2.3 ENVIRONMENTAL IMPACTS AND MITIGATION

Information in Table 2-2, “Summary of Environmental Impacts and Mitigation Measures,” has been organized to correspond with the environmental issues discussed in Chapters 4.0 through 14.0 of this document. The summary table is arranged in four columns: environmental impacts; level of significance without mitigation; mitigation measures; and level of significance with implementation of mitigation measures. Environmental impacts and mitigation measures for the proposed project are included in this table. For a full discussion of all impacts and mitigation measures, refer to Chapters 4.0 through 14.0 of this document.

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>Land Use and Agricultural Resources (Chapter 4.0)</p>			
<p>4-1: Adverse Effect on Agricultural or Timber Resource Operations or Conversion of Important Farmland to Nonagricultural Uses. The proposed project would increase use of the project area by the public where grazing activities currently take place, and the project area is designated as Farmland of Statewide Importance and Farmland of Local Importance. Grazing would continue on the property and is included as a component of the County's vegetation, fuels, and range management plan for the Park. Therefore, the property's agricultural use would be sustained as part of the project.</p>	LTS	No mitigation necessary.	LTS
<p>4-2: Alteration of Land Use and Potential Conflicts with Existing or Future Land Uses Adjacent to the Project Area. Use of the project area for open space and grazing would be consistent with surrounding land uses; however, outdoor recreation would be a new land use for the project area. The proposed project would add trails and recreational facilities and would increase the use of the project area by the public. Although this change in use would be different from surrounding uses, project facilities are included that would ensure compatibility with surrounding land uses adjacent to the project area.</p>	LTS	No mitigation necessary.	LTS
<p>4-3: Potential for Conflicts with Land Use or Agricultural Resource Plans, Policies, or Regulations. Construction and operation of outdoor recreational facilities in the project area is not included as a land use under the General Plan's Agriculture land use designation. However, the County determines allowable land uses at a parcel-level according to the zoning code, and outdoor recreational uses are allowed as specified in the open space zoning district. According to the Placer County zoning code, the project would be allowed in the project area with approval of a Conditional Use Permit. Further, the use of the property as a regional park is considered compatible with agricultural uses, would maintain the</p>	LTS	No mitigation necessary.	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>natural state of the area, and grazing activities would continue to occur after the project is implemented. Therefore, the land uses proposed by the project are consistent with existing plans, policies, and regulations. In addition, the project area is not enrolled in a Williamson Act contract.</p>	LTS	No mitigation necessary.	LTS
<p>4-4: Roadway Improvements on Garden Bar Road and Potential Conflicts with Existing or Future Land Uses Adjacent to the Project Area. Garden Bar Road would be improved to meet demands of increased traffic related to Park use. Roadway improvements would include widening in certain areas that could impact existing properties, trees, environmentally sensitive areas, and utility poles located along Garden Bar Road. However, design features are included in the project design that would minimize impacts on properties, and other sensitive areas. Road widening would not result in a change in existing land uses adjacent to Garden Bar Road and the impacts would be primarily temporary during construction.</p>	LTS	No mitigation necessary.	LTS
<p>Soils, Geology, and Seismicity (Chapter 5.0)</p>			
<p>5-1: Construction- and Operation-Related Erosion Hazards. Based on soil types and topography, the excavation and grading of soil in the project area could result in erosion during project construction, particularly during periods of strong winds or storm events. In addition, use and maintenance of the Park could result in erosion over time.</p>	PS	<p>5-1: Obtain Authorization for Construction and Operation Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required.</p> <p>A: Implement Stormwater BMPs.</p> <p>Water quality BMPs shall be designed according to the <i>Stormwater Best Management Practice Handbooks for Construction, for New Development and Redevelopment (CSQA 2003)</i>.</p> <p>Storm drainage from on- and off-site impervious surfaces (including roads) shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, or filters for entrapment of sediment, debris</p>	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p>and oils/greases, and other identified pollutants, as approved by the County. BMPs shall be designed at a minimum in accordance with the <i>Guidance Document for Volume and Flow-Based Sizing of Permanent Post-Construction Best Management Practices for Stormwater Quality Protection</i> (Placer Regional Stormwater Coordination Group 2005).</p> <p>No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by appropriate regulatory authorities.</p> <p>All BMPs shall be maintained as required to ensure effectiveness.</p>	<p>B: Obtain RWQCB Permit and Implement Construction BMPs.</p> <p>Projects with ground disturbance exceeding 1 acre that are subject to construction storm water quality permit requirements of the National Pollutant Discharge Elimination System (NPDES) program shall obtain such permit from the Regional Water Quality Control Board and shall obtain evidence of a state-issued Waste Discharge Identification number or filing of a Notice of Intent and fees prior to start of construction.</p> <p>This project is located within the area covered by the County's municipal stormwater quality permit, pursuant to the NPDES Phase II program. Project-related storm water discharges are subject to all applicable requirements of said permit. BMPs shall be designed to mitigate (minimize, infiltrate, filter, or treat) storm water runoff in accordance with "Attachment 4" of Placer County's NPDES Municipal Stormwater Permit (State Water Resources Control Board NPDES General Permit No. CAS000004).</p> <p>Construction (temporary) BMPs for the project include, but are not limited to:</p>	

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<ul style="list-style-type: none"> ▲ Use temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; ▲ Store materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water; ▲ Use water for dust control; ▲ Construct sediment control basins; ▲ Regular sweeping of entry and exit areas to minimize off-site sediment transport; ▲ Install traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and ▲ Use barriers, such as straw bales, perimeter silt fences, or placement of hay bales, to minimize the amount of uncontrolled runoff that could enter drains or surface water. 	<p>C: Implement Post-Development BMPs.</p> <p>Post-development (permanent) BMPs for the project include, but are not limited to:</p> <ul style="list-style-type: none"> ▲ The project will have an effective system of erosion and sedimentation control, consisting of vegetative and structural measures and management practices, to reduce the damage of erosion and costly clean-up procedures. ▲ Following trail construction, wattles/fiber rolls and/or gravel-filled bags will remain in place until permanent stabilization measures have proven successful. ▲ For the duration of the project, storm drainage within ditch systems associated with switchback construction will have stabilized ditch protection. This will consist of filter fabric, mulch, or a 3-inch gravel base. ▲ Plan development to fit the particular topography, soils, waterways, and natural vegetation of the site, to avoid the creation of erosion problems on the site. 	

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<ul style="list-style-type: none"> ▶ Reduce erosion hazards and runoff volumes and velocity by limiting the length and steepness of slopes. Slopes subject to erosion should not be steeper than 2:1 horizontal to vertical. ▶ Break up long steep slopes by benching, terracing, or diversion structures. ▶ Use existing vegetation to control erosion to (a) shield the soil surface from rain, (b) increase infiltration, (c) reduce velocity of runoff and (d) hold soil in place and act as a filter. ▶ Time the project so that grading and construction occur during the normal dry season to the extent feasible. <p>The County shall also consult with the RWQCB to acquire the appropriate regulatory approvals that may be necessary to obtain Section 401 water quality certification.</p>		LTS
<p>5-2: Risks to People from Naturally Occurring Asbestos. Disturbance of naturally occurring asbestos fibers could create a health hazard. The project area is located in an area that is moderately likely to contain naturally occurring asbestos, and disturbance of soil during construction could expose workers to asbestos.</p>	PS	<p>9-1: Conduct On-Site Soil Testing and Prepare and Implement an Asbestos Dust Control Plan, If Needed (Please see description below in Mitigation Measure 9-1.)</p>	LTS
<p>5-3: Risks to People and Structures Caused by Strong Seismic Ground Shaking or Fault Rupture. The project area has the potential to be affected by shock waves resulting from earthquakes in distant areas that display greater seismic activity. In addition, the Bear Mountain Fault is located within 5 miles of the project area. Although all project facilities would be designed and constructed in accordance with the current design requirements for the California Building Code and the project area is not located in an Alquist-Priolo Earthquake Fault Zone, the project could construct buildings or structures across an active fault.</p>	PS	<p>5-2: Obtain and Implement Seismic Engineering Design Recommendations.</p> <p>a. Prior to issuance of grading permits, the applicant shall obtain the services of a qualified, licensed geotechnical engineer to examine for traces of the Bear Mountain fault within the project area. If traces of the Bear Mountain fault cross the project area, a qualified, licensed geotechnical engineer shall develop engineering design recommendations for the project area. The recommendations shall include calculation of seismic shaking hazards using the appropriate computer modeling software, and shall include specific structural design recommendations to minimize potential damage to</p>	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>buildings and structures from seismic events. The recommendations shall also include an examination of the traces of the Bear Mountain fault system within the project area, including surface reconnaissance, and shall make recommendations for building foundation and infrastructure design accordingly. All appropriate design recommendations shall be implemented during the project design and construction phases.</p> <p>b. No structures intended for human occupancy shall be constructed within a 100-foot-wide no building zone over the Bear Mountain fault traces. However, following completion of the seismic study required in (a) above, the no building zone may be modified if recommended by the geotechnical engineer.</p> <p>c. Prior to issuance of grading permits, the County shall obtain the services of a qualified, licensed geotechnical engineer to prepare a comprehensive final geotechnical report for the entire project area with specific design recommendations sufficient to ensure the safety of soil conditions, project structures, and site occupants. The report shall include project design and construction recommendations to address:</p> <ul style="list-style-type: none"> ▶ Site preparation and grading, including surface and subsurface prep work, engineered fill materials, fill placement and compaction, trench backfill, and surface drainage; ▶ Foundation requirements specific to the location of each component of the proposed project; ▶ Concrete slabs-on-grade, both interior and exterior; ▶ Retaining and below grade walls; and ▶ Pavements. 	

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		The seismic engineering design recommendations shall be incorporated into the project design. The County shall insure adequate field inspection during construction.	
<p>5-4: Risks to People and Structures Caused by Landslides. Although stable slope conditions and drainage patterns may change with site alterations (e.g., cuts, fills) associated with construction of recreation facilities in the Park, field review of the project area identified no areas of shallow slope instability and/or small landslide areas. Therefore, the risk of a landslide is considered low.</p>	LTS	No mitigation necessary.	LTS
<p>5-5: Limited Ability for Soils to Support Operation of a Wastewater Disposal System. Soils in the project area are identified by USGS as having limitations for the use of septic tanks. However, on-site soil testing for the project has confirmed soils capable of supporting a conventional septic system.</p>	LTS	No mitigation necessary.	LTS
Cultural Resources (Chapter 6.0)			
<p>6-1: Potential for Loss of or Damage to Potentially Significant Cultural Resources. Nine potentially significant cultural resources and one significant cultural resource have been documented within the Spears Ranch portion of the Park. The proposed project has the potential to damage or destroy these cultural resources, either directly by construction or by increased public use.</p>	PS	<p>6-1: Modify Project Plans to Avoid Potentially Significant Cultural Resources and Actively Monitor Resources for Indirect Effects. The County will prepare detailed design of trails, roads, and Park facilities to ensure that direct effects associated with project implementation avoids all significant and potentially significant documented cultural resources in the project area. As part of the County's ongoing operational responsibility, usage trends that threaten any potentially significant documented cultural resources will be actively managed to avoid damage. If designing such trails and facilities to avoid potential impacts is not feasible or if management of Park usage indicates potential impacts to significant or potentially significant cultural resources, an approved treatment plan shall be drafted and implemented to mitigate the significant impacts. Such a plan may include one or more of the following elements:</p>	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> ▶ vegetation removal and surface inspection; ▶ ethnographic studies or Native American consultation, or both; ▶ subsurface testing; and ▶ if necessary, data recovery. 	LTS
<p>6-2: Potential for Disturbance of Undiscovered Cultural Resources. The project vicinity is known to contain numerous historic and prehistoric resources. In addition, buried traces of historic-era activity and early Native American occupation that remain undocumented may be present within and in the vicinity of proposed trails. Ground-disturbing activities during construction of trails and Park facilities could disturb undiscovered cultural resources.</p>	PS	<p>6-2: Protect Previously Unknown Cultural Resources. Given the potential for subsurface deposits, if undocumented resources are encountered during construction, all destructive work in the vicinity of the find shall cease until a qualified professional archaeologist can assess the significance of the find and, if appropriate, provide recommendations for treatment. Appropriate measures for treatment may include no action, avoidance of the resource through relocation of Park facilities, subsurface testing, and potentially data recovery. For any such discovery, a memorandum documenting the results of the evaluation shall be provided to the County by the archaeologist, and the County shall forward the memorandum to the California Department of Parks and Recreation and the State Historic Preservation Officer.</p>	LTS
<p>6-3: Potential for Disturbance of Unknown Human Interments. Although no evidence of human interments was found in documentary research or during the archaeological inventory evidence of prehistoric and historic use of the project area has been found. If undiscovered human remains are present, ground-disturbing activities during construction of trails and other Park facilities could adversely affect presently unmarked human interments.</p>	PS	<p>6-3: Stop Potentially Damaging Work if Human Remains are Uncovered during Construction. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the construction contractor or the County, or both, shall immediately halt potentially damaging excavation in the area of the burial and notify the County coroner and a qualified professional archaeologist to determine the nature of the remains. The coroner shall examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands, in accordance with Section 7050(b) of the Health and Safety Code. If the coroner determines that the remains are those of a Native American, he or she shall contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code</p>	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p>Section 7050(c)]. After the coroner's findings are presented, the County, the archaeologist, and the NAHC-designated Most Likely Descendant (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed.</p> <p>Upon the discovery of Native American remains, the procedures above regarding involvement of the County coroner, notification of the NAHC, and identification of a MLD shall be followed. The County shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours after being granted access to the site to complete a site inspection and make recommendations. A range of possible treatments for the remains may be discussed: nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment. Assembly Bill (AB) 2641 (Chapter 863, Statutes of 2006) suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641 includes a list of site protection measures and states that the County shall comply with one or more of the following measures:</p>	<ul style="list-style-type: none"> ▶ Record the site with the NAHC or the appropriate Information Center. ▶ Utilize an open-space or conservation zoning designation or easement. ▶ Record a document with the county in which the property is located. <p>The County or its authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a</p>	

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The County or its authorized representative may also reinter the remains in a location not subject to further disturbance if it rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner. Adherence to these procedures and other provisions of the California Health and Safety Code and AB 2641 would reduce potential impacts on human remains to a less-than-significant level.</p>	
Visual Resources (Chapter 7.0)			
<p>7-1: Short-Term Changes in Visual Resources Associated with Project Construction. Construction activity, construction equipment, and areas of vegetation removal would be temporarily visible during and immediately after construction of proposed project facilities (e.g., bridges, trails, viewing boardwalk, roads, parking areas). However, these changes in views would be minimal and not visible from most off-site locations. In addition, all views of construction activities would be temporary.</p>	LTS	No mitigation necessary.	LTS
<p>7-2: Long-Term Changes in Visual Resources Associated within the Proposed Regional Park. The proposed project would introduce new physical elements into the landscape; however, the proposed facilities of the Park (e.g., bridges, trails, viewing boardwalk, restroom, picnic areas, expanded parking area) would be in a remote location, avoiding visually obtrusive effects.</p>	LTS	No mitigation necessary.	LTS
<p>7-3: Long-Term Changes in Visual Resources Associated with the Improvements to Garden Bar Road. The proposed project would widen Garden Bar Road which would require removal of existing trees. The removal of trees would result in a substantial physical change to the visual environment of the road and would occur within close proximity of viewers, including adjacent residents.</p>	S	<p>7-1: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts. To address the potential degradation of visual quality resulting from tree removal, the County shall revegetate and restore all disturbed areas. Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate initial growth. To the extent feasible, restoration of trees and shrubs shall reduce visual impacts for</p>	SU

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>affected properties. Revegetation of disturbed areas shall promote restoration of vegetation over time that is as consistent as feasible with the surrounding natural landscape, recognizing constraints of the right-of-way and available space. The County shall prepare a restoration and revegetation plan that implements actions intended to mitigate the impacts on trees and vegetation removed along Garden Bar Road. The plan will be prepared in conjunction with detailed roadway engineering design, so that precise areas of disturbance are known and the revegetation process can be coordinated with roadway implementation. Portions of the revegetation plan may be implemented on adjacent property outside the County road right-of-way by agreements with willing property owners.</p> <p>12-8: Protect Oak Woodland Habitat. (Please see description below in Mitigation Measure 12-8.)</p>	LTS
<p>7-4: Increased Light and Glare. The proposed Park would include some security lighting and lighting at the caretaker's residence. However, the lighting in the project area would not change substantially compared to existing lighting.</p>	LTS	No mitigation necessary.	LTS
Transportation and Circulation (Chapter 8.0)			
<p>8-1: Temporary Increase in Traffic during Construction. During construction of the proposed Park, local roadways would experience an increase in traffic from daily commuters by construction workers and delivery trucks. However, this increase in traffic would be temporary and is not expected to be substantial in relation to the existing traffic load and capacity of area roadways.</p>	LTS	No mitigation necessary.	LTS
<p>8-2: Increase in Traffic Impacts Associated with Use of Garden Bar Road. Additional automobiles and trucks with equestrian trailers entering and exiting the proposed Park entrance via Garden Bar Road could cause an increase in traffic impacts in the project area. Garden Bar Road would be improved with the project and the</p>	LTS	No mitigation necessary.	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>Park entrance would be designed for safe ingress and egress of trucks and trailers.</p>	<p>LTS</p>	<p>No mitigation necessary.</p>	<p>LTS</p>
<p>8-3: Increase in Traffic with Operation of the Park. The proposed Park would add approximately 255 one-way vehicle trips per day (weekday) to 460 one-way vehicle trips per day (weekend) during peak visitation periods, with 25–30 of those one-way trips expected during weekday peak commute hours. This traffic increase would not result in conditions in excess of adopted standards at intersections or on individual roadway segments.</p>	<p>LTS</p>	<p>8-1: Implement Traffic Control Measures During Park Reservation-Based Events. Reservation-based events (involving less than 200 people on-site at a given time) would be regulated by the County Parks Division Reservation System. The Reservation System would include, but not be limited to, applicable restrictions on:</p> <ul style="list-style-type: none"> ▶ event start and end times so as not to exceed peak usage capacity of Garden Bar Road or coincide with scheduled use of the road by school buses; ▶ regulation of number and types of vehicles so as not to exceed parking capacity (i.e., 50 paved stalls and 20 truck and trailer gravel stalls) in combination with daily use; ▶ the range of vehicle sizes allowed on Garden Bar Road during Phases 1 and 2 to be determined by the County Department of Public Works. Vehicles exceeding the maximum unrestricted size on Garden Bar Road shall be subject to County-imposed traffic controls. <p>The County may also regulate the days and/or times of reservation-based events to avoid peak days or times such as holiday weekends, as necessary.</p>	<p>LTS</p>
<p>8-4: Transportation and Circulation—Increase in Traffic related to Reservation-Based Events in the Park. Reservation-based events at the Park could cause an increase in automobile, truck, and bus traffic in addition to regular Park use. Use of Garden Bar Road by buses and/or delivery trucks could impact traffic flow along the road.</p>	<p>PS</p>	<p>8-1: Implement Traffic Control Measures During Park Reservation-Based Events. Reservation-based events (involving less than 200 people on-site at a given time) would be regulated by the County Parks Division Reservation System. The Reservation System would include, but not be limited to, applicable restrictions on:</p> <ul style="list-style-type: none"> ▶ event start and end times so as not to exceed peak usage capacity of Garden Bar Road or coincide with scheduled use of the road by school buses; ▶ regulation of number and types of vehicles so as not to exceed parking capacity (i.e., 50 paved stalls and 20 truck and trailer gravel stalls) in combination with daily use; ▶ the range of vehicle sizes allowed on Garden Bar Road during Phases 1 and 2 to be determined by the County Department of Public Works. Vehicles exceeding the maximum unrestricted size on Garden Bar Road shall be subject to County-imposed traffic controls. <p>The County may also regulate the days and/or times of reservation-based events to avoid peak days or times such as holiday weekends, as necessary.</p>	<p>LTS</p>

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>8-5: Transportation and Circulation—Adequacy of Parking for Park Visitors. There would be increased demand for parking at the Park and adequate parking would be provided to accommodate Park visitors. Large events that could result in an exceedance of parking capacity would be required to obtain a Temporary Event Permit and undergo separate environmental review.</p>	LTS	No mitigation necessary.	LTS
<p>8-6: Potential Interference with Emergency Response Routes. The proposed trail system would have several access points to provide adequate access for emergency response vehicles and personnel within the Park.</p>	LTS	No mitigation necessary.	LTS
Air Quality (Chapter 9.0)			
<p>9-1: Short-Term Emission of Criteria Air Pollutants and Precursors during Construction. Modeled short-term emissions of ozone precursors and fugitive dust from construction of trails and other project facilities would not exceed PCAPCD's significance threshold of 82 lb/day. Thus, emissions of ROG, NO_x, and PM₁₀ associated with project construction would not violate or contribute substantially to an existing or projected air quality violation, nor would they expose sensitive receptors to substantial concentrations of pollutants.</p>	LTS	No mitigation necessary.	LTS
<p>9-2: Long-Term, Regional Emissions of Criteria Air Pollutants and Ozone Precursors Associated with Project Operation. Operational activities associated with the proposed project would not result in emissions of ROG, NO_x, or PM₁₀ exceeding PCAPCD's significance threshold of 82 lb/day. Emissions of ROG and NO_x would also not exceed PCAPCD's cumulative threshold of 10 lb/day. Thus, emissions of criteria air pollutants and precursors associated with project operation would not violate or contribute substantially to an existing or projected air quality violation, expose sensitive receptors to substantial pollutant concentrations, or conflict with air quality planning effort.</p>	LTS	No mitigation necessary.	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>9-3: Exposure of Sensitive Receptors to Emissions of Toxic Air Contaminants. The proposed project would not expose sensitive receptors to substantial emissions of TACs during project construction because construction emissions would be temporary and would rapidly dissipate with distance from the source. However, construction workers and surrounding residents could be exposed to dust from asbestos rock and soils during project construction.</p>	PS	<p>9-1: Conduct On-Site Soil Testing and Prepare and Implement an Asbestos Dust Control Plan, If Needed. Prior to the start of construction activities, the County shall test the on-site soils for the presence of asbestos. If asbestos is not present in on-site soils, no further measured would be required. If asbestos is determined to be present on-site, the County shall prepare and implement and asbestos dust control plan as described below.</p> <p>The project shall comply with PCAPCD Rule 228 for fugitive dust control. In addition, the County shall prepare an asbestos dust control plan for approval by PCAPCD as required in Section 93105 of the California Health and Safety Code, "Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations." The asbestos dust control plan shall specify measures, such as periodic watering to reduce airborne dust and ceasing construction during high winds to ensure that no visible dust crosses the property line. The County shall submit the plan to the County Planning Department for review and PCAPCD for review and approval before construction of the first project phase. Approval of the plan must be received from PCAPCD before any asbestos-containing rock (serpentine) can be disturbed. Upon approval of the asbestos dust control plan by PCAPCD, the County shall ensure that construction contractors implement the terms of the plan throughout the construction period.</p>	LTS
<p>9-4: Long-Term (Local) Mobile-Source Emissions of Carbon Monoxide during Project Operation. Long-term operational (local) mobile-source emissions of CO would not violate or contribute substantially to a violation of the CAAQS or NAAQS, nor would they expose sensitive receptors to substantial pollutant concentrations.</p>	LTS	No mitigation necessary.	LTS
<p>9-5: Exposure of Sensitive Receptors to Odors. Construction of the proposed trails and recreational facilities would result in diesel exhaust emissions from on-site construction equipment. However, these emissions would be intermittent and would dissipate rapidly</p>	LTS	No mitigation necessary.	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>with an increase in distance from the source. The proposed project would not be a major source of odors.</p>			
<p>Noise (Chapter 10.0)</p>			
<p>10-1: Short-Term Construction-Generated Noise Levels Exceeding County Standards. Short-term exterior noise levels at the closest existing noise-sensitive receptor could exceed 68 dBA without feasible noise controls, which would exceed the applicable County nighttime standard of 45 dBA at existing nearby off-site sensitive land uses. However, construction would be limited to daytime hours.</p>	LTS	No mitigation necessary.	LTS
<p>10-2: Increases in Long-Term (Operational) Noise Levels from Nontransportation Stationary and Area Sources. Area-source noise may result from maintenance activities. However, exterior noise levels at the closest existing noise-sensitive receptor (800 feet) would not exceed 41 dBA. Such noise levels would not exceed any of the applicable County standards for daytime or nighttime noise, nor would they result in a substantial increase in ambient noise levels at nearby existing noise-sensitive receptors.</p>	LTS	No mitigation necessary.	LTS
<p>10-3: Increases in Transportation-Related Noise Levels. Short-term construction of the proposed Park would not result in a noticeable (i.e., 3 dBA or greater) increase in traffic noise levels along area roadways. Noise increases associated with construction traffic would be temporary and would occur during the less noise-sensitive daytime hours. Long-term traffic associated with project operation would not exceed Placer County standards but would result in a noticeable (i.e., 3 dBA or greater) increase in traffic noise levels along area roadways. Short- and long-term traffic-generated noise levels would not exceed applicable Placer County noise standards; however, long-term traffic would increase ambient noise at nearby existing noise-sensitive receptors.</p>	S	<p>10-1: Restrict General Public Traffic to 6 a.m. to 30 Minutes after Sunset. The County shall restrict all long-term general public traffic to 6 a.m. to 30 minutes after sunset by ensuring that the Park gates are closed and locked until these times. With implementation of Mitigation Measure 10-1 traffic noise level increases on Garden Bar Road North and Mears Drive would be reduced below a substantial amount (3 dBA or more), as shown in Table 10-12. This would reduce Impact 10-3 to a less-than-significant level.</p>	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>10-4: Exposure of Persons to or Generation of Excessive Groundborne Vibration or Noise Levels. Ground vibration levels generated by on-site construction equipment would not exceed Caltrans' recommended standard of 0.2 in/sec PPV for the prevention of structural damage or FTA's maximum-acceptable vibration standard with respect to human annoyance for residential uses (80 VdB for residential structures). In addition, long-term use and maintenance of the project area would not include the operation of any sources of ground vibration. Thus, the proposed project would not result in the exposure of persons to or generate excessive groundborne vibration or groundborne noise levels.</p>	LTS	No mitigation necessary.	LTS
<p>Hydrology and Water Quality (Chapter 11.0)</p>			
<p>11-1: Potential for Short-Term, Construction-Related Soil Erosion and Impairment of Water Quality. Project construction could cause short-term degradation of water quality. Areas where vegetation would be removed and topography altered could be subject to erosion from rain and wind. In addition, accidental spills of construction-related contaminants could occur during construction in the project area. Both of these mechanisms could carry soil and construction-related contaminants to on-site drainages before they are ultimately discharged to Coon Creek.</p>	PS	<p>11-1: Prepare and Implement a Grading and Drainage Plan. The Placer County Department of Facility Services shall prepare and submit Grading and Drainage Plans (Plans) and specifications (per the requirements of Section II of the Land Development Manual that are in effect at the time of submittal) for review and approval of work associated with structural design, hydrology associated with the bridges, and grading/drainage associated with the facility development zone. The Plans shall show all conditions affecting those facilities as well as pertinent topographical features. All existing and proposed utilities and easements, on-site and adjacent to those facilities, which may be affected by planned construction, shall be shown on the plans. The County Department shall pay plan check and inspection fees as applicable.</p> <p>All proposed grading, drainage improvements, vegetation, tree impacts, and tree removal associated with the Park access road, parking areas, and bridges shall be shown on the Plans and all work shall conform to provisions of the County Grading Ordinance (Section 15.48, formerly Chapter 29, Placer County Code) and the Placer County Flood Control District's Stormwater Management Manual. No grading, clearing, or tree disturbance shall occur until the Plans are approved and any required temporary construction fencing has been installed and inspected</p>	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>by a member of the Design Review Committee. All cut/fill slopes included in the Plans shall be at 2:1 (horizontal:vertical) maximum unless a soils report supports a steeper slope and Design Review Committee concurs with said recommendation.</p> <p>In addition, a drainage report in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual that are in effect at the time of submittal, shall be prepared and submitted with the Plans. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: written text addressing existing conditions, the effects of the improvements, all appropriate calculations, a watershed map, increases in downstream flows, proposed on- and off-site improvements and drainage easements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used both during construction and for long-term post-construction water quality protection. Best Management Practice (BMP) measures shall be provided to reduce erosion, water quality degradation, and prevent the discharge of pollutants to stormwater to the maximum extent practicable.</p> <p>Although the facility development zone is generally in the southwestern portion of the Park, including the previously disturbed area surrounding the existing ranch house and the proposed parking areas, the exact location of individual facilities could vary within this zone. Therefore, it is not practical to prepare the drainage plan prior to project approval. In addition, routine maintenance shall be performed on Park facilities to reduce erosion to the extent possible and to repair weather-related damage that could contribute to erosion.</p> <p>5-1: Obtain Authorization for Construction and Operation Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required. (Please see description above in Mitigation Measure 5-1.)</p>	

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>11-2: Potential for Long-Term Soil Erosion and Impairment of Water Quality. Use of the proposed trail system and extreme weather events could cause long-term degradation of water quality from soil erosion and creek sedimentation. The introduction of impervious surfaces on-site such as the access road and parking areas has the potential to alter existing absorption rates and increase runoff of surface water into Coon Creek and other drainages on-site.</p>	PS	<p>11-1: Prepare and Implement a Grading and Drainage Plan. (Please see description above in Mitigation Measure 11-1.)</p>	LTS
<p>11-3: Change in the Quality of Groundwater because of Installation of a Septic System. Operation of two septic systems is proposed as part of the project. There is the potential that installing an on-site septic system could change the quality of the groundwater in the Spears Ranch portion of the Park, if the septic system is not sited properly. Although suitable soils have been identified on-site, the potential still exists for changes in groundwater quality to occur.</p>	PS	<p>11-2: Implement Groundwater Protection through a Transient Non-community Water System Permit. A Hidden Falls Regional Park Groundwater Systems Operation Procedure is in place for the existing well serving the restroom and facilities at the Didion Ranch parking area. Pump performance and system leakage inspections are part of the regular maintenance routine under this procedure. One Park staff member is trained and tasked with water sampling at monthly intervals. The County employs qualified plumbers and electricians to correct any system failures. The Placer County Parks Division, which is a division of the Department of Facility Services, operates the well and distribution system serving the public facilities at the existing Didion Ranch parking area under a Transient Non-community Water System Permit administered by the Placer County Environmental Health Division.</p> <p>A separate permit would be obtained to include any additional wells that serve public facilities within Spears Ranch portion of the Park, and the conditions of the permit would be implemented to protect groundwater. The siting of any additional wells shall comply with the Placer County Water Well Construction Ordinance (Placer County Code Subchapter 8, effective July 19, 1990), and California Well Standards, Department of Water Resources Bulletin 74-90, June 1991.</p> <p>A Groundwater Systems Operation Procedure or applicable equivalent would be prepared for any additional wells and adhered to as part of the permit conditions and ongoing operation.</p>	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p>The objectives of the procedure shall be to ensure that:</p> <ul style="list-style-type: none"> ▶ Water sources are not at risk of contamination from either tampering, pollutant discharge into the well head area, or latent groundwater contaminants. ▶ The responsible management agency has the technical capacity to operate the system to public health standards. <p>The procedure would include the following elements:</p> <ul style="list-style-type: none"> ▶ The minimum horizontal distance between any additional wells and any sewer line or storm drain main or lateral shall be 50 feet. The minimum horizontal distance between any additional wells and septic tanks or leach fields shall be 100 feet. ▶ A Bacteriological and Chemical Monitoring and Reporting Program, approved by the Placer County Environmental Health Division. ▶ An operations and maintenance program including inspection of the distribution system and well head assembly. ▶ An emergency operations and repair program. <p>If well-monitoring samples show that groundwater quality is deteriorating, prompt actions shall be initiated to remedy problems, as specified by the Placer County Environmental Health Division and/or Central Valley RWQCB. These actions could include but would not be limited to the use of injection wells or other recharge methods, closing the well and chlorinating the water, decommissioning the well and re-siting, or other water treatment alternatives such as construction of an on- or off-site water treatment plant. Some of these actions may be subject to additional CEQA analysis and other regulatory compliance. Implementation of Mitigation Measure 11-2 would reduce the potentially significant impact related to groundwater quality impairment to a less-than-significant level, because the Groundwater Systems Operation Procedure would enable the project applicant(s) to acquire the data and information necessary to</p>		

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>11-4: Change in the Supply and Availability of Groundwater through Withdrawals, Interception, or Loss of Recharge Capacity. While soil compaction from constructed facilities could slightly impede recharge in localized areas, less than 5 acres of the project area would be developed with impervious surfaces. Installation of groundwater wells for uses related to the proposed facilities could increase the demand for groundwater; however, project-related groundwater demand would not be substantial and is similar to yield rates found in private wells in the project vicinity. However, the proposed project-related water needs include water necessary for fire suppression and the 2009 water demand calculation report did not evaluate project requirements related to fire suppression. This impact would be potentially significant.</p>	PS	<p>11-3: Calculate Water Demands for Fire Suppression. If groundwater is to be used for emergency fire suppression water, the County shall amend the April 7, 2009, Water Demand Calculation Report (Placer County 2009) to include fire suppression water requirements. If it is found that fire suppression requirements combined with water demands for other proposed uses is consistent with yields found in nearby private wells (1.3 to 7 gpm) then no further mitigation is required. If fire suppression requirement surpasses yields found in nearby private wells, one of the following shall be done:</p> <ul style="list-style-type: none"> ▶ modify proposed uses at each well location to be consistent with available water that would not surpass similar yields of nearby wells; ▶ utilize Nevada Irrigation District raw irrigation water sources including but not limited to existing canals and ponds, new ponds, and/or irrigation fed underground storage tanks; ▶ fill storage tanks during off-peak periods when use is limited (i.e. winter and nighttime periods); ▶ import water needed to meet fire suppression requirements for emergency storage tanks via water trucks so that this water is not being pulled from the wells. 	LTS
		<p>11-2: Implement Groundwater Protection through a Transient Non-community Water System Permit. (Please see description above in Mitigation Measure 11-2.)</p>	

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>11-5: Exposure of People or Structures to Flooding. Constructing Park facilities adjacent to or across Coon Creek could expose people and structures to flooding. Park facilities potentially exposed to flooding would be constructed to weather the flows. No housing would be constructed in the floodplain, and access to the floodplain would be restricted in the event of a flood.</p>	LTS	No mitigation necessary.	LTS
<p>11-6: Exposure of People or Structures to WWTP Effluent. Proposed Park facilities would allow people to come into contact with Coon Creek and Whiskey Diggins Canal, which receive effluent (indirectly) from the Placer County SMD 1 WWTP. However, the WWTP operates under an NPDES Permit requiring tertiary treatment protective of beneficial uses including contact and noncontact recreation. Therefore, this impact is less than significant.</p>	LTS	No mitigation necessary.	LTS
Biological Resources (Chapter 12.0)			
<p>12-1: Potential Disturbance of Aquatic Habitats and the Native Fish Community. Several native fish species, including special-status steelhead and fall-/late fall-run chinook salmon, are known to use aquatic habitats in Coon Creek within or immediately downstream of the project area. Implementation of the proposed project could result in temporary and long-term degradation of aquatic habitats, loss of instream cover, and increased injury or mortality of fishes because of increased angling pressure.</p>	PS	<p>12-1: Implement Measures to Protect Aquatic Habitats and the Native Fish Community. The County and its primary construction contractor shall implement the following measures to reduce impacts on aquatic habitats and the native fish community in the project area:</p> <ul style="list-style-type: none"> ▶ All in-water construction activities shall be conducted during months when sensitive fish species are less likely to be present or less susceptible to disturbance (i.e., April 15 - October 15 or as directed by DFG). ▶ The County shall obtain and implement the conditions of a streambed alteration agreement. DFG shall be consulted regarding potential disturbance to fish habitat, including SRA habitat, as part of the process for obtaining a streambed alteration agreement, pursuant to Section 1602 of the California Fish and Game Code. Affected habitats shall be replaced and/or rehabilitated to the extent feasible and practicable. The acreage of riparian habitat that would be 	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p>removed shall be replaced or rehabilitated on a “no-net-loss” basis in accordance with DFG regulations and as specified in the streambed alteration agreement. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to DFG. Minimization and compensation measures adopted through the permitting process shall be implemented.</p> <ul style="list-style-type: none"> ▶ The County shall consult and coordinate with DFG to develop regulations and limits for angling in Coon Creek, restrict angling activities while adult steelhead and salmon are present, and coordinate on enforcement of the area to monitor and regulate fishing activities. 	<p>12-2: Replace, Restore, or Enhance Affected Jurisdictional Waters of the United States and Waters of the State.</p> <p>Prior to construction, the County shall obtain a verified wetland delineation from USACE. Based on the results of the verified delineation, the County shall commit to replace, restore, or enhance on a “no net loss” basis, in accordance with USACE and the Central Valley RWQCB, the acreage of all waters of the United States and wetland habitats that would be affected by implementation of the project. Wetland restoration, enhancement, and/or replacement shall be at a location and by methods agreeable to USACE, DFG, and the Central Valley RWQCB, as determined during the Sections 404, 1602, and 401 permitting processes.</p> <p>The County shall either obtain credits from an approved mitigation bank, at a rate determined by USACE, to replace lost wetland values at a 1:1 ratio, or shall prepare and submit a wetland mitigation and monitoring plan to USACE for the creation of jurisdictional waters at a mitigation ratio no less than 1 acre of created water of the United States, including wetlands, for each acre filled. The mitigation plans shall demonstrate how the USACE criteria for jurisdictional waters will be met through implementation. The wetland mitigation and monitoring plan shall</p>	

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p>include the following:</p> <ul style="list-style-type: none"> ▶ target areas for creation, ▶ a complete biological assessment of the existing resources on the target areas, ▶ specific creation and restoration plans for each target area, ▶ performance standards for success that will illustrate that the compensation ratios are met, and ▶ a monitoring plan, including schedule and annual report format. <p>The County shall secure the following permits and regulatory approvals, as necessary, and implement all permit conditions before implementation of any construction activities associated with the proposed project.</p> <ul style="list-style-type: none"> ▶ Authorization for the fill of jurisdictional waters of the United States shall be secured from USACE through the CWA Section 404 permitting process before any fill is placed in jurisdictional wetlands. Timing of compliance with the specific conditions of the 404 permit shall be in accordance with conditions specified by USACE as part of permit issuance. In its final stage and once approved by USACE, this mitigation plan shall detail proposed wetland restoration, enhancement, and/or replacement activities that would ensure no net loss of jurisdictional wetlands function and services in the project vicinity. As required by Section 404, approval and implementation of the wetland mitigation and monitoring plan shall ensure no net loss of jurisdictional waters of the United States, including jurisdictional wetlands. ▶ Water quality certification pursuant to Section 401 of the CWA is required as a condition of issuance of the 404 permit. Before construction in any areas containing wetland features, the County shall obtain water quality certification for the 		

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>project. Any measures required as part of the issuance of water quality certification shall be implemented.</p> <p>5-1: Obtain Authorization for Construction and Operation Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required. (Please see description above in Mitigation Measure 5-1.)</p> <p>11-1: Prepare and Implement a Grading and Drainage Plan. (Please see description above in Mitigation Measure 11-1.)</p>	
<p>12-2: Potential Disturbance of California Red-Legged Frog. Suitable habitat for California red-legged frog exists within the project area. Construction and operation of proposed trails, bridges, septic system, and structures across or adjacent to stock ponds, creeks with backwaters, and freshwater marshes could degrade and possibly result in removal of aquatic habitat or could result in physical injury to red-legged frog.</p>	PS	<p>12-3: Implement Measures to Protect California Red-Legged Frog. The County and its primary construction contractor shall implement the following measures to reduce impacts on California red-legged frogs:</p> <ul style="list-style-type: none"> ▶ Before any work in or within 200 feet of aquatic habitat, the County shall determine whether aquatic habitat is occupied by California red-legged frog, in consultation with USFWS. This determination may be supported by a habitat assessment for California red-legged frog prepared according to USFWS guidelines (USFWS 2005) as revised, and focused surveys if recommended by USFWS. If aquatic habitat in the project area is not occupied by California red-legged frog, there would be no impacts on this species and no further mitigation would be required. ▶ If aquatic habitat in the project area is occupied by California red-legged frog, the County shall minimize impacts on California red-legged frog by implementing the following measures: <ul style="list-style-type: none"> • Worker awareness training shall be provided to construction crews working in California red-legged frog habitat. At a minimum, the training shall include a description of California red-legged frog and its habitat and their importance, general measures that are being 	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>implemented to conserve California red-legged frog as such measures relate to the project, and the boundaries within which construction activities shall occur.</p> <ul style="list-style-type: none"> • Suitable California red-legged frog habitat shall be surveyed 2 weeks before the start of construction activities. If California red-legged frogs, tadpoles, or eggs are found, they may be moved from the project area only with regulatory agency approval. If California red-legged frogs are not identified, construction may proceed. • Exclusionary fencing (i.e., silt fences) shall be installed no more than 200 feet around all areas that are within or adjacent to California red-legged frog habitat. • A USFWS-approved biologist shall be present at active project areas until the removal of California red-legged frog, instruction of workers, and habitat disturbance have been completed. After this time, the County shall designate a person to monitor on-site compliance with all minimization measures. • If any work area will be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 5 millimeters. Water shall be released downstream at an appropriate rate to maintain downstream flows during construction and in such a manner as to prevent erosion. Dewatering structures shall be removed upon completion of the project. • Guidelines shall be implemented to protect water quality and prevent erosion, as outlined in the best management practices (BMPs) in Mitigation Measure 11-1, "Obtain Authorization for Construction Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required." 	

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> The County shall compensate for permanently lost habitat by developing and/or implementing a habitat creation/restoration plan for California red-legged frog. This plan shall, at a minimum, compensate for lost habitat on an acre-for-acre basis, and it shall include verifiable performance criteria and remediation measures developed with USFWS during the Section 7 consultation process. 	
<p>12-3: Potential Disturbance of Foothill Yellow-Legged Frog and Northwestern Pond Turtle. Habitat for foothill yellow-legged frog and northwestern pond turtle occurs in the project area. Construction of trails across drainages could degrade aquatic habitat or could result in physical injury to yellow-legged frog and pond turtle.</p>	PS	<p>12-4: Implement Measures to Protect Foothill Yellow-Legged Frog and Northwestern Pond Turtle. The County and its contractor shall implement the following measures to reduce impacts on foothill yellow-legged frogs and northwestern pond turtles:</p> <ul style="list-style-type: none"> Construction of foot bridges and trails across smaller drainages shall occur when the drainages are dry, to the extent feasible. Before any work in Coon Creek, the County shall determine, in consultation with DFG, whether aquatic habitat at work sites would support foothill yellow-legged frog and/or northwestern pond turtle habitat. If no aquatic habitat for foothill yellow-legged frog or northwestern pond turtle habitat occurs at a work site, there would be no impacts on these species and no further mitigation is required. If aquatic habitat for foothill yellow-legged frog and/or northwestern pond turtle is present at work sites, the County shall minimize impacts on these species by implementing the following measures: <ul style="list-style-type: none"> Worker awareness training shall be provided to construction crews working in foothill yellow-legged frog and northwestern pond turtle habitat. At a minimum, the training shall include a description of foothill yellow-legged frog and northwestern pond turtle and their 	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p>habitats and their importance, general measures that are being implemented to conserve foothill yellow-legged frog and northwestern pond turtle as such measures relate to the project, and the boundaries within which construction activities shall occur.</p> <ul style="list-style-type: none"> • Suitable foothill yellow-legged frog and northwestern pond turtle aquatic habitat shall be surveyed within 2 weeks before the start of construction activities. If northwestern pond turtles or foothill yellow-legged frogs, tadpoles, or eggs are found, they may be moved from the project area only with DFG approval. If neither northwestern pond turtle nor foothill yellow-legged frog is identified, construction may proceed. • A qualified biologist holding the appropriate permits shall be present at active work sites until the removal of foothill yellow-legged frog and northwestern pond turtle, instruction of workers, and habitat disturbance have been completed. After this time, the County shall designate a person to monitor on-site compliance with all minimization measures. • If any work site will be temporally dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 5 millimeters. Water shall be released downstream at an appropriate rate to maintain downstream flows during construction and in such a manner as to prevent erosion. Dewatering structures shall be removed upon completion of the project. • Guidelines shall be implemented to protect water quality and prevent erosion, as outlined in the BMPs in Mitigation Measure 11-1, "Obtain Authorization for Construction Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required." 		

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>12-4: Potential Disturbance of Nests of Raptors and Other Birds. Trees and other vegetation in and adjacent to the project area provide potential nest sites for raptors and migratory birds. Removal of trees or other vegetation during construction and maintenance of trails and fuel breaks and for road improvements could destroy or disturb nests, resulting in loss of eggs or young. Use of the Park by reservation-based events may also cause nest failure. Use of trails could cause potential temporary disturbance to golden eagle nest sites.</p>	PS	<p>12-5: Implement Measures to Protect Raptors and Other Nesting Birds. The County and its contractors shall implement the following measures to reduce impacts on raptors and other nesting birds:</p> <ul style="list-style-type: none"> ▶ If trees larger than 6 inches dbh must be removed, then the following mitigation measures shall be implemented: <ul style="list-style-type: none"> • Tree removal shall be completed in accordance with the Placer County Tree Ordinance. • For any construction activities that take place between March 1 and August 31 (raptor breeding season), preconstruction or pre-event surveys for active raptor nests shall be conducted no more than 2 weeks prior to the start of the activity. If no active raptor nests are found, no further mitigation is required. If any active raptor nests are identified during surveys, then impacts on active raptor nests shall be avoided by establishing minimum buffers of 500 feet (0.25 mile for golden eagle) until young have fledged or the nest is otherwise no longer active. These buffers may be reduced if a qualified biologist determines that such a reduction would not risk failure of a nest. ▶ If active golden eagle nests are located within 0.25-mile of public trails or roads, the County shall: <ul style="list-style-type: none"> • Notify DFG of the nest; and • Cooperate with DFG in implementation of measures to protect the nests during nesting. 	LTS
<p>12-5: Potential Disturbance of Dens and Individual Ringtails. Trees along riparian portions of the project area such as Coon Creek that are 6 inches or greater dbh and are hollow or have large cavities provide potential den sites for ringtail. Removal of such trees or other vegetation during trail construction and for road improvements could destroy dens, resulting in potential loss of</p>	PS	<p>12-6: Implement Measures to Protect Ringtail and Townsend's Big-Eared Bat. The County and its contractor shall implement the following measures to protect Townsend's big-eared bat and ringtail:</p> <ul style="list-style-type: none"> ▶ A qualified biologist shall conduct pre-construction surveys to identify bat hibernation roost and maternity sites and potential 	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
adults and/or young.		<p>ringtail den sites in suitable habitat within 100 feet of proposed trails (i.e., those areas directly affected by trail construction). For bats, roost habitat surveys should focus on locations of mine tunnels, caves, abandoned buildings, and rock crevices; for ringtail, potential den site surveys should focus on locations of trees 6 inches dbh or greater in riparian areas.</p> <ul style="list-style-type: none"> ▶ The County shall avoid locating trails within 100 feet of bat roosts and ringtail dens. If avoidance is not possible, the County shall survey those locations to determine if they are occupied by the target species. If sites are not occupied, they may be sealed or removed in accordance with the following specifications: <ul style="list-style-type: none"> • Potential Townsend’s big-eared bat nursery roosts may be sealed from September through March, before the nursery season. The County shall verify that the potential roost is not occupied immediately before sealing it. • Potential Townsend’s big-eared bat hibernation roosts may be sealed from April through October, prior to before the hibernation season. The County shall verify that the potential roost is not occupied immediately before sealing it. • Potential ringtail den sites may be removed only from September through April. The County shall verify that the potential den is not occupied immediately before sealing it. 	
12-6: Potential Disturbance of Townsend’s Big-Eared Bat Habitat or Individuals. Limited habitat for Townsend’s big-eared bats occurs in the project area. Construction of trails, bridges, and structures could result in the disturbance of Townsend’s big-eared bat maternity or winter roosts.	PS	12-6: Implement Measures to Protect Ringtail and Townsend’s Big-Eared Bat. (Please see description above in Mitigation Measure 12-6.)	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>12-7: Potential Loss of Brandegee's Clarkia. Populations of Brandegee's clarkia were documented in the Spears Ranch portion of the Park. Construction of trails, fuel breaks, and road improvements along Garden Bar Road could potentially disturb known populations of Brandegee's clarkia.</p>	<p>PS</p>	<p>12-7: Implement Measures to Protect Brandegee's Clarkia. The County and its primary contractor shall implement the following measures to protect Brandegee's clarkia populations:</p> <ul style="list-style-type: none"> ▶ The locations of known Brandegee's clarkia occurrences in the project area shall be clearly marked for avoidance by construction crews before the commencement of project construction activities. ▶ If construction activities cannot avoid Brandegee's clarkia occurrences, then prior to commencement of construction, the following measures shall be implemented: <ul style="list-style-type: none"> • Information on Brandegee's clarkia occurrences in the project area shall be recorded on California Native Species Field Survey Forms and submitted to the CNDDDB. • Seed from Brandegee's clarkia populations shall be collected and redistributed into suitable habitat by a qualified botanist. Seed shall be distributed over an area twice the size of the affected area. Because Brandegee's clarkia is an annual plant that is tolerant of some disturbance, this measure will allow the perpetuity of populations in the project area and minimize the impact of project activities. 	<p>LTS</p>
<p>12-8: Impacts on Waters of the United States and Waters of the State. A preliminary wetland delineation identified approximately 31.5 acres of potentially jurisdictional waters of the United States and waters of the state on the Spears Ranch property and along Garden Bar Road. Although the majority of this area would be avoided and not affected by project implementation, installation of stream crossings and bridges, viewing boardwalks, and trail construction in the project area and road improvements along Garden Bar Road could result in the fill of jurisdictional waters of the United States and waters of the state, including wetlands.</p>	<p>PS</p>	<p>12-2: Replace, Restore, or Enhance Affected Jurisdictional Waters of the United States and Waters of the State. (Please see description above in Mitigation Measure 12-2.)</p>	<p>LTS</p>

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>12-9: Impacts on Oak Woodland Habitat. The proposed project may result in the removal of trees that are 6 inches dbh or larger from oak woodland habitat. Native oak trees are protected under the Placer County Tree Ordinance and SB 1334.</p>	PS	<p>12-8: Protect Oak Woodland Habitat. If removal of native trees larger than 6 inches dbh is required during construction of the proposed project, the County shall compensate for removal of those trees by paying in-lieu fees into the County approved oak woodland preservation fund as stipulated in the Placer County Tree Ordinance and in consultation with a certified arborist.</p>	LTS
<p>Public Services and Utilities (Chapter 13.0)</p>			
<p>13-1: Potential for Damage to Water or Wastewater Facilities. Implementation of the proposed project would require the installation of up to two groundwater wells and a septic system within the Spears Ranch portion of the Park, and the existing groundwater well and septic system could be upgraded or abandoned and replaced as part of the project. The project would not damage any public water or wastewater facilities.</p>	LTS	No mitigation necessary.	LTS
<p>13-2: Increase in Demand for Police Services. Use of the proposed Park would increase demand for police services in the project area. However, measures would be taken to minimize such demand.</p>	LTS	No mitigation necessary.	LTS
<p>13-3: Increase in Demand for Fire Services. Construction and use of the Park facilities may increase the risk of wildfire in the Spears Ranch portion of the Park because more people would be allowed into an area that is not currently open to the public. However, the County would implement measures to reduce the potential for a fire within the Park. Therefore, the project is not expected to cause a significant increase in demand for fire services.</p>	LTS	No mitigation necessary.	LTS
<p>13-4: Increase in Emergency Response Times. The proposed project may cause an increase in demand for emergency services. However, adequate access to the proposed Park would be provided for emergency vehicles. Therefore, current emergency response times are not expected to increase.</p>	LTS	No mitigation necessary.	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>13-5: Temporary Disruption of Utility Service during Construction. Implementation of the proposed project could require the relocation of utility poles that are adjacent to Garden Bar Road. Relocation of utility poles could cause temporary disruptions in service.</p>	LTS	No mitigation necessary.	LTS
<p>13-6: Increase in Solid Waste and Wastewater Generation. Operation of the Park would increase generation of solid waste and wastewater on the Spears Ranch portion of the Park and would increase the demand for solid waste disposal services. However, solid waste and wastewater generated by the project are expected to be minimal. In addition, the County would contract with Auburn Placer Disposal to provide solid waste disposal service to the Park and the on-site sewage disposal system and/or vault system would be designed to accommodate Park use.</p>	LTS	No mitigation necessary.	LTS
Hazardous Materials and Hazards (Chapter 14.0)			
<p>14-1: Potential for Fire to Occur during or after Construction. The potential exists for wildfire to occur during or after project construction. However, as part of the project, the County would implement management actions and fire response facilities that would reduce the risk of wildfire.</p>	LTS	No mitigation necessary.	LTS
<p>14-2: Potential for Release of Hazardous Materials during Construction or Operation. Park construction and maintenance equipment may use small amounts of hazardous materials. The proposed project would comply with all applicable federal and state regulations pertaining to handling of hazardous materials and worker health and safety; however, accidental spills or other releases of small amounts of hazardous materials could occur during construction or operation of the Park.</p>	PS	<p>14-1: Implement Measures to Reduce Hazards Associated with Potential Releases of Hazardous Materials. The County shall ensure that the following measures are implemented before project construction begins:</p> <ul style="list-style-type: none"> ▶ The County or the County's contractor shall prepare and implement an accidental-spill prevention and response plan for storage and use of hazardous materials during trail construction and maintenance. This plan shall identify measures to prevent accidental spills from leaving the area and methods for responding to and cleaning up spills before 	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>neighboring properties are exposed to hazardous materials.</p> <ul style="list-style-type: none"> ▶ The County shall ensure that any employee handling hazardous materials is trained in the safe handling and storage of hazardous materials and is trained to follow all applicable regulations with regard to such hazardous materials. ▶ The primary construction contractor shall identify a staging area where hazardous materials will be stored during construction, in accordance with applicable state and federal regulations. <p>5-1: Obtain Authorization for Construction and Operation Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required. (Please see description above in Mitigation Measure 5-1.)</p>	LTS
<p>14-3: Potential for a Public Safety Hazard from Hunting Activities. Activities allowed in the Park would include hunting of legal game and hunting to control damage to the Park, especially wild pigs. Hunting activities could conflict with other recreational activities occurring in the Park. However, measures would be implemented to protect the visiting public and surrounding residents from hunting activities.</p>	LTS	No mitigation necessary.	LTS
<p>14-4: Potential Exposure of People to Hazardous Materials. Although there have been no recorded releases of toxic materials in the project area, the Asbestos Building Material and Lead-Based Paint Survey Report concluded that several on-site buildings likely contain ACMs and LBP. In addition, several remnant mining or prospecting resources are located on-site that could contain hazardous materials.</p>	PS	<p>14-2: Prepare and Implement a Safety Hazard Plan and Conduct Soil Sampling. To avoid health risks to construction workers, Placer County shall require the contractor to prepare and implement a site health and safety plan if areas containing hazardous materials are to be disturbed. This plan will outline measures that will be employed to protect construction workers and the public from exposure to hazardous materials during remediation, demolition, and construction activities. The County shall consult with the contractor to determine the measures to be employed at the site, which could include posting notices, limiting access to the site, monitoring the air quality, watering, and</p>	LTS

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
	<p>installation of wind fences. Contractors shall be required to comply with state health and safety standards for all demolition work, including compliance with OSHA and Cal/OSHA requirements regarding exposure to ACMs and LBP.</p> <p>For any prospecting or mining resources (Abandoned Mine Lands) that are in close proximity to a project facility, a Phase 2 Limited Soil Sampling (soil sampling) shall be conducted to determine if there are any hazardous materials present on-site. The soil sampling of the tailings shall be conducted during the entitlement process (i.e. conditional use permit). Soil sampling will determine the California Human Health Screening Levels (CHHSL) of the testing protocol (CAM 17 metals, a list of 17 metals found typically in hazardous materials and mining sites). The CHHSLs are a list of 54 hazardous chemicals in soil or soil gas that the California Environmental Protection Agency (CalEPA) considers to be below thresholds for risks to human health.</p>	<p>The soil sampling results shall be reviewed by Placer County Environmental Health Services. If the soil sampling results are above the CHHSLs, then Placer County Environmental Health Services would refer the project to the DTSC. DTSC requires the project proponent to enter their Voluntary Cleanup Agreement (VCA) program. The VCA typically requires more soil testing to determine the scope of the contamination area. Furthermore, DTSC may require a Preliminary Endangerment Assessment (PEA) and/or a removal action workplan (RAW). The PEA is used to discuss the health risks associated with hazardous materials site releases and the RAW is used to specifically detail the areas of the project area to have soil removed and the contaminated soils disposal at an appropriate solid waste facility. Following soils removal, DTSC issues a "No Further Action" letter indicating that the project site is safe.</p> <p>In addition, the contractor shall prepare and implement a site plan that identifies necessary remediation activities appropriate for</p>	

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

Impacts	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>proposed land uses, including excavation and removal of on-site contaminated soils, and redistribution of clean fill material within the project area. The plan shall include measures that ensure the safe transport, use, and disposal of contaminated soil and building debris removed from the project area. In the event that contaminated groundwater is encountered during site excavation activities, the contractor shall report the contamination to appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminants before discharge into the sanitary sewer system. The contractor shall be required to comply with the plan and with applicable local, state, and federal laws.</p>	
<p>14-5: Increased Risk of Health Hazard from Vector-borne Diseases. There are existing stock ponds on the Spears Ranch portion of the Park and several new fishing ponds could be constructed as part of the project. These ponds could serve as potential habitat for mosquitoes. The project would also increase the number of people in an area that could contain several mosquito-breeding sites and therefore would increase the number of people potentially exposed to vector-borne diseases carried by mosquitoes. However, the County would coordinate with the Vector Control District to ensure these sites are not a hazard to the public.</p>	LTS	No mitigation necessary.	LTS

3.0 PROJECT DESCRIPTION

The Hidden Falls Regional Park Project (proposed project or project) involves access and recreation improvements at a regional park proposed by the Placer County (County) Department of Facility Services. The “project area” discussed below refers to the Spears Ranch property and the parking area on the Didion Ranch property, which make up a portion of the regional park, along with a portion of Garden Bar Road. This chapter provides information on the proposed project’s location, objectives, facilities, construction techniques, maintenance, and permitting requirements. Alternatives to the proposed project are presented in Chapter 15.0, “Other CEQA Sections.”

3.1 PROJECT LOCATION

The proposed project is located between north Auburn and the City of Lincoln in Placer County, in the Sierra Nevada foothills approximately 40 miles northeast of Sacramento. The approximately 1,200-acre Hidden Falls Regional Park (Park) consists of the properties formerly known as Spears Ranch (979 acres) and Didion Ranch (221 acres) (Exhibits 3-1 and 3-2). The project area includes portions of Coon and Deadman Creeks and is located south of the Bear River. The Hidden Falls property is bordered on all sides by private property. In the project area, Garden Bar Road is located to the west; Mt. Vernon and Mt. Pleasant Roads are to the south; Bell Road and Hubbard Road are to the east; and Big Hill Road is to the north.

3.2 CHARACTERISTICS OF THE PROJECT AREA

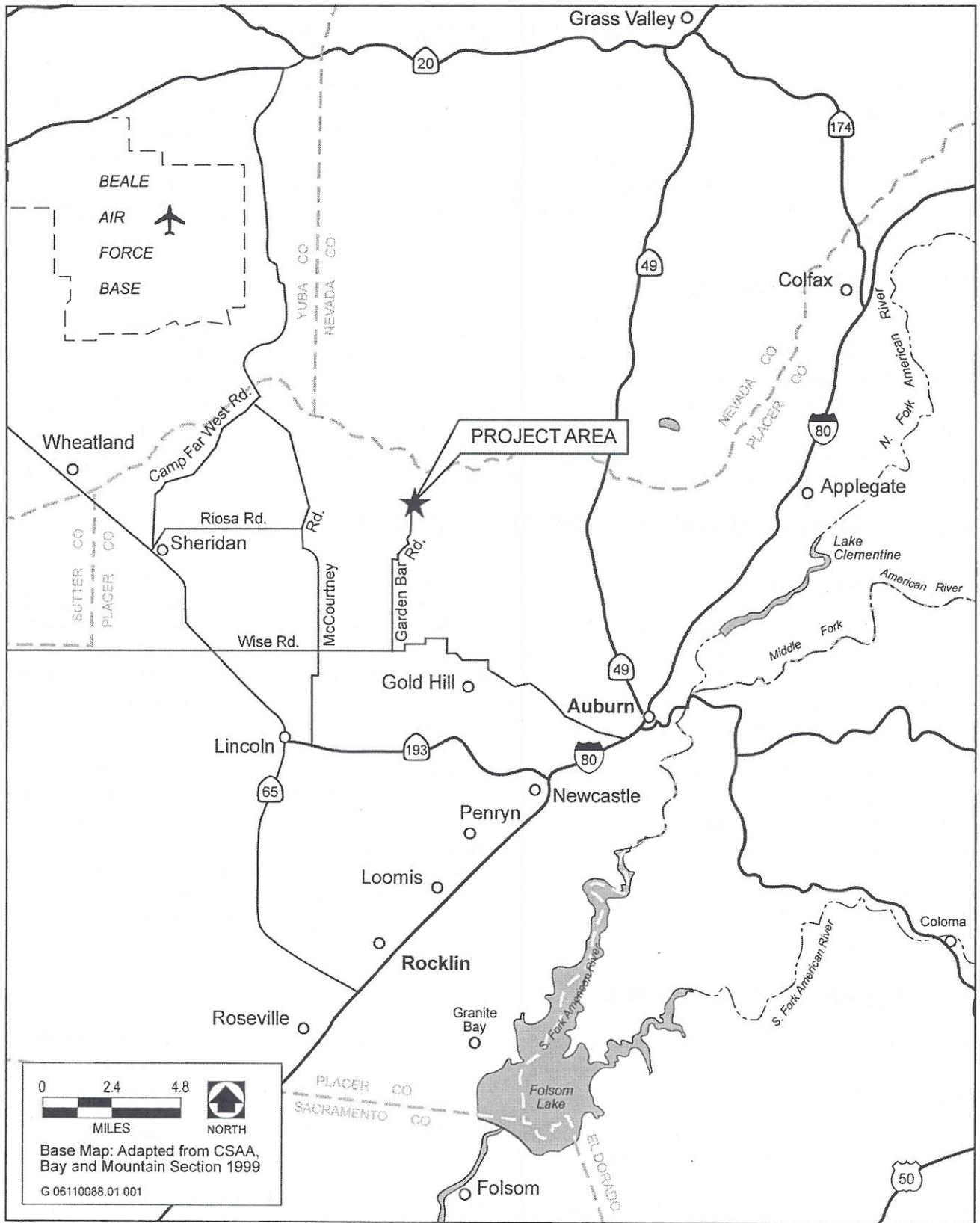
The Park is located in an unincorporated area of Placer County. The project area has been used for cattle grazing in the recent past, and portions of the property continue to be used for grazing. The Park and the surrounding area are characterized by blue oak woodland and oak-foothill pine woodland. Coon Creek flows from the northeastern portion of the property to the westernmost property boundary. Deadman Creek flows from the southeastern boundary and is confluent with Coon Creek within the Park. Several intermittent tributaries flow into Coon Creek from both the north and south. On-site creeks flow to the Feather River. Adjacent land uses include rural residential home sites and agriculture, mostly in the form of cattle grazing.

The Big Hill area of Placer County including the project area and area to the north has been identified as a strategic opportunity area for land conservation because of the relatively undeveloped stretches of the Coon Creek and Bear River watersheds, blue oak woodland and other habitats, value as a connected migration corridor with protected areas to the north such as the Spenceville Wildlife Area in Yuba County, and the large intact parcel sizes in the area. Exhibit 3-3 shows the properties in the vicinity of the Park and the Big Hill Area that are currently held in perpetuity for conservation purposes. Trail connectivity is being planned to link the Park to the Placer Land Trust parcels to the northeast, contingent upon successful acquisition of trail access rights through linking parcels.

3.3 PROJECT OBJECTIVES

Project objectives represent the overarching goals and purpose of a proposed project. They are used to guide the definition of project as a screening tool in evaluating project alternatives. The County has developed the following objectives for the proposed project.

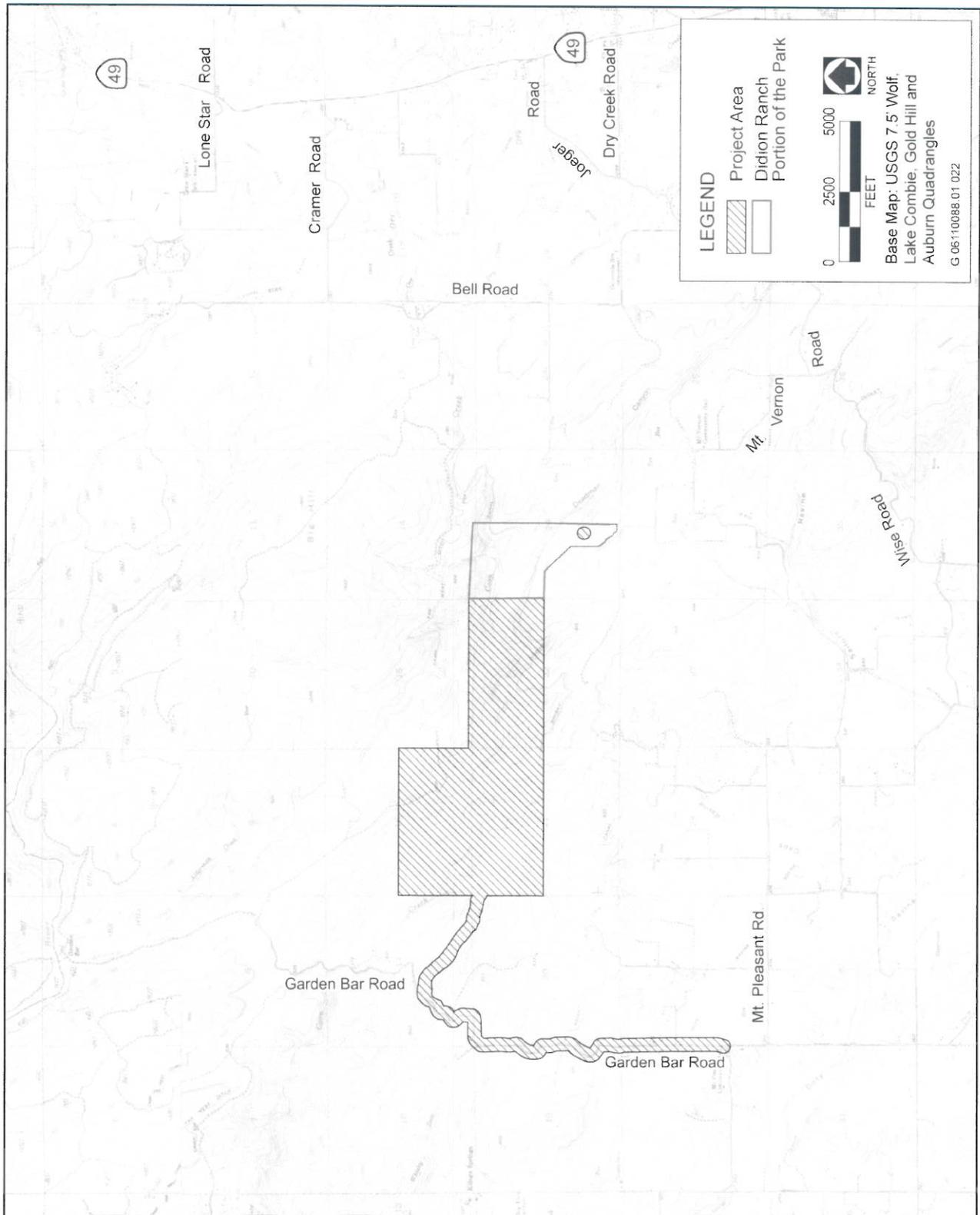
- ▶ Create an open space park consistent with the goals of the Placer Legacy Open Space and Agricultural Preservation Program (Placer Legacy Program).
- ▶ Provide adequate opportunities to a wide variety of park users to access a breadth of features within Hidden Falls Regional Park intended for public passive recreational and educational access without overburdening the natural resources and functional capacity of the site and appurtenant roadway system.
- ▶ Protect open space and blue oak woodland habitat for special-status species within Placer County.



Source: Data provided by EDAW in 2006

Vicinity Map

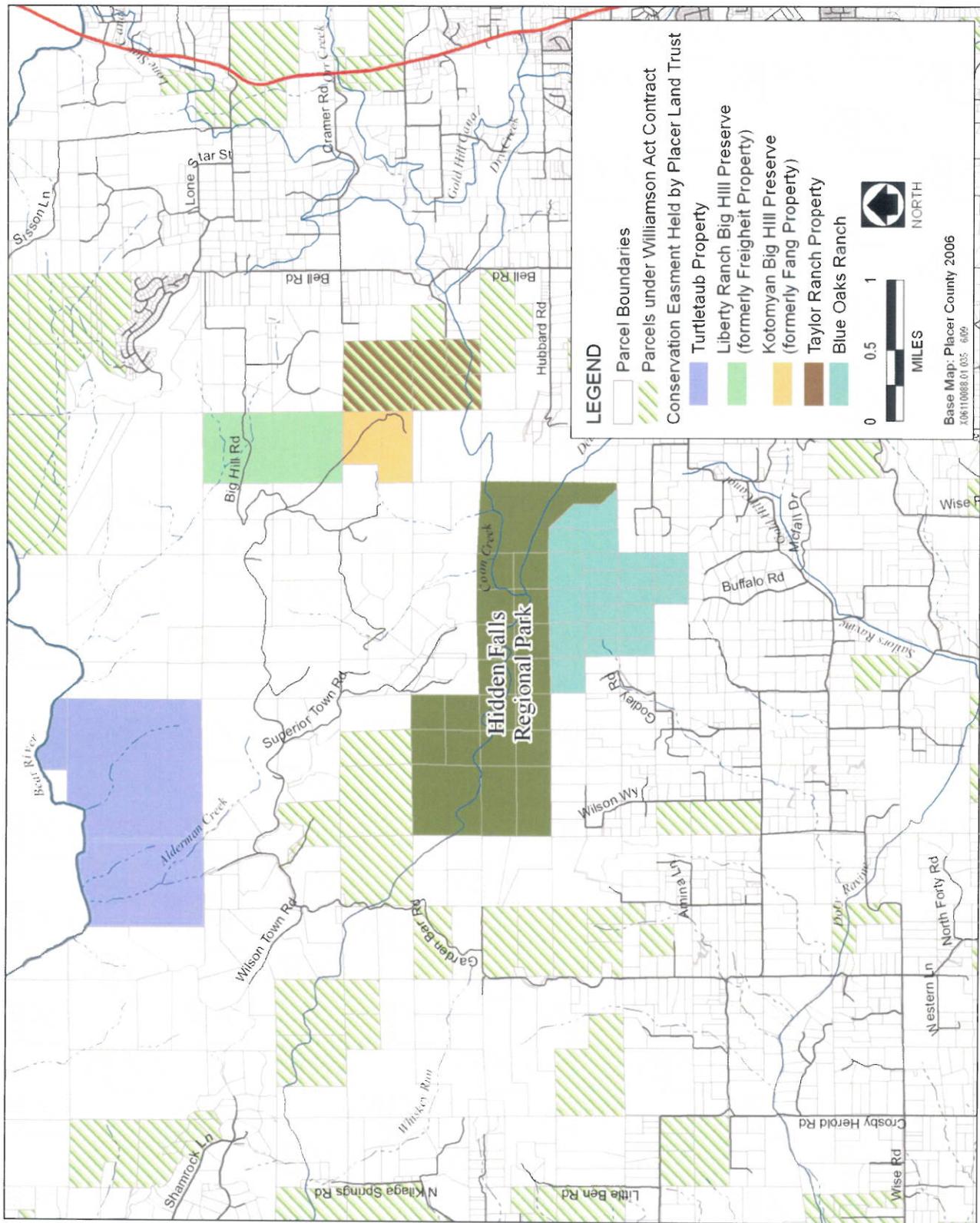
Exhibit 3-1



Source: Data provided by EDAW in 2007

Project Location Map

Exhibit 3-2



Source: Data provided by Placer County in 2002

Big Hill Area Conservation Areas

Exhibit 3-3

- ▶ Design a multiple-use, natural-surface trail system that will provide recreational opportunities for the residents of Placer County, while maintaining safety for park users, visitors, and nearby residents.
- ▶ Develop a project that minimizes the need for maintenance, thereby reducing long-term costs and environmental impacts.
- ▶ Develop a project that supports the future ability to create natural, cultural, and historic education and interpretive opportunities for youth and adults, fostering stewardship and environmental awareness.

3.4 DESCRIPTION OF THE PROPOSED PROJECT

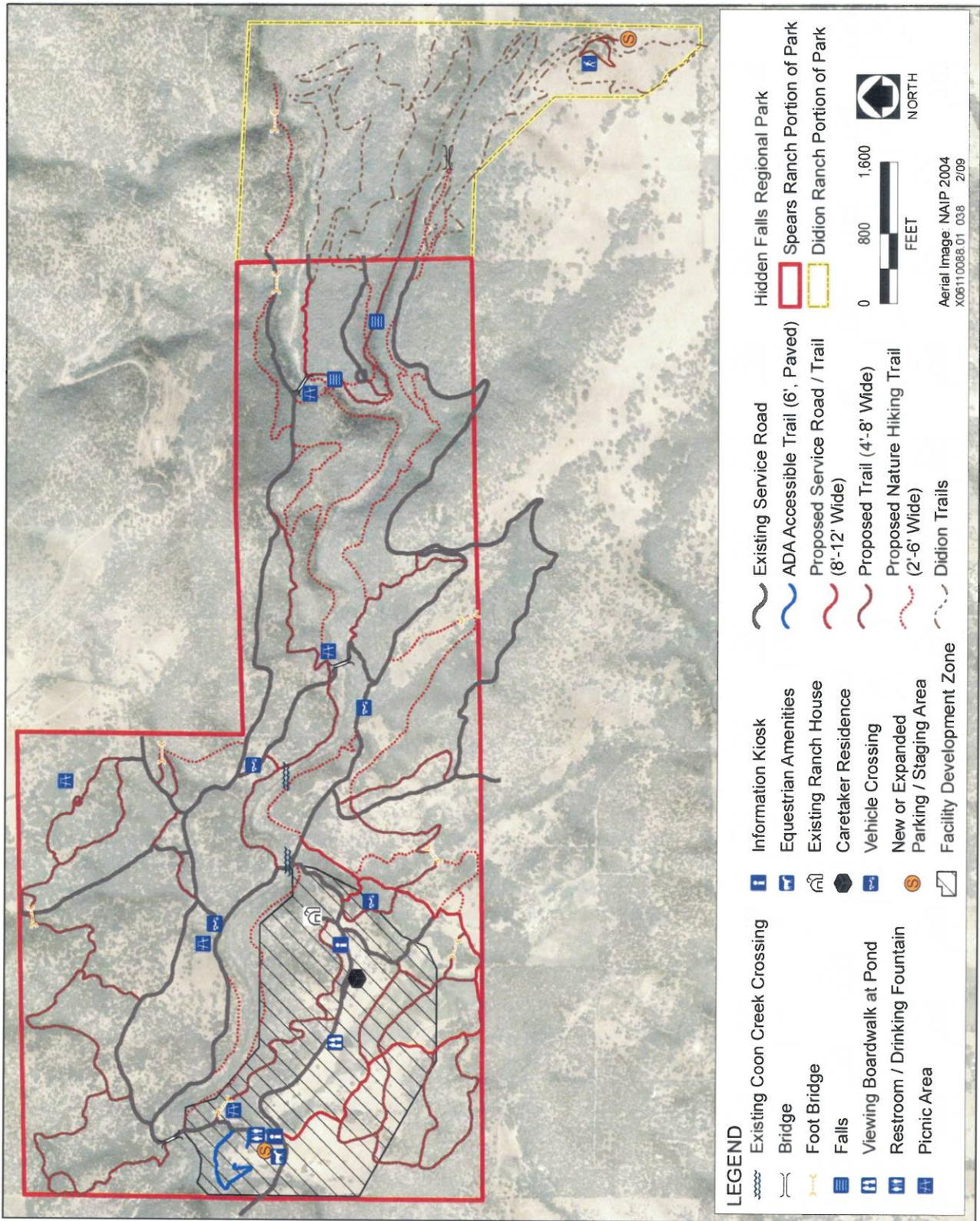
The proposed project would develop phased recreation and access facilities on the 979-acre former Spears Ranch property and would expand the existing parking area on the Didion Ranch portion of the Park to provide opportunities for passive recreation (i.e., hiking, biking, horseback riding) on the entire 1,200-acre Hidden Falls Regional Park. In addition, the project would improve access to the western portion of the property, including an on-site staging/parking area with access from Garden Bar Road. Various recreational/educational uses for the existing ranch house and site buildings are being considered including use as a nature/cultural education center and/or conference facility. The potential for overnight use of the ranch house area is being considered including the provision of bunkhouses near the ranch house.

A previously disturbed area within the Park has been identified as a facility development zone shown in Exhibit 3-4. The facility development zone is generally located in the southwestern portion of the Park, including the area surrounding the existing ranch house and the proposed parking/staging areas. Most future building and staging development within the Park would occur within the facility development zone. The exact location of individual facilities could vary within this zone as detailed design is prepared in the future. Other facilities (e.g., trails, picnic areas, bridges, vault/temporary toilets) would be located both inside and outside of the facility development zone.

3.4.1 TRAIL SYSTEM AND PARK AMENITIES

Specific features and uses that are part of the proposed project for the Park are as follows:

1. Approximately 14 miles of new multiple-use, natural-surface trails in addition to more than 10 miles of existing ranch roads for hikers, mountain bikers, and equestrians within the Spears Ranch portion of the Park. Exhibit 3-4 depicts the planned trail system designed by County staff and consultants with input from the Hidden Falls Trails Forum. This trail map would guide initial construction; however, the County would make adjustments to the trail network to promote desirable user patterns and other operational needs subject to avoidance of sensitive areas and adherence to applicable permit requirements;
2. Trail and bridge connections to other public trails near the Park property (in addition to the trail network constructed on-site);
3. American's with Disabilities (ADA) accessible trails including access for ADA vehicles;
4. Bridge crossings over Coon Creek and other streams to support the trail network, provide emergency access, connect to the existing trail system within the Didion Ranch portion of the Park, and provide access to the portion of the Park north of Coon Creek;
5. Culvert and rock-lined stream crossings over intermittent drainages to support the trails network;



Source: Placer County 2006

Proposed Hidden Falls Park Features

Exhibit 3-4

6. Groundwater wells for drinking water and restrooms as required to accommodate Park needs; irrigation water from the canal system may continue to be used for major irrigation activities and fire suppression facilities.
7. Fire suppression facilities (i.e., helistops for emergency use and an emergency water system);
8. Equestrian facilities (e.g., horse watering facilities, hitching posts);
9. Picnic areas throughout Park to accommodate use, including covered pavilions;
10. Benches and rest areas throughout the Park;
11. Enclosed bear-proof trash receptacles throughout Park to accommodate use;
12. Suitable landscaping around parking areas and restrooms;
13. Improvements to facilitate public access to viewing areas (e.g., overlook at Coon Creek Falls);
14. A disc golf course may be developed that would generally coincide with areas of shaded fuel breaks and other upland areas where the foot traffic pattern would not impact sensitive areas and/or would be beneficial to ongoing vegetation management/fire risk reduction objectives;
15. Drinking fountains;
16. Access to fishing locations along Coon Creek and/or ponds developed in coordination with the California Department of Fish and Game (DFG);
17. New fishing ponds may be developed in conjunction with the fuel load reduction and/or grazing plans and in coordination with DFG;
18. Film and theater production, subject to County Film Permit requirements;
19. Managed hunting of legal game and nuisance species during times of Park closure. Hunting would be allowed for up to two 2-day seasons per year with 10 hunting permits being issued per season or through depredation permits (e.g., for feral pigs);
20. Interpretive programs, including signage, displays, and/or guided tours; and
21. A group camping area with one or more formalized fire pits, a group tent area, and/or bunkhouses for scheduled, supervised overnight use within the facility development zone.

3.4.2 VEHICLE ACCESS, PARKING, AND ROAD IMPROVEMENTS

Public access to the Park would be provided via Garden Bar Road and Mears Drive. Park visitors would use the existing access road/easement from Garden Bar Road to the proposed western parking area. Vehicle access to the Park would be expanded in phases as funding becomes available as described in Table 3-1.

The proposed project is anticipated to generate as many as 128 weekday and 230 weekend vehicles round trip per day. Phased parking amenities include a 50-stall surfaced parking area to accommodate anticipated uses and a gravel equestrian parking area, a gravel overflow parking area, a parking area to accommodate the nature center, and a handicapped accessible parking area near the emergency access bridge. In addition, the existing parking area on the Didion Ranch portion of the Park would be expanded from 55 parking spaces (i.e., 50 for cars, five for trucks and trailers) to 82 (i.e., up to 25 additional paved stalls and 12 additional truck and trailer spaces) including relocation of the adjacent helistop immediately south of the existing location.

**Table 3-1
Summary of Park Access Phasing**

Permitted Access	Corresponding Improvements
PHASE 1	
<ul style="list-style-type: none"> ▶ Trail and emergency access system would be completed throughout the Park and opened for daily public use via existing Mears entrance ▶ Daily public vehicle access would be restricted to existing Mears entrance ▶ Didion Ranch parking area would be expanded from 55 parking spaces to up to 82 parking spaces (i.e., up to 25 additional paved stalls and 12 additional truck and trailer spaces) including relocating the adjacent helistop. ▶ Garden Bar entrance would continue to be used by County employees, tenants, contractors, consultants, utility providers, maintenance trucks, and fire and law enforcement personnel without additional improvements ▶ Development of existing ranch house may proceed during Phase 1 ▶ Occasional classroom sized groups would be permitted to access site through Garden Bar entrance on appointment basis (gates would be opened and closed behind groups) ▶ A handicap-placard-only parking area may be constructed near the emergency access bridge. Park use would be regulated through the Placer County Parks Division reservation system. 	<ul style="list-style-type: none"> ▶ Prior to allowance of classroom sized groups, a new public access gate and approximately 200 feet of connecting road to existing access road would be constructed at the intersection of Garden Bar Road near the existing access road. ▶ Prior to allowance of classroom sized groups, a 48 inch high 12.5-gauge woven wire field fence would be constructed along both sides of access road between Garden Bar Road and Park entrance. (as applicable per the terms of the Purchase and Sale Agreement with the Spears family) ▶ Prior to allowance of classroom sized groups, two cattle guards would be installed at each end of the access road between Garden Bar Road and the Park entrance. (as applicable per the terms of the Purchase and Sale Agreement with the Spears family) ▶ Up to 25 additional paved parking stalls and up to 12 additional equestrian parking stalls may be developed at the existing Mears entrance (Placer County 2003).
PHASE 2	
<p>In addition to Phase 1 Access:</p> <ul style="list-style-type: none"> ▶ Daily public automobile access would be allowed to the new parking area at western end of property via Garden Bar Road. ▶ Equestrian trailers would be excluded from the western parking area and from entering the Park via Garden Bar Road. Equestrians would continue to enter the Park via Mears entrance. ▶ Reservation-based events consistent with passive recreation and education with 200 attendees or less at one time would be allowed by County Parks Division reservation. ▶ Use of ranch house for educational and/or meeting purposes would remain regulated by County Parks Division reservation system and/or use agreements. 	<p>In addition to Phase 1 Improvements:</p> <ul style="list-style-type: none"> ▶ New parking area would be constructed at western end of property to include 50 stall paved parking lot and gravel overflow area. ▶ Widen Garden Bar Road from Mt. Pleasant Road to access road to 18 feet of hard surface with 2-foot shoulders where feasible subject to County review and approval.¹ ▶ Vertical curves along Garden Bar Road would be improved in accordance with traffic safety report recommendations subject to County review and approval. ▶ Signing and striping improvements along Garden Bar Road would be made in accordance with traffic safety report recommendations subject to County review and approval. ▶ Improve the access road from Garden Bar Road to the western parking area to 24 feet wide all weather surface with 2-foot shoulders where feasible subject to County review and approval¹. ▶ Install a gate between the western parking area and the ranch house to prevent unrestricted vehicle access beyond parking area into remainder of property.
PHASE 3	
<p>In addition to Phase 1 and 2 Access:</p> <ul style="list-style-type: none"> ▶ Daily public access for equestrian trailers would be allowed to the western parking area via Garden Bar Road. 	<p>In addition to Phase 1 and 2 improvements:</p> <ul style="list-style-type: none"> ▶ A gravel equestrian staging area would be constructed adjacent to the new paved parking area to allow parking for up to 20 horse trailers. ▶ Widen Garden Bar Road from Mt. Pleasant Road to the access road to 20 feet of hard surfacing with 2-foot shoulders where feasible subject to County review and approval.¹ ▶ Horizontal curves along Garden Bar Road would be improved in accordance with traffic safety report recommendations subject to County review of improvement plans.
<p>¹ In areas along Garden Bar Road and the access road from Garden Bar Road to the Park entrance where the County determines that status trees, significant rock outcroppings, and other valuable natural features within the proposed widening corridor should be preserved or where adequate road right-of-way does not currently exist and is not obtainable through market value based willing seller negotiations, alternatives such as turnouts, striping, and/or signage may be considered and approved in lieu of full width widening for those discreet areas.</p>	

3.4.3 EDUCATIONAL USES AND USE OF EXISTING FACILITIES

Educational uses within the Park may include:

- ▶ rehabilitation of the existing ranch house to function as a nature/cultural education/conference center.
- ▶ agricultural, cultural, scouting, and informational/educational classes and programs;
- ▶ multiple-day or overnight educational, agricultural, cultural, and scouting camps (subject to agreement and conditions determined by the County on a case-by-case basis) including a commercial kitchen. Overnight activities would be confined to the facility development zone; and
- ▶ access for school programs, such as cross-country training and meets, and educational field trips that are consistent with passive recreation and education.

Any large events that would exceed the capacity of the on-site restrooms would need to supply portable toilets, and events with 200 individuals or more would be required to obtain a Temporary Event Permit from the County and would undergo separate environmental review. Size, timing, duration, and other variables related to these events are not known at this time, therefore, consistent with other County Park operations, these would separate environmental review would be needed as part of the permit application process.

A variety of renovation and use options are being considered for the existing ranch house. Uses under consideration include:

- ▶ a nature education center with meeting room facilities;
- ▶ a classroom;
- ▶ an event facility;
- ▶ a volunteer and information center;
- ▶ interpretive and educational displays; and
- ▶ an environmental education camp.

The two existing former residences and outbuildings located southwest of the ranch house would be demolished. Similar sized buildings may be erected within the facility development zone for use as a maintenance shop or caretaker residence, or they would be incorporated into an educational/camp program. Up to 10 additional buildings may be constructed for use as bunkhouses near the existing ranch house, if the ranch house is used for overnight camp functions or environmental education. If constructed, these buildings would be located in the proximity of the existing ranch house and would be approximately 16 feet by 28 feet each. In addition, up to two restroom facilities that would be approximately 400 square feet each may be constructed in this area to serve the bunkhouses. One or two campfire pits may also be constructed in this area as part of the overnight camp uses. Campfires would require a permit and would not be allowed outside of the designated fire pit areas or on high fire hazard days as designated by CalFire.

Organized camping accommodation would be subject to the provisions of California Health and Safety Code standards for Camps (Division 13, Part 2.3) and other applicable state and local regulations.

3.4.4 FISH AND WILDLIFE HABITAT RESTORATION

Pending identification of implementation and maintenance funding, the following wildlife and habitat restoration elements would be allowed and encouraged along Coon Creek and throughout the project area:

- ▶ fish passage amenities;
- ▶ nesting boxes;

- ▶ natural erosion control along streambanks, roadbeds, and other areas;
- ▶ habitat revegetation projects, including native planting of oak woodlands, grasslands, floodplains, wetlands, and riparian habitat; and
- ▶ protective measures to direct visitors away from protected resources.

3.4.5 AGRICULTURE

Agricultural uses that would be allowed in the Park include:

- ▶ continuation of current grazing agricultural activities;
- ▶ farm management practices (e.g., maintenance of fences, expansion of irrigated pastureland);
- ▶ agricultural research projects conducted by qualified institutions;
- ▶ agricultural education programs; and
- ▶ grazing for specific vegetation management purposes (e.g., use of goats).

3.4.6 STREAM CROSSINGS AND DRAINAGE FEATURES

The proposed trail system would cross Coon Creek in three locations. One bridge would provide access for pedestrians, equestrians, and emergency vehicles and two bridges would provide access for pedestrians, equestrians, and small maintenance vehicles only. Approximately eight pedestrian/equestrian foot bridges would also be constructed over drainages along the trail system including Deadman Creek. Bridges would be designed to fit the rustic character of the surroundings and may include suspension, covered, truss, and/or other designs. Abutments would likely be concrete subject to engineered design. Decking and other structural components may be made of weathering steel, fiberglass, concrete, steel cable or other suitable materials. Local rock or imitation rock may also be used as facing on concrete abutments. Up to 25 additional drainage crossings would require construction or replacement of culverts or the use of rock-lined stream crossings. Rocks would be placed in ephemeral drainages to provide a level surface and prevent erosion.

3.4.7 INTERPRETIVE PROGRAM

A kiosk would be placed at each parking area to provide information to Park users. Kiosks would include informative displays on topics such as water quality, wildlife, habitat, and general park information. Interpretive and directional signage or audio-visual displays, or both, would be placed at key points throughout the property. Interpretive signs would include information on topics such as native and nonnative plants, mining and Native American history in the area, conservation and restoration programs, and wildlife that can be found in the Park.

3.4.8 MAINTENANCE FACILITIES

The Park would include the following maintenance facilities that would be located within the facility development zone:

- ▶ a maintenance yard near the ranch house and parking area, used to store and maintain equipment (e.g., tractors, mowers, all-terrain vehicles);
- ▶ a maintenance shop/barn—either a new building or renovated existing building;
- ▶ irrigation system to support landscaping near parking areas and restrooms if landscaping is installed;
- ▶ security and safety lighting for the maintenance yard; and

- ▶ perimeter and cross fencing to enclose maintenance areas.

If construction of a new maintenance building is necessary, the building would be constructed within the facility development zone.

3.4.9 SIGNS, FENCES, AND GATES

Perimeter fencing around the property would be repaired in kind or replaced with barbless wire. New sections would be constructed of barbless wire as needed. Cross fencing and exclusionary fencing would be constructed in riparian and other sensitive areas throughout the Park and along the access road from Garden Bar Road to the proposed western parking area. Fencing may be constructed of a variety of materials including wood rail, barbless wire, and large rocks. Signage with trail etiquette would be posted at trailheads. Directional signage would be placed along primary public-access routes from both Auburn and Lincoln in addition to the informational signage described above in Section 3.4.7.

3.4.10 FIRE SUPPRESSION FACILITIES

Fire suppression facilities would include emergency water facilities, a new helistop in the Spears Ranch portion of the Park and a relocated helistop in the Didion Ranch portion of the Park. The helistops would be flat unpaved areas where emergency helicopters can land during emergencies. Emergency water facilities would be located between the proposed parking area within the western portion of the property and the existing ranch house to allow for emergency access. Water for the emergency water system could come from Whiskey Diggins Canal, well backup, a potential new Nevada Irrigation District raw water conveyance line, off-site water sources via water trucks, and/or existing or new ponds. The emergency water system would include standard fire hydrants and may include any combination of the following components:

- ▶ 12,000-gallon water tank with gravity flow to the hydrant system;
- ▶ existing and/or new ponds;
- ▶ raw water service to the hydrant system from the Whiskey Diggins Canal; or
- ▶ raw water service to the hydrant system from the proposed Nevada Irrigation District (NID) raw water conveyance pipeline.

3.5 USES NOT ADDRESSED IN THIS EIR

The following uses are not analyzed in this EIR and would not be allowed in the Park:

- ▶ use of motorized vehicles outside of designated access/parking areas, except for motorized wheelchairs, maintenance vehicles, film crews, and vehicles permitted by separate permit;
- ▶ hunting during open Park usage hours;
- ▶ amplified noise;
- ▶ active recreation sports (e.g., soccer, baseball, basketball);
- ▶ lighting other than security and safety lighting around the caretaker residence, maintenance yard, ranch house building, and camp; and

Additional approvals by the County, following supplemental environmental and public review, would be required if any of these uses are considered in the future.

3.6 TRAIL AND FACILITY CONSTRUCTION

Mechanical and hand construction techniques would be used to build the proposed trail system. One or more crews from the California Conservation Corps, licensed contractors, volunteers, and/or County staff would be used to construct the trail system and other facilities.

Vegetation along the trail corridors would be cleared by hand before construction. Vegetation removal along the trail corridors would be minimized to the extent possible; however, a selective vegetation removal within a 15 – 20 foot trail corridor would be performed to accommodate multiple trail uses. Selective vegetation removal means that the trail corridors would not be clear cut. Rather, underbrush, limbs, and select smaller trees would be removed around the trail envelope leaving the trail to meander around larger trees within the corridors. Vegetation removed for trail construction would be chipped or lopped and scattered near the trails. Soil stabilizers and crushed rock, mulch, and/or straw may be needed along the trail tread in some areas to prevent erosion. Topical areas prone to erosion would be stabilized with certified “weed-free” grain straw. The alignment of proposed trails would be located to minimize the removal of native trees greater than 6 inches in diameter at breast height (dbh). Trees larger than 6 inches dbh that are removed would be mitigated with preservation of existing oak woodland within the project area and payment of in-lieu fees for oak woodland preservation consistent with the Placer County Tree Ordinance.

The tread widths of the proposed trail alignments (i.e., the actual surface on which trail users actively place feet, hooves, or wheels) would vary depending on the type of trail. Multiple-use trails would be 4–8 feet wide, service and emergency access roads that can also be used as trails would be 8–12 feet wide, and nature hiking trails would be 2–6 feet wide. Trail widths would vary as needed based on safety considerations and avoidance of biological or cultural resources. The trail tread would be excavated using a Sweco trail dozer, mini excavator, and/or other machinery capable of conforming to the dimensional requirements of the trails. Dips and undulations in the design would follow the natural drainage patterns to facilitate effective surface flow of water off the trail tread.

Construction of parking areas and other recreational facilities would require moving and placing soil, rough and fine grading, installing signage, removing vegetation, paving, installing equipment, finishing, and cleanup. Large equipment such as graders, excavators, pavers, dozers, and haul trucks would be used to construct the proposed roads, parking areas, restrooms, and other facilities. A drainage system would be installed adjacent to parking areas to compensate for any alterations in water flow. Vegetation around the proposed parking areas would be mulched, stockpiled, and placed on exposed areas after construction.

Protective fencing would be installed around sensitive areas during bridge construction and protective measures would be implemented, consistent with Central Valley Regional Water Quality Control Board (RWQCB) regulations, to ensure that concrete residue would not enter Coon Creek.

Construction of the trail system and associated recreational facilities is expected to generate a maximum of 400 delivery trucks. However, construction-related traffic would be spread out over several years as described below in Section 3.6.1, “Construction Schedule.” For Phase 1 of construction, truck traffic is expected to be approximately 10–20% of the total needed or 40–80 truck trips. Construction activities would generally take place Monday through Saturday, although construction activities that are inaudible from areas outside the Park may be permitted on Sundays. From Monday through Friday, work would be allowed between 6 a.m. and 8 p.m. during daylight savings time and between 7 a.m. and 8 p.m. during standard time. Construction activities would be allowed between 8 a.m. and 6 p.m. on Saturdays.

3.6.1 CONSTRUCTION SCHEDULE

The proposed project would be constructed in phases over several years as funding allows. Each phase would allow an additional level of public access to the Park. The project elements included in each phase are described above in Table 3-1. Phases 1 through 3 are addressed in this EIR. Improvements intended to accommodate large events with more than 200 individuals on-site at a given time or large events that would exceed the parking capacity in combination with regular day use are not being proposed at this time and would require a Temporary Event Permit. Temporary Event Permits are issued by the County Community Development Resources Agency (CDRA). CDRA evaluates Temporary Event Permit applications and assigns the appropriate level of environmental review to each application based on the specifics of the proposed event.

Construction of some of the project elements would need to coincide with favorable weather conditions. Vegetation clearing would be scheduled in the nonbreeding season for raptors (September–March) or outside nesting areas documented by preconstruction surveys conducted by a qualified biologist. Bridges would be built during dry periods of the year.

Phase 1 amenities are expected to be constructed and corresponding uses allowed within the next 5 years. Phase 2 and 3 amenities and uses are expected to be constructed in succession following Phase 1 as funding becomes available.

3.7 LONG-TERM MAINTENANCE

The proposed trail system and recreational facilities would be designed to be as low maintenance as possible, although some regular maintenance of the Park facilities would be required. The majority of Park maintenance would be conducted by County staff, volunteers, and user groups.

Trail maintenance would include activities, such as selectively clearing vegetation; regrading trail tread; removing loose rocks, roots, and dead trees; and replacing trail surface material, if necessary. Localized spraying of herbicide may be required along the trail corridor to prevent vegetation from overgrowing the tread. Herbicides would be applied by County staff members certified in herbicide/pesticide application. Additional maintenance may be required as a result of weather-related events (e.g., removal of downed trees and slide removal); routine wear from hikers, mountain bikers, and equestrians; and unauthorized activities such as vandalism. Other maintenance activities, such as litter cleanup and sign repair, would be conducted as necessary.

Material that is low maintenance and weather and graffiti resistant would be used for Park amenities throughout the property. The Park's restroom facilities would be cleaned by a janitorial service on a regular schedule, and the County would generally maintain parking areas and other paved areas, including sealing cracks as needed. The County would also repair, maintain, and winterize the existing ranch house as needed, and inspect and maintain water wells in the project area in accordance with their public water permits.

Oversight of Park activities would be provided through the collective efforts of any combination of County sheriff staff, County maintenance staff, volunteer patrol groups, and/or Park users. The project area is located within the sheriff's patrol district for the Auburn area. A resident caretaker may also be used to help minimize the incidents of vandalism, crime, and misuse of Park property. The Park would be closed at night and all gates on access roads to the Park would be locked, which would further deter unauthorized activities.

3.8 ONGOING MANAGEMENT ACTIVITIES

Current and long-term operation of the Park property requires ongoing management activities to ensure the safety of Park users, maintain existing access, reduce fire risk, minimize erosion, protect habitats, control animal depredation, and manage ongoing ranch operations. These management actions are currently under way and are expected to continue as needed throughout the life of the Park. Under a categorical exemption, the County is

proceeding with some of the actions described below, which are ongoing standard land ownership and management and maintenance practices.

3.8.1 FUEL LOAD MANAGEMENT

Fuel load management and fire reduction measures in the Park would include:

- ▶ thinning vegetation and clearing a defensible space around parking and improvement areas and buildings and maintaining fuel break areas;
- ▶ maintaining fire safe areas adjacent to the main vehicle-access road system within the Park;
- ▶ creating shaded fuel breaks;
- ▶ flagging all work-area boundaries and erecting temporary signs to notify Park users of the work areas;
- ▶ developing a maintenance plan for maintaining areas of defensible space around existing and immediately proposed improvements, roads, and shaded fuel breaks;
- ▶ grazing within the property on a year-round basis or seasonally at or below the property's carrying capacity (i.e., 75 cows);
- ▶ exploring the use of goats or other suitable grazers as a vegetation management tool; and
- ▶ developing additional livestock watering points to help improve livestock distribution.

3.8.2 RANCH ROAD MAINTENANCE AND RESTORATION

- ▶ implement storm water Best Management Practices under guidance of an erosion control specialist.

3.8.3 PARK PLANNING AND CONSTRUCTION

Additional planning and construction activities being proposed for the Park include:

- ▶ evaluating additional amenities and uses that are consistent with the goals of the Placer County General Plan, Placer Legacy Program, and the terms of the use permit as opportunities and demand arise;
- ▶ further developing agricultural uses;
- ▶ developing nature and cultural education elements as resources and programming partners emerge;
- ▶ refining the trail system and associated amenities as user and wear patterns evolve;
- ▶ administering controlled hunting of legal game and nuisance species (e.g., feral pigs) during times of Park closure for population management. Hunting would be allowed for up to two 2-day seasons per year with 10 hunting permits being issued per season or through depredation permits; and
- ▶ demolishing unsalvageable outbuildings.

3.9 INTENDED USES OF THIS EIR

An EIR analyzes the environmental effects of a project, indicates ways to reduce or avoid significant and potentially significant environmental effects resulting from the project (i.e., mitigation measures), and identifies alternatives to the project that are also capable of avoiding or reducing project-related significant environmental impacts. An EIR must also disclose significant environmental effects that cannot be avoided, growth-inducing effects, significant cumulative impacts, and effects found not to be significant. The purpose of an EIR is not to recommend approval or denial of the project, but to provide information to aid the public, decision-makers, and permitting agencies in the decision-making process.

3.9.1 REQUIRED PERMITS AND APPROVALS

Permits and approvals required by federal, state, and local agencies for the proposed project are listed in Table 3-2. These permits and approvals are discussed in more detail below.

Agency	Permit/Approval
U.S. Army Corps of Engineers	Permit under Section 404 of the Clean Water Act
Central Valley Regional Water Quality Control Board	Permit under Section 401 of the Clean Water Act; National Pollutant Discharge Elimination System permit
California Department of Fish and Game	Consultation under the California Endangered Species Act and authorization of incidental take; permit under Section 1602 of the Fish and Game Code (streambed alteration agreement)
U.S. Fish and Wildlife Service	Consultation under the federal Endangered Species Act and authorization of incidental take
Placer County Community Development Resource Agency	Conditional Use Permit
Placer County Department of Public Works	Encroachment permit for Garden Bar Road improvements
Placer County Environmental Health Division	Evaluation of the sewage system permit for the water system
California Department of Public Health	Public water provider's permit (administered by the Placer County Environmental Health Division)

Source: Data provided by EDAW in 2008

U.S. ARMY CORPS OF ENGINEERS

It is anticipated that fill would be placed in jurisdictional waters of the United States as part of the proposed project; therefore, a permit from the U.S. Army Corps of Engineers (USACE) would be required under Section 404 of the federal Clean Water Act. If the project's impacts would be less than 0.5 acre or 300 linear feet, the County would obtain a Nationwide Permit 42 that serves as compliance with the Clean Water Act for dredging and/or fill activities related to the construction of recreational facilities, specifically the creek crossings and bridge installations. If the project's impacts exceed 0.5 acre or 300 linear feet, the County would obtain an individual 404 permit. It is likely that separate applications will be submitted related to facility development within the Park and Garden Bar Road improvements.

U.S. FISH AND WILDLIFE SERVICE

The proposed project has the potential to affect species that are federally listed as threatened or endangered. If take cannot be avoided, consultation would be required under Section 7 of the federal Endangered Species Act. Section 7(a)(2) requires consultation with the U.S. Fish and Wildlife Service to ensure that the proposed project would not jeopardize the continued existence of any listed species. If fill of USACE jurisdictional waters for implementation of the proposed project could result in take of California red-legged frog and Central Valley steelhead, consultation between USACE, USFWS, and NMFS under Section 7 of ESA would be required.

CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

The proposed project may have the potential to degrade water quality of other waters of the United States as regulated by the Central Valley RWQCB. A water quality certification from the Central Valley RWQCB would be required under Section 401 of the Clean Water Act. An application for Section 401 certification would be submitted to the Central Valley RWQCB with the CEQA documentation.

It is anticipated that the project construction area would exceed 1 acre in size; therefore, a National Pollutant Discharge Elimination System permit would also be required by the Central Valley RWQCB on behalf of the U.S. Environmental Protection Agency (see Chapter 11.0, "Hydrology and Water Quality").

CALIFORNIA DEPARTMENT OF FISH AND GAME

It is anticipated that the proposed project would affect Coon and Deadman Creeks and/or adjacent riparian habitat; therefore, a streambed alteration agreement from DFG is required pursuant to Section 1602 of the Fish and Game Code. An application for a Section 1602 streambed alteration agreement would be submitted to DFG.

If the proposed project has the potential to affect a state-listed or special-status species, consultation under the California Endangered Species Act would be required. For direct or indirect impacts on state-listed species, an incidental take permit would be required under Section 2081 of the Fish and Game Code. If the state-listed species is also federally listed, a consistency determination would be required under Section 2080.1 of the Fish and Game Code.

PLACER COUNTY PERMITS

An encroachment permit from the County Department of Public Works would be required for proposed road improvements along Garden Bar Road. In addition, a Conditional Use Permit from the County Community Resource Development Agency would be required, and a sewage system evaluation, public well construction permit, small public water system provider's permit, and well abandonment permit (if applicable) would be required from the County Environmental Health Division.

Prior to submitting any County application or improvement plans for approval associated with the Park, the applicant for each proposed project shall complete a Subsequent Conformity Review questionnaire. The purpose of the questionnaire will be to enable the County to determine whether the proposed project is consistent with this EIR, to examine whether there are project-specific effects that are particular to the project or its site that were not considered in this EIR, and/or whether an event as described in Section 15162 of the State CEQA Guidelines has occurred. The County may require additional information to make such a determination, including, but not limited to, the following:

- ▶ Preliminary Grading Plan (including off-site improvements)
- ▶ Preliminary Geotechnical Report

- ▶ Preliminary Drainage Report
- ▶ Preliminary Water Quality Best Management Practices (BMP) Plan
- ▶ Acoustical Analysis (and associated Traffic and Circulation Studies)
- ▶ Hazards/Past Use Studies (Phase I Environmental Site Assessments and Phase II limited soils investigation, and/or Preliminary Endangerment Assessment with California Department of Toxic Substances Control, as determined by County Environmental Health Services)
- ▶ Mosquito Control Design Features (for waterways, underground water detention structures, water facilities, etc.)
- ▶ Water Quality Related Studies/Details (BMP's, Preliminary Grading Plan, Preliminary Drainage Plan)
- ▶ Utility Will-Serve Requirements Letters (water, sewer, solid waste, reclaimed water, etc.)
- ▶ Senate Bill (SB) 221 Water Supply Assessment Information
- ▶ Hazardous Materials Usage Information
- ▶ Water Supply Well Information (as applicable)
- ▶ Biological and Cultural Resources Study; and
- ▶ Public Safety Assessment

Based on the information provided, the County will determine whether the proposed development entitlement is consistent with this EIR, whether additional environmental compliance is required, and if so, the correct mechanism of such compliance.

3.9.2 OTHER AGENCIES USING THE EIR AND CONSULTATION REQUIREMENTS

This EIR will be used by the County and CEQA responsible agencies to fulfill the requirements of CEQA. It will also be used as an informational document by federal agencies that could have permitting or approval authority for the project and by other state and local agencies, including CEQA trustee agencies that may have an interest in the project. See Chapter 1.0, "Introduction," for detail on the lead, responsible, and trustee agencies for the proposed project.

Consultation with these responsible and trustee agencies as well as Native American interests is ongoing. As described in Chapter 6.0, "Cultural Resources," consultation was initiated with representatives of Native American groups during early planning phases for the project. Because the project area could be of cultural significance to Native Americans, individuals and representatives from local Native American tribes were consulted before any field surveys and ground-disturbing activities were conducted. The United Auburn Indian Community of the Auburn Rancheria, Shingle Springs Band of Miwok Indians, Todd Valley Miwok-Maidu Cultural Foundation, and Rose Enos were all contacted by letter, with requests for information on sacred or sensitive resources within the project area. The Native American Heritage Commission was also contacted concerning the proposed project.

The following is a list of entities that may use this EIR for discretionary or informational purposes:

FEDERAL AGENCIES

- ▶ U.S. Army Corps of Engineers
- ▶ U.S. Fish and Wildlife Service
- ▶ National Marine Fisheries Service

STATE AGENCIES

- ▶ California Air Resources Board
- ▶ California Department of Conservation
- ▶ California Department of Fish and Game, Region 2
- ▶ California Department of Forestry and Fire Protection
- ▶ California Department of Parks and Recreation
- ▶ California Department of Transportation, District 3
- ▶ California Highway Patrol
- ▶ California Resources Agency
- ▶ Central Valley Regional Water Quality Control Board
- ▶ State Water Resources Control Board

LOCAL AGENCIES

- ▶ City of Auburn
- ▶ City of Lincoln
- ▶ Placer County Board of Supervisors
- ▶ Placer County Department of Public Works
- ▶ Placer County Community Resource Development Agency
- ▶ Placer County Environmental Health Division
- ▶ Placer County Air Pollution Control District
- ▶ Placer County Department of Facility Services
- ▶ Placer County Sheriff-Coroner-Marshall
- ▶ Placer County Office of Emergency Services

4.0 LAND USE AND AGRICULTURAL RESOURCES

This chapter evaluates the environmental impacts from implementation of the proposed project on existing land uses and agricultural resources. A description of the existing site characteristics and setting is followed by an analysis focused on the relationship between the proposed project and existing plans and policies, and the relationship with proposed on-site and existing adjacent land uses.

4.1 ENVIRONMENTAL SETTING

4.1.1 PROJECT AREA (EXISTING LAND USES, AGRICULTURE)

The proposed project is located between north Auburn and the City of Lincoln in Placer County, in the Sierra Nevada foothills approximately 40 miles northeast of Sacramento. The Park includes approximately 1,200 acres of open space lands consisting of Spears Ranch (979 acres) and Didion Ranch (221 acres). The project area is situated along Coon Creek and is south of the Bear River. Garden Bar Road is located to the west; Mt. Vernon and Mt. Pleasant Roads are to the south; and Bell and Hubbard Roads are to the east. The area is undeveloped except for an existing ranch house and several smaller support structures; the project area consists largely of open space comprising natural oak woodlands, with Coon Creek, Deadman Creek, and associated tributaries meandering from the eastern end of the property to the westernmost property boundary.

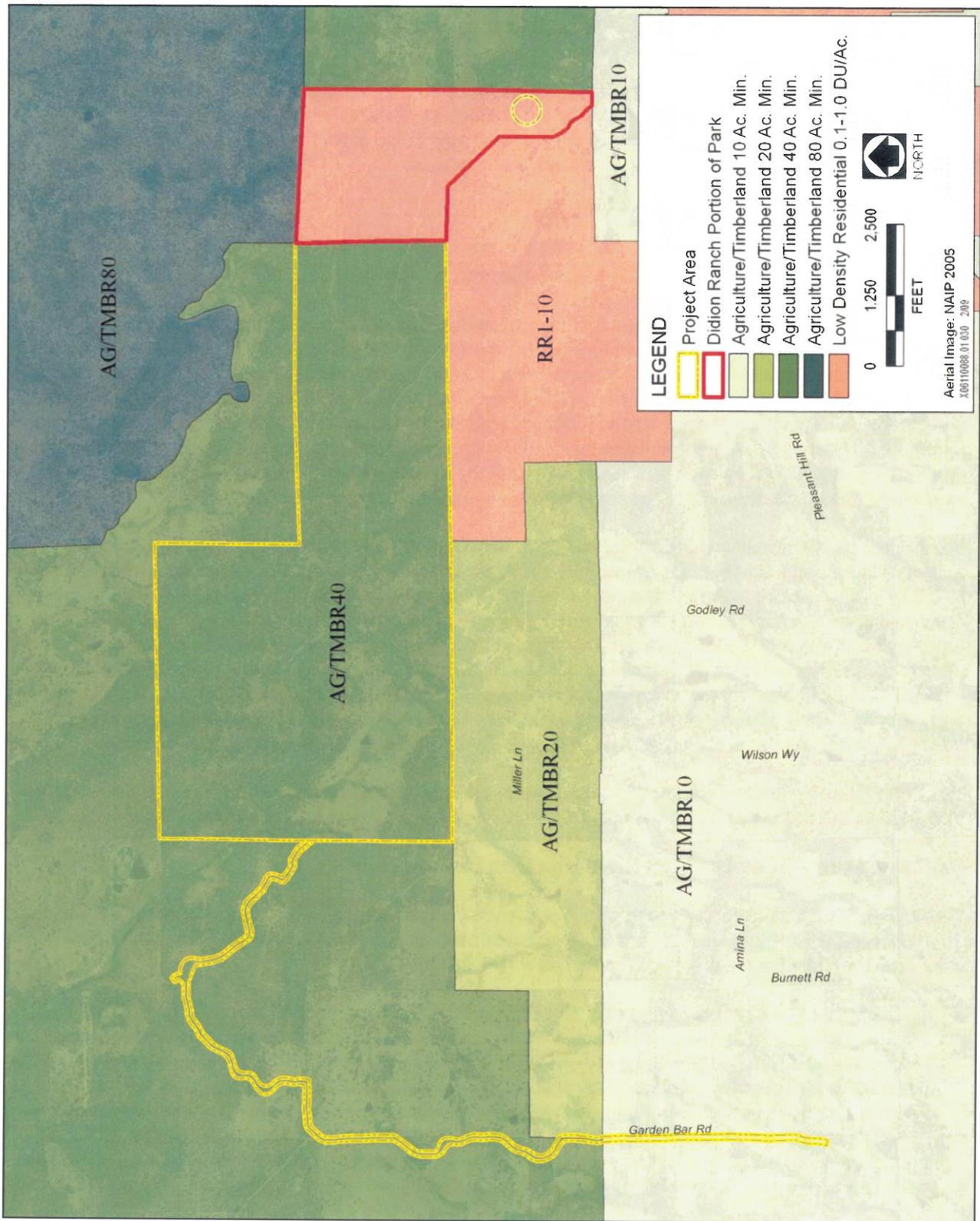
For the past 100 years, the western 979 acres (Spears Ranch) of the Park were used primarily for livestock grazing. The current tenant (i.e., the former owner) has used the property for cattle grazing since 1985. For the past 20 years, the stocking rate has fluctuated between 75 and 100 cows. The former owner has retained grazing rights in a portion of the Park until 2014, at which point the County will take over these rights. Cattle continue to be grazed on portions of the Park, primarily in irrigated pasture areas, and fencing has been placed in areas to manage the grazing activities. The ranch house, support structures, and grazing lands are located in the western portion of the Park. The property is currently served by public and private services and utilities. The eastern portion of the Park is not subject to heavy grazing activity because of uneven and undulating topography and inaccessibility of the area associated with Coon Creek, Deadman Creek, and associated tributaries.

The Didion Ranch portion of the Park, located adjacent to the proposed project area to the east, is currently open to public use and the Spears Ranch portion of the Park (project area) is currently closed to public use.

PLACER COUNTY GENERAL PLAN LAND USE DESIGNATIONS

The land use designations for the Spears Ranch portion of the Park in the *Placer County General Plan* (General Plan) (Placer County 1994) are Agriculture, 40-acre minimum lot area and Timberland, 40-acre minimum lot area. These designations are described further below (see Exhibit 4-1).

- ▶ **Agriculture (AG) (40-acre minimum).** This designation identifies land used for production of food and fiber, including areas of prime agricultural soils. It also includes other productive and potentially productive lands where commercial agricultural uses can exist without creating conflicts with other land uses, or where potential conflicts can be mitigated. Typical land uses allowed include crop production, orchards and vineyards; grazing, pasture, rangeland, and hobby farms; other resource extraction activities; facilities that directly support agricultural operations, such as processing of agricultural products; and necessary public utility and safety facilities. Allowable residential development in areas designated Agriculture includes one principal dwelling and one secondary dwelling per lot, caretaker/employee housing, and farmworker housing.



Source: California Department of Conservation 2004

Land Use Designations in the Project Vicinity

Exhibit 4-1

- ▶ **Timberland (T) (40-acre minimum).** This designation is applied to mountainous areas of the county where the primary land uses relate to the growing and harvesting of timber and other forest products, and limited, low-intensity public and commercial recreational activities. Typical land uses allowed include all commercial timber production operations and associated facilities; agricultural operations, where soil and slope conditions permit; mineral and other resource extraction operations; recreational uses such as incidental camping and private, institutional, and commercial campgrounds (but not recreational vehicle parks); and necessary public utility and safety facilities. Allowable residential development in areas designated Timberland includes one principal dwelling and one secondary dwelling per lot and caretaker/employee housing.

PLACER COUNTY ZONING

In the County Zoning Ordinance the Spears Ranch portion of the Park consists of 20 separate parcels all zoned open space (see Exhibit 4-2).

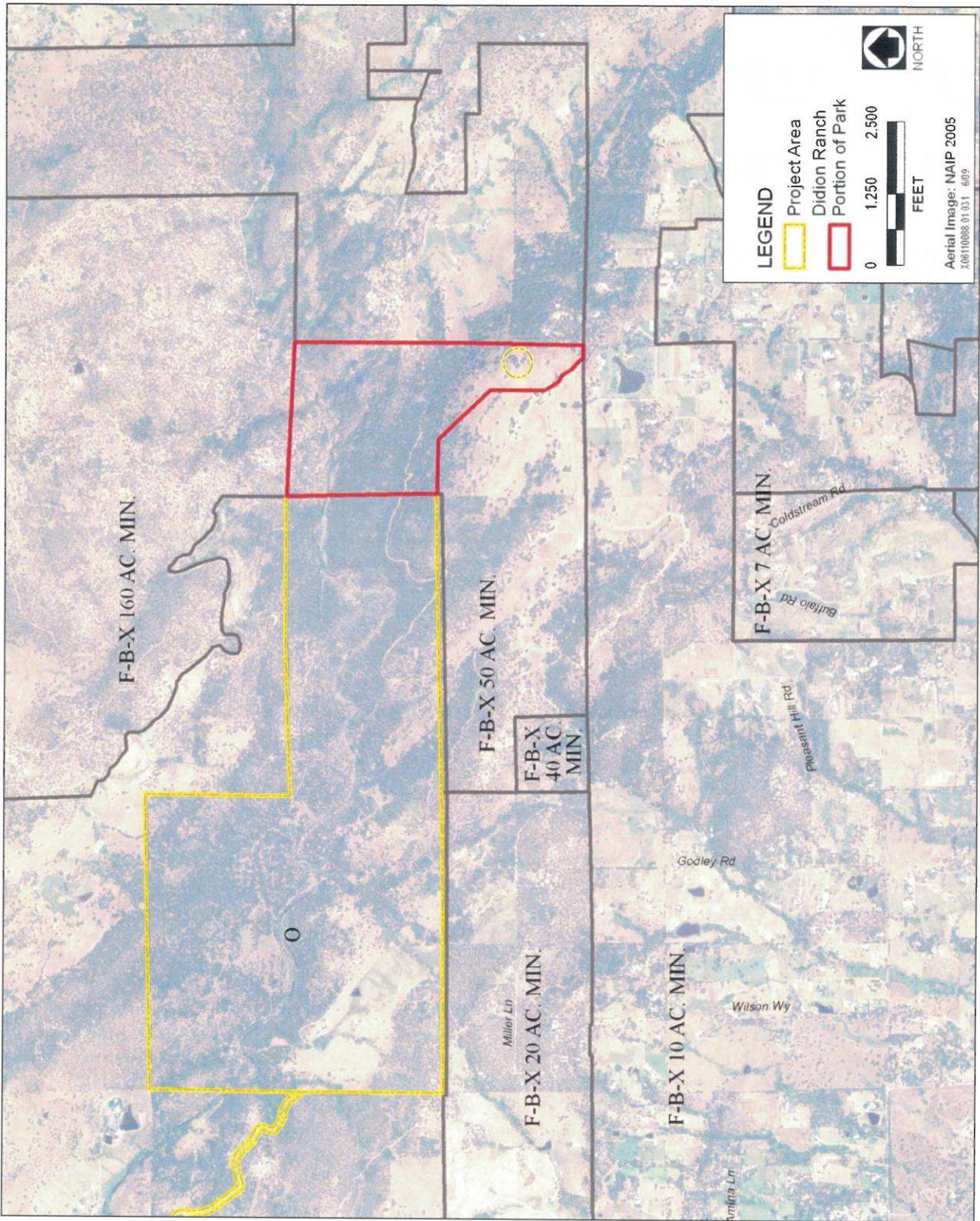
Zoning districts are used to address special needs or characteristics of the areas of the county to which they are applied, such as potential hazards and/or land use conflicts created by aircraft overflight, flooding, unique community character, or visual quality. The zoning district applicable to the Park is open space, which is designated as O. Section 17.14.010 of the County Zoning Ordinance describes the purpose of the open space district as follows:

The purpose of the open space district is to protect important open space lands within Placer County by limiting allowable land uses to low intensity agricultural and public recreational uses, with development restricted to accessory structures necessary to support the primary allowed uses, and critical public facilities. Allowable land uses in the open space district include agricultural (including accessory structures), grazing, forestry, equestrian facilities, recreational uses, mining, campgrounds, shooting ranges, and temporary events.

4.1.2 ADJACENT LAND USES

The project area is surrounded by private agricultural lands in the Sierra Nevada foothills. Adjacent land uses include cattle grazing and scattered rural residences. The project area is adjacent to the 221-acre, County-owned Didion Ranch portion of the Park. Approximately 7 miles of trails exist on the Didion Ranch portion of the Park. Both the Didion Ranch and Spears Ranch portions of the Park have been used in the past for grazing. The Didion Ranch portion of the Park is currently used for passive recreation and includes multiple-use trails, a small picnic area, handicapped accessible trail, and parking area. The Didion Ranch portion of the Park is open to the public from sunrise to sunset, year-round. There is parking for approximately 50 cars and 6 equestrian trailers. Access to this portion of the Park is provided via Mears Drive. Other Didion Ranch Park amenities include watering facilities for equestrian use, a double cell restroom facility, a public well, an entry gate, an informational kiosk, 12,000-gallon emergency water storage tank, fire hydrant, security lighting, and two drinking fountains. The Didion Ranch portion of the Park also contains an emergency water supply storage tank, a helistop, and an emergency vehicle bridge crossing over Deadman Canyon Creek. No hunting is currently allowed on the property; however, fishing is allowed according to California Department of Fish and Game regulations.

An existing residence is located approximately 1,600 feet from the northwest corner of the Spears Ranch portion of the Park, and several rural residences are located to the south off Miller Lane and Johnson Drive at a distance ranging from 800 to 1,400 feet from the southwestern project boundary. Additional land uses to the southwest consist of cattle grazing and forested areas lie to the south of the property. North of the project area is wooded forest with agricultural uses and land to the northeast is used for grazing.



Source: Placer County 1994

Zoning Designations in the Project Vicinity

Exhibit 4-2

Some of the access to the Spears Ranch portion of the Park would be from Garden Bar Road, a rural two-lane roadway. Garden Bar Road would require phased upgrades to support proposed traffic to the project area. The area surrounding Garden Bar Road is largely rural with scattered residences and agricultural uses in the vicinity. Approximately 50 residences are accessed from Garden Bar Road between Mt. Pleasant Road and the project area, with approximately 10 residences within 500 feet of Garden Bar Road. Garden Bar Road becomes increasingly rural as it approaches the proposed entrance to the Park, and residences are much more widely dispersed in this area.

The General Plan land use designations for lands adjacent to the Park are the same as the project area. They are listed below and described in detail above. The County zoning for the lands adjacent to the Park is Farm with Building Site, which is described below:

- ▶ The land use designations in the General Plan for land adjacent to the project area are Agriculture, 10-, 20-, 40-, and 80-acre minimum lot area; Timberland, 10-, 20-, 40-, and 80-acre minimum lot area; and Rural Residential 1-10-acre minimum lot area (Exhibit 4-1).
- ▶ Land adjacent to the project area is zoned as Farm with Building Site ranging from 10 to 160 acre minimums (Exhibit 4-2). The purpose of the Farm (F) district is to provide areas for commercial agricultural operations that can also accommodate necessary services to support agricultural uses, together with residential land uses at low population densities. Allowable land uses in the Farm district are agriculture, forestry, grazing, mining, community centers, libraries, museums, parks, playgrounds, golf courses, rural recreation, schools, and single-family dwellings. Rural recreational uses require a minor use permit in the F district.

4.2 REGULATORY SETTING

4.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws related to land use or agricultural resources are applicable to the proposed project.

4.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

CALIFORNIA IMPORTANT FARMLAND INVENTORY SYSTEM AND FARMLAND MAPPING AND MONITORING PROGRAM

The California Department of Conservation, Office of Land Conservation, maintains a statewide inventory of farmlands. These lands are mapped by the Division of Land Resource Protection as part of the Farmland Mapping and Monitoring Program (FMMP). The maps are updated every 2 years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance. Farmlands are divided into the following five categories based on their suitability for agriculture:

- ▶ **Prime Farmland**—land that has the best combination of physical and chemical characteristics for crop production. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed.
- ▶ **Farmland of Statewide Importance**—land other than Prime Farmland that has a good combination of physical and chemical characteristics for crop production.
- ▶ **Unique Farmland**—land that does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, but that has been used for the production of specific crops with high economic value.

- ▶ **Farmland of Local Importance**—land that either is currently producing crops or has the capability of production, but that does not meet the criteria of the categories above.
- ▶ **Grazing Land**—land on which the vegetation is suited to the grazing of livestock.

These categories are sometimes referred to as Important Farmland. Other categories used in the FMMP mapping system are “urban and built-up lands,” “lands committed to nonagricultural use,” and “other lands” (land that does not meet the criteria of any of the other categories).

Exhibit 4-3 shows the designated farmland within the project area, according to the latest data available from the FMMP. The majority of the project area is categorized as Farmland of Local Importance, and a smaller portion in the southwest area of the Park is categorized as Farmland of Statewide Importance.

WILLIAMSON ACT CONTRACT LAND

The California Land Conservation Act of 1965, commonly known as the Williamson Act, enables local governments to enter into contracts with private landowners to promote the continued use of the relevant land in agricultural or related open-space use. In return, landowners receive property tax assessments that are based on farming and open-space uses instead of full market value. Local governments receive an annual subvention (subsidy) of forgone property tax revenues from the state via the Open Space Subvention Act of 1971.

The Williamson Act empowers local governments to establish “agricultural preserves” consisting of lands devoted to agricultural uses and other compatible uses. When such preserves are established, the locality may offer owners of included agricultural land the opportunity to enter into annually renewable contracts that restrict the land to agricultural use for at least 10 years (i.e., the contract continues to run for 10 years after the first date upon which the contract is not renewed). In return, the landowner is guaranteed a relatively stable tax rate, based on the value of the land for agricultural/open space use only and unaffected by its development potential.

Exhibit 4-4 shows the existing Williamson Act contracts in the project vicinity. The project area is not currently under Williamson Act contract. Lands to the north of the project area and adjacent to Garden Bar Road are currently under Williamson Act contracts.

4.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

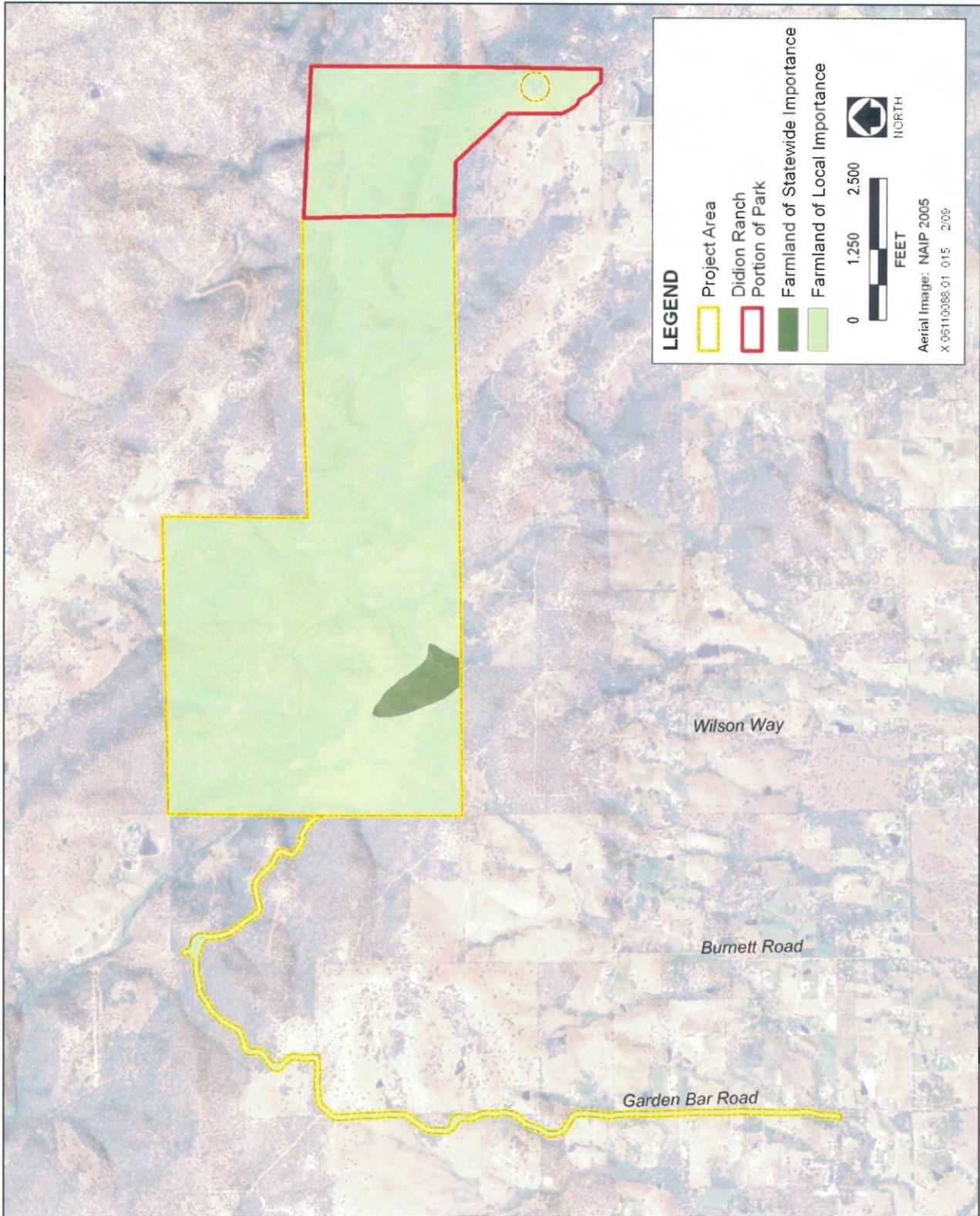
PLACER COUNTY GENERAL PLAN

The General Plan (1994) describes assumptions, goals, and planning principles that provide a framework for land use decisions throughout the county. It is based on the assumption that the County will experience continued growth and economic development, because of its desirable climate, physical setting, plentiful resources, and proximity to the Sacramento metropolitan area.

The General Plan’s land use designations for the project area are described in Section 4.1.1 above. The following are the relevant goals and policies identified by the General Plan for land use:

GOAL 1.G: To designate land for and promote the development and expansion of public and private recreational facilities to serve the needs of residents and visitors.

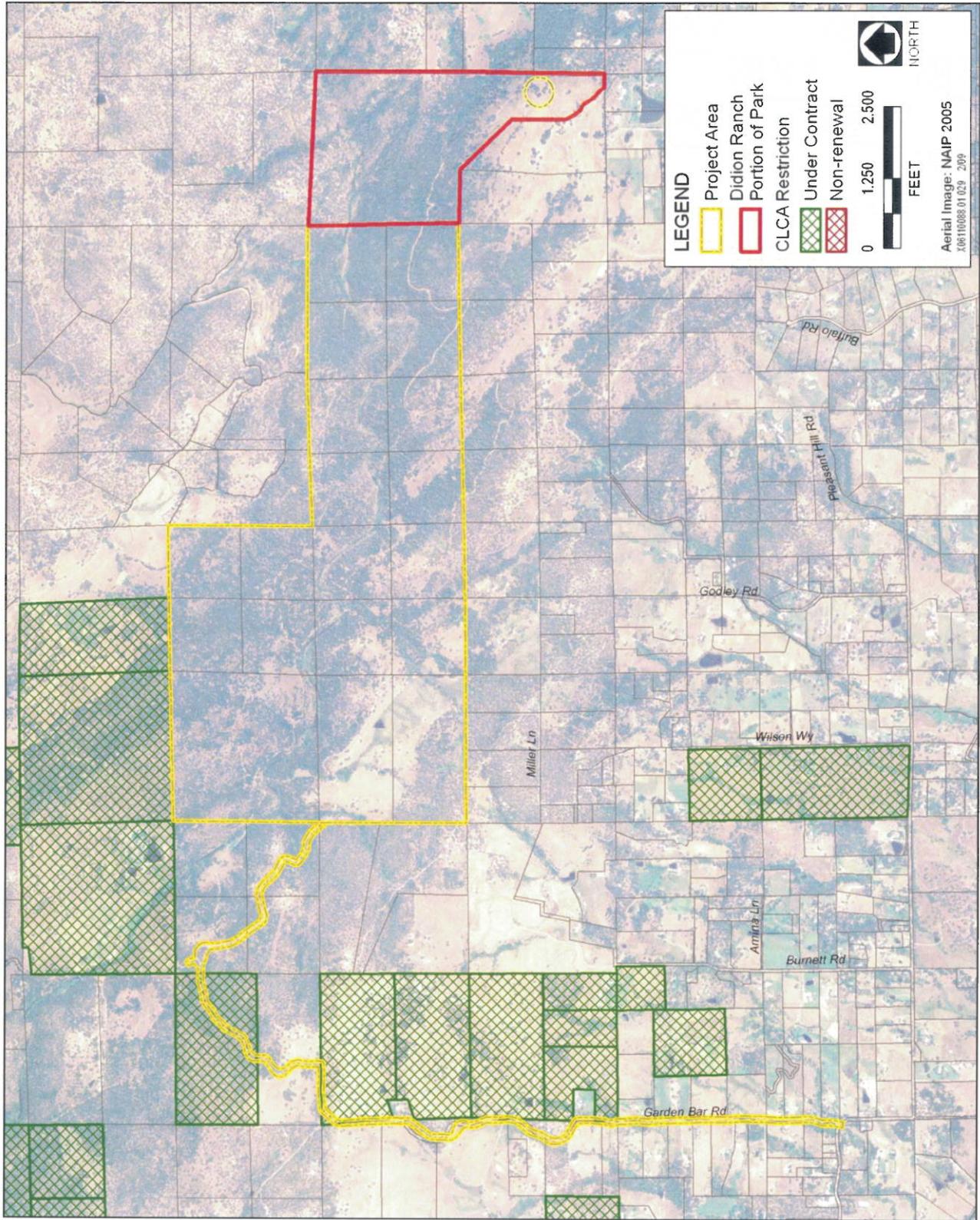
- ▶ **Policy 1.G.2.** The County shall strive to have new recreation areas located and designed to encourage and accommodate non-automobile access.
- ▶ **Policy 1.G.3.** The County shall continue to require the development of new recreational facilities as new residential development occurs.



Source: California Department of Conservation 2004

Farmland Map

Exhibit 4-3



Source: National Agriculture Imagery Program 2005

Williamson Act Contract Map

Exhibit 4-4

The following are the relevant goals and policies identified by the General Plan for agricultural resources:

GOAL 7.A: To provide for the long-term conservation and use of agriculturally-designated lands.

- ▶ **Policy 7.A.1.** The County shall protect agriculturally-designated areas from conversion to non-agricultural uses.
- ▶ **Policy 7.A.3.** The County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses.
- ▶ **Policy 7.A.7.** The County shall maintain agricultural lands in large parcel sizes to retain viable farming units.
- ▶ **Policy 7.A.13.** The County shall encourage multi-seasonal use such as private recreational development, agricultural lands, and timberlands to enhance the economic viability.

GOAL 7.B: To minimize existing and future conflicts between agricultural and non-agricultural uses in agriculturally-designated areas.

PLACER COUNTY ZONING ORDINANCE

The County Zoning Ordinance, Chapter 17 of the County Code, was adopted by the County Board of Supervisors in July 1995 (Edition No. 1). The Zoning Ordinance, Ninth Edition, was revised in January 2005. The County Zoning Ordinance, which is consistent with the General Plan, regulates the use of land, buildings, and structures and establishes minimum regulations and standards for the development of land within the county. Zoning designations for the project area is described in Section 4.1.1 above.

4.3 IMPACTS

4.3.1 ANALYSIS METHODOLOGY

The focus of this analysis is on land use impacts that would result from project implementation. Evaluation of potential land use impacts of the proposed project was based on a review of existing planning documents pertaining to the project area (the General Plan, the County Zoning Ordinance); and field review of the project area and surroundings.

Specific impacts and project consistency issues associated with biological resources; cultural resources; visual resources; transportation and circulation; air quality; noise; soils, geology, and seismicity; hydrology and water quality; public services and utilities; and recreation are addressed in the respective chapters of this EIR as appropriate.

4.3.2 THRESHOLDS OF SIGNIFICANCE

Based on the Placer County CEQA checklist and the State CEQA Guidelines, the proposed project would result in a potentially significant impact on land use if it would:

- ▶ convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use;
- ▶ conflict with existing zoning for agricultural use, or a Williamson Act contract;
- ▶ involve other changes in the existing environment that, because of their location or nature, could result in the conversion of Farmland to nonagricultural use;

- ▶ physically divide an established community; or
- ▶ conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.

The proposed project would not conflict with an applicable environmental plan or policy adopted by an agency with jurisdiction over the project. The area is undeveloped except for an existing ranch house and several smaller support structures and the surrounding vicinity consists of scattered rural residences and agricultural grazing lands; therefore, the project would not divide an established community. Consistency with habitat conservation plans is discussed in Chapter 12.0, “Biological Resources.” For these reasons, these topics will not be discussed further.

4.3.3 IMPACT ANALYSIS

IMPACT 4-1 **Land Use and Agricultural Resources—Adverse Effect on Agricultural or Timber Resource Operations or Conversion of Important Farmland to Nonagricultural Uses.** *The proposed project would increase use of the project area by the public where grazing activities currently take place, and the project area is designated as Farmland of Statewide Importance and Farmland of Local Importance. Grazing would continue on the property and is included as a component of the County’s vegetation, fuels, and range management plan for the Park. Therefore, the property’s agricultural use would be sustained as part of the project.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Land use in the Spears Ranch portion of the Park is designated by the General Plan as Agriculture, 20-acre minimum lot area, and Timberland, 20-acre minimum lot area, and is zoned as open space. The project area is also designated as Farmland of Local Importance and Farmland of Statewide Importance (Exhibit 4-1). Currently, grazing takes place on the property and on adjacent properties.

For the past 100 years, the western 979-acre (Spears Ranch) portion of the Park was used for livestock grazing. The stocking rate has fluctuated between 75 and 100 cows over the past 20 years. The former owner has retained grazing rights in the project area until 2014, at which point the County will take over these rights. The County also intends to continue managed grazing as part of its vegetation, fuels, and range management plan for the Park (Placer County 2007). This plan recommends grazing up to 75 cows year round for fire fuel reduction purposes, which is similar to the stocking rate that has been used historically for the project area.

Public use of the project area would consist of outdoor recreation, amenities including hiking, biking, and equestrian trails, and other recreational facilities. Proposed major recreational facilities and structures would be located in a previously disturbed area (i.e., the facility development zone), where several structures are currently located and the land has been heavily grazed in the past (See Exhibit 3-3 in Chapter 3.0, “Project Description.”). Trails would be located in areas used previously for grazing as well as throughout in more natural areas, and would utilize newly constructed trails as well as existing roadways. Minor facilities such as bridges, viewing platforms, picnic pavilions, benches, and interpretive signage would be placed throughout the Park to accommodate use. The Didion Ranch portion of the Park is developed and is currently open to the public.

Expansion of the existing parking area and relocating the adjacent helistop within this part of the Park would not introduce any new land uses.

Restoring farmland to non-agricultural uses, such as a regional park, is consistent with the property's original (or natural) condition. In addition, long-term natural functions and values of habitat would be maintained or improved particularly in the areas where restoration would take place. The project allows restoration actions including fish passage amenities vegetation enhancement and includes protective measures to direct visitors away from sensitive resources.

Native riparian habitat has been reduced due to past land uses on the project area. Restoring riparian habitat along Coon Creek and Deadman Creek.

Changes in land uses pursuant to the proposed zoning code could also indirectly affect adjacent agricultural operations, including agricultural uses on Important Farmland and lands under Williamson Act contracts, if proposed facility development and resource management efforts conflict with or interrupt surrounding agricultural-based land uses.

However, the proposed project would include several agricultural components, such as continuation of current agricultural activities, including grazing; farm management practices (e.g., maintenance of fences, potential expansion of irrigated pastureland); agricultural research projects conducted by qualified institutions; agricultural education programs; and potential leases for grazing and/or agricultural uses. Perimeter fencing around the property would be repaired in kind or replaced with barbless wire as needed. Cross fencing and exclusionary fencing would be constructed in riparian and other sensitive areas throughout the Park.

Constructing recreational facilities in the project area would not result in or encourage the conversion of any surrounding farmland to nonagricultural use. Outdoor recreation is noted as being compatible with agriculture in Williamson Act documentation and in the Land Evaluation Site Assessment (LESA) model, which is a model that evaluates and rates potential impacts to agricultural lands. In addition, the project area has not previously been used for timber resource operations and is not expected to be used for this purpose in the future. Therefore, there would be no change in timber resource operations as a result of the proposed project.

Because the property would continue to be used for livestock grazing, and outdoor recreation uses are considered compatible with agricultural uses, this impact would be less than significant.

IMPACT 4-2 **Land Use and Agricultural Resources—Alteration of Land Use and Potential Conflicts with Existing or Future Land Uses Adjacent to the Project Area.** *Use of the project area for open space and grazing would be consistent with surrounding land uses; however, outdoor recreation would be a new land use for the project area. The proposed project would add trails and recreational facilities and would increase the use of the project area by the public. Although this change in use would be different from surrounding uses, project facilities are included that would ensure compatibility with surrounding land uses adjacent to the project area.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

The surrounding land uses are primarily rural residential and cattle grazing. An existing residence is located approximately 1,600 feet from the northwest corner of the property, and several rural residences are located between 800 to 1,400 feet from the southwestern project boundary. Additional land uses to the southwest consist of cattle grazing lands. Land uses to the south consist of forested areas and agricultural uses. North of the project area uses include wooded forest with agricultural and grazing uses to the northeast.

Residences are located primarily in the vicinity of Garden Bar Road. Approximately 50 residences are accessed from Garden Bar Road between Mt. Pleasant Road and the project area, with approximately 10 residences within 500 feet of Garden Bar Road. Garden Bar Road becomes increasingly rural as it approaches the proposed entrance to the Spears Ranch portion of the Park, and residences become much more widely dispersed in this area. Similarly, many of the existing grazing areas are associated with the residences in the area, and become increasingly dispersed approaching the project area.

The project vicinity is largely rural in nature, surrounded by agricultural lands consisting of various habitats such as grazing lands, oak woodlands, grassland, chaparral, wetlands, and riparian habitat associated with Coon and Deadman Creeks. The Didion Ranch portion of the Park is also located in the project vicinity and is currently being used by the public for passive recreation.

Land uses adjacent to the project area are designated by the General Plan as Agriculture, 20-acre minimum lot area, and Timberland, 20-acre minimum lot area, and zoned as Farm with Building Site (F-B-X 20-acre minimum, F-B-X 40, F-B-X 50, and F-B-X 160) by the County Zoning Ordinance. Compatible land uses for these zoning and land use and designations are discussed above in Section 4.1.2.

The project area would support outdoor recreation uses, which is noted as compatible with land under Williamson Act contract and in the LESA model. The proposed project would also include habitat restoration and continuation of agricultural uses within the Park, and the Didion Ranch portion of the Park is already open for passive recreation. Therefore, the proposed project would be consistent with existing and future adjacent land uses and this would be a less-than-significant impact.

IMPACT 4-3 **Land Use and Agricultural Resources—Potential for Conflicts with Land Use or Agricultural Resource Plans, Policies, or Regulations.** *Construction and operation of outdoor recreational facilities in the project area is not included as a land use under the General Plan’s Agriculture land use designation. However, the County determines allowable land uses at a parcel-level according to the zoning code, and outdoor recreational uses are allowed as specified in the open space zoning district. According to the Placer County zoning code, the project would be allowed in the project area with approval of a Conditional Use Permit. Further, the use of the property as a regional park is considered compatible with agricultural uses, would maintain the natural state of the area, and grazing activities would continue to occur after the project is implemented. Therefore, the land uses proposed by the project are consistent with existing plans, policies, and regulations. In addition, the project area is not enrolled in a Williamson Act contract.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Zoning for the Spears Ranch portion of the Park is designated open space. The open space designation allows for agricultural operations, grazing, and outdoor recreational facilities. Lands zoned open space allows for outdoor

recreational uses, campgrounds, and temporary events with the approval of a Conditional Use Permit. The General Plan designates the land use in the Spears Ranch portion of the Park as Agriculture, 40-acre minimum lot area; and Timberland, 40-acre minimum lot area. The Timberland land use designation allows forestry uses, while also allowing open space, residential, and recreational land uses in these same areas. Although the Agricultural land use designation does not specifically state that recreational uses are allowed, it lists a broad range of typical uses that are allowed within this land designation area, which includes agriculture related uses, such as commercial agriculture, grazing, pasture, rangeland, and hobby farms; other resource extraction activities; and facilities that directly support agricultural operations. The General Plan Land Use section Part 1 refers to the County's zoning maps (Chapter 30 of the Placer County Code) for more detailed, parcel-specific allowable land uses. The proposed use is consistent with the County's zoning of the Spears Ranch portion of the Park, and with the acquisition of a Conditional Use Permit, the project would comply with the County's planning documents. The Didion Ranch portion of the Park is already developed and is open to the public. Expansion of the existing parking area and relocating the adjacent helistop within this part of the Park would not introduce any new land uses.

Major structures and amenities to be built or renovated would be limited to the facility development zone of the southwest portion of the property and include parking areas, permanent restrooms, a nature/cultural education center, bunkhouses, caretaker facility, and maintenance yard. Minor structures and amenities proposed throughout the property include hiking trails, which would include newly constructed trails, as well as existing maintenance roadways, associated foot bridges, an emergency vehicle bridge, equestrian amenities, picnic areas, permanent restroom facilities, fire suppression facilities, a disc golf course, designated fishing areas, and interpretive signage. Options being considered for parking include a surfaced parking area to accommodate anticipated uses and a gravel equestrian parking area, a gravel overflow parking area, and a parking area to accommodate the nature center. In addition, the existing parking area on the Didion Ranch portion of the Park would be expanded.

More intensive land uses, including the parking areas, maintenance facilities, caretaker residence, nature/cultural education center, bunkhouses, and restrooms with septic systems, are proposed to be limited to the southwest portion of the property, within the existing facility development zone (See Exhibit 3-4 in Chapter 3.0, "Project Description."). Less intensive land uses, including various benches and picnic tables, fitness/ropes courses, and bridge crossings, would be dispersed throughout the project area relative to the proposed trail network. A disc golf course would be designed to coincide with areas where vegetation management is desirable such as shaded fuel breaks and other non-sensitive upland areas.

The nearest residences are 1,600 feet to the northwest and over 800 feet to the south. With the more intensive proposed recreation uses limited to the portion of the property that already have existing buildings, the distance to the nearest homes from major structures would be increased to at least 1,500 feet. The proposed project also includes components such as, the continuation of grazing activities, fencing, and signage. Perimeter fencing around the property and access road would be constructed of barbless or woven wire to contain cattle. Signage would alert Park visitors to the Park boundaries. Park patrols would be implemented as conditions warrant. Considering the distance to the closest rural homes, fencing, trail placement, property boundary signage, and Park patrols, significant land use conflicts with nearby residences would not be expected.

The use of the Spears Ranch portion of the Park for preservation of open space would be consistent with the General Plan and County Zoning Ordinance. However, a Conditional Use Permit would be required to ensure the project would be compatible with the surrounding privately-owned properties. Approval of a Conditional Use Permit is required for certain land uses that are generally consistent with the zone's purposes but that could create compatibility issues for adjoining properties, the surrounding area, and their populations if not designed to avoid effects on surrounding land uses. The purposes of a Conditional Use Permit are to allow County Planning Department staff and the planning commission to evaluate one or more proposed uses to determine whether land use conflicts may occur, to provide members of the public with an opportunity to review the proposed project and express their concerns in a public hearing, to work with the project applicant to adjust the project through

conditions of approval to solve any potential conflicts that are identified, or to disapprove a project if identified conflicts cannot be acceptably corrected.

The project has been designed to be consistent with residences and agricultural activities in the surrounding area and includes components that would ensure compatibility with surrounding land uses and would be consistent with planning documents, policies, and regulations. In addition, the proposed project would be required to obtain a Conditional Use Permit. This impact would be less than significant.

IMPACT 4-4 **Land Use and Agricultural Resources—Roadway Improvements on Garden Bar Road and Potential Conflicts with Existing or Future Land Uses Adjacent to the Project Area.** *Garden Bar Road would be improved to meet demands of increased traffic related to Park use. Roadway improvements would include widening in certain areas that could impact existing properties, trees, environmentally sensitive areas, and utility poles located along Garden Bar Road. However, design features are included in the project design that would minimize impacts on properties, and other sensitive areas. Road widening would not result in a change in existing land uses adjacent to Garden Bar Road and the impacts would be primarily temporary during construction.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Approximately 50 residences are accessed from Garden Bar Road between Mt. Pleasant Road and the project area, with approximately 10 residences within 500 feet of Garden Bar Road. Garden Bar Road becomes increasingly rural as it approaches the proposed Spears Ranch entrance, and residences become much more widely dispersed. Similarly, many of the existing grazing areas are associated with the residences in the area, and become increasingly dispersed approaching the project area. The use of the proposed Park is expected to generate approximately 128 vehicles per day during weekdays and 230 vehicles per day on weekends. It should be noted that traffic volume data from the Mears Drive entrance shows that traffic associated with the use of the Park peaks during mid-day hours outside of typical morning and evening commute hour peaks. Peak traffic trends would likely be similar for the Garden Bar entrance.

To meet the demands of increased traffic proposed for Phases 2 and 3 of the proposed project, upgrades would be required on Garden Bar Road. Roadway improvements would take into consideration right-of way availability, trees, environmentally sensitive areas, and utility poles. Roadway widening impacts would potentially require fill of wetlands and removal of a significant number of trees along the roadway (please refer to Section 12.0, “Biological Resources,” for a discussion of these wetland and tree removal impacts). Roadway widening would potentially impact as much as 5 acres of land that is outside of the existing Garden Bar Road right-of-way to accommodate improvements.

Planned improvements to Garden Bar Road are proposed in 3 phases. In Phase 1, the access road between Garden Bar Road and the Park would be fenced, cattle guards would be installed, and an improved gated connector between the access road and Garden Bar Road would be installed prior to allowance of classroom sized groups on site by reservation. Daily public automobile access would not be allowed into the Garden Bar Road entrance in Phase 1; County maintenance access and potential classroom sized groups with managed bus and automobile travel to the Park would be allowed via appointment. All vehicles entering and leaving the site during Phase 1 would be subject to opening and locking the access gate behind them. The improvements in Phases 2 are intended to provide a minimum 18-foot roadway width, where possible, and improve designated vertical curves and

signage along portions of Garden Bar Road. Public automobile, trucks without trailers, and bus access would be allowed into the Garden Bar Road entrance with Phase 2 improvements; however, horse trailer access would not be allowed. For Phase 3 of the project, Garden Bar Road would be widened to 20 feet, where possible, and parking that could accommodate horse trailers would be constructed. In areas along Garden Bar Road and the access road from Garden Bar Road to the Park entrance where the County determines that status trees, significant rock outcroppings, and other valuable natural features within the proposed widening corridor should be preserved or where adequate road right-of-way does not currently exist and is not obtainable through market value based willing seller negotiations, alternatives such as turnouts, striping, and/or signage may be considered and approved in lieu of full width widening for those discreet areas. Horse-trailer access to the Garden Bar Road entrance would be allowed with the implementation of Phase 3. Ultimately, in Phase 3, horizontal curve radii would be designed to 35 mph and 25 mph standards. While recognizing that the 25-mph design does not meet the County's requirements for a rural secondary road, the safety study notes:

Due to the nature of the existing roadway the standard for a rural secondary roadway is not considered appropriate for this setting and would result in unnecessary widening of the existing road and change in character of the roadway given the existing and future use levels. The County Fire Department's requirement is an 18 ft wide all-weather surface and is considered appropriate for Phase 2.

Existing roadside ditches would be reconstructed where the road would be widened; however, no existing structures adjacent to Garden Bar Road would be affected. Road widening would result in a change in land uses of approximately 5 acres of land adjacent to Garden Bar Road. However, the County would work with existing land owners to negotiate the purchase of additional right-of-way from willing sellers as needed for the proposed improvements. This would be a less-than-significant impact.

4.4 MITIGATION MEASURES

No mitigation measures are necessary.

5.0 SOILS, GEOLOGY, AND SEISMICITY

This chapter summarizes existing geologic conditions in the project area, describes applicable regulations, and evaluates project-related impacts associated with on-site geology, soils, seismic hazards, and slope stability. Mitigation measures are recommended as necessary to reduce significant geologic impacts. As described in Chapter 1.0, "Introduction," the proposed project would not result in the loss of any known mineral resources, nor would it impede or interfere with mineral extraction operations, and the project area is not delineated as a locally important recovery site. Therefore, implementation of the proposed project would have no effect on mineral resources, and this topic will not be discussed further in this EIR.

5.1 ENVIRONMENTAL SETTING

5.1.1 PHYSIOGRAPHIC SETTING

The project area is located along the western slope of the Sierra Nevada Geomorphic Province. The Sierra Nevada Geomorphic Province is a tilted fault block nearly 400 miles long. Its east face is a high, rugged multiple scarp, in contrast with the gentle western slope, which disappears under sediments of the Great Valley. Deep river canyons are cut into the western slope. Their upper courses, especially in massive granites of the higher Sierra Nevada, are modified by glacial sculpturing, forming such scenic features as the Yosemite Valley. The high crest culminates in Mount Whitney, with an elevation of 14,495 feet above sea level near the eastern scarp. The metamorphic bedrock contains gold-bearing veins in the northwest trending Mother Lode. The northern Sierra Nevada boundary is marked where bedrock disappears under the Cenozoic volcanic cover of the Cascade Range (California Geological Survey 2002).

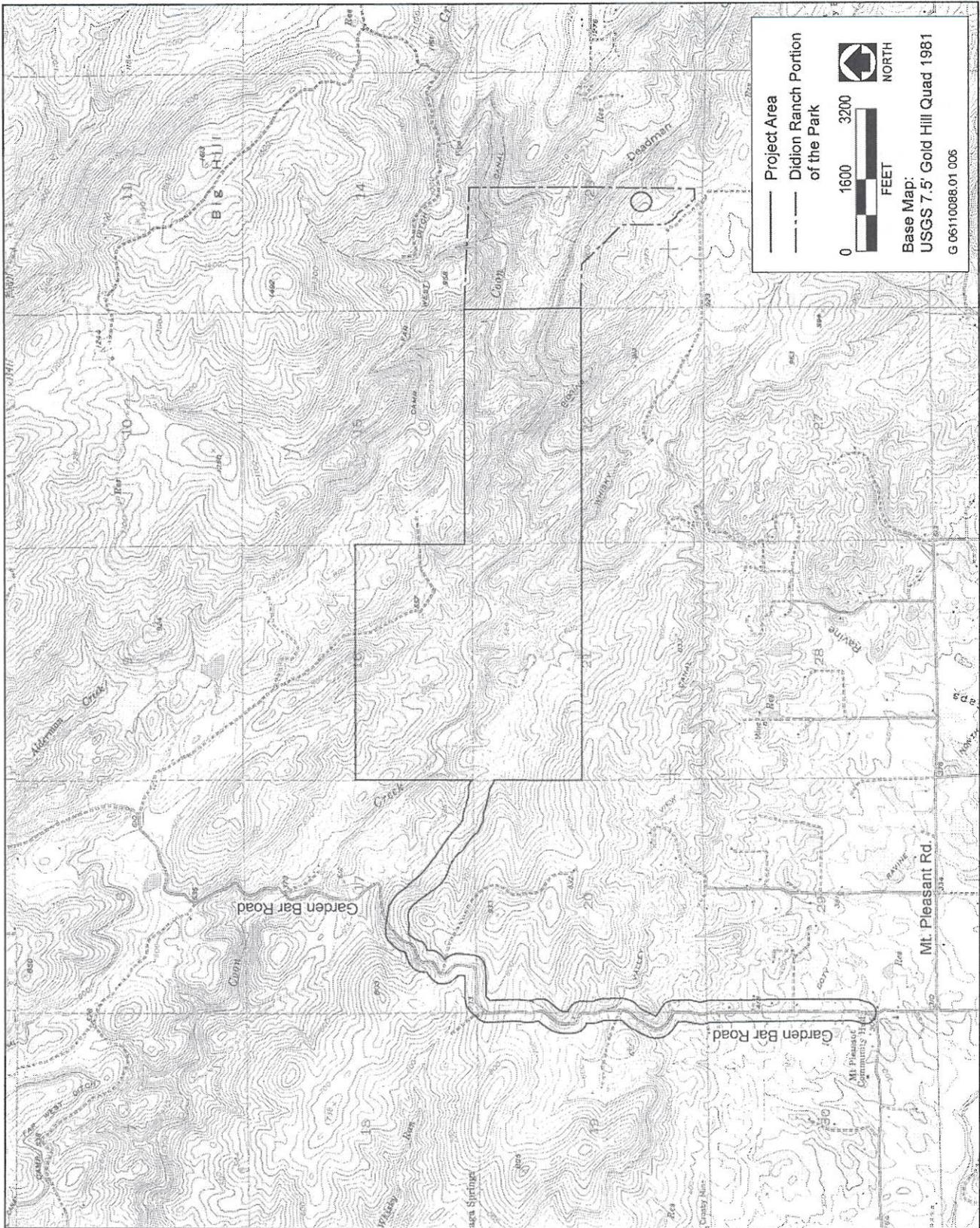
The western slope of the Sierra Nevada is underlain by a series of metamorphic rock assemblages that trend north-northwest to south-southeast between the Mesozoic granitics of the Sierra Nevada batholith on the east and the sediment-filled Sacramento Valley to the west. These metamorphic rocks were developed by convergent plate tectonics between the early Paleozoic era and the Late Jurassic period (400–120 million years ago) and consist of three northerly trending units bounded by faults and classified on the basis of age and lithology: the Eastern, Central, and Western metamorphic terranes.

5.1.2 LOCAL GEOLOGY

The proposed project is located along an approximate 3.5-mile extent of Coon Creek and found on the U.S. Geological Survey (USGS) Gold Hill 7.5-minute quadrangle. The project area is located less than 3 miles northwest of the City of Auburn and approximately 6 miles southeast of Camp Far West Reservoir. The project area ranges from less than 400 feet above sea level in the western portion (along Coon Creek) to more than 1,200 feet above sea level at the eastern project boundary. Gradients in the project area are highest in the eastern portions along Coon Creek, Whiskey Diggins Canal, and Deadman Creek and lowest in the western portions (Exhibit 5-1). Gradients of the canyon straddling Coon Creek reach 50% at specific segments. However, the majority of gradients on the project area do not exceed 20%.

5.1.3 RECREATIONAL GEOLOGIC FEATURES

Recreational geologic resources typically include volcanoes, surface hydrothermal features, or surface expressions of geologic features unique enough to generate recreational interest in the general public (e.g., natural bridges, caves, features associated with glaciation, and geomorphic features such as waterfalls, cliffs, canyons, and badlands). Based on a review of the Natural Resources Conservation Service (NRCS) soil survey for the project area, the southeastern-most portion of the project area contains rock outcroppings. These rock outcroppings could be considered a recreational geologic resource for the project area.



Source: Adapted by EDAW 2009

Project Area Topography

Exhibit 5-1

5.1.4 SOIL RESOURCES

Maps provided by NRCS were reviewed to identify the distribution of soil types in the project area. Exhibit 5-2 provides a detailed map of the surficial soils in the project area. The physical and chemical characteristics of each soil type identified in the project area are presented below.

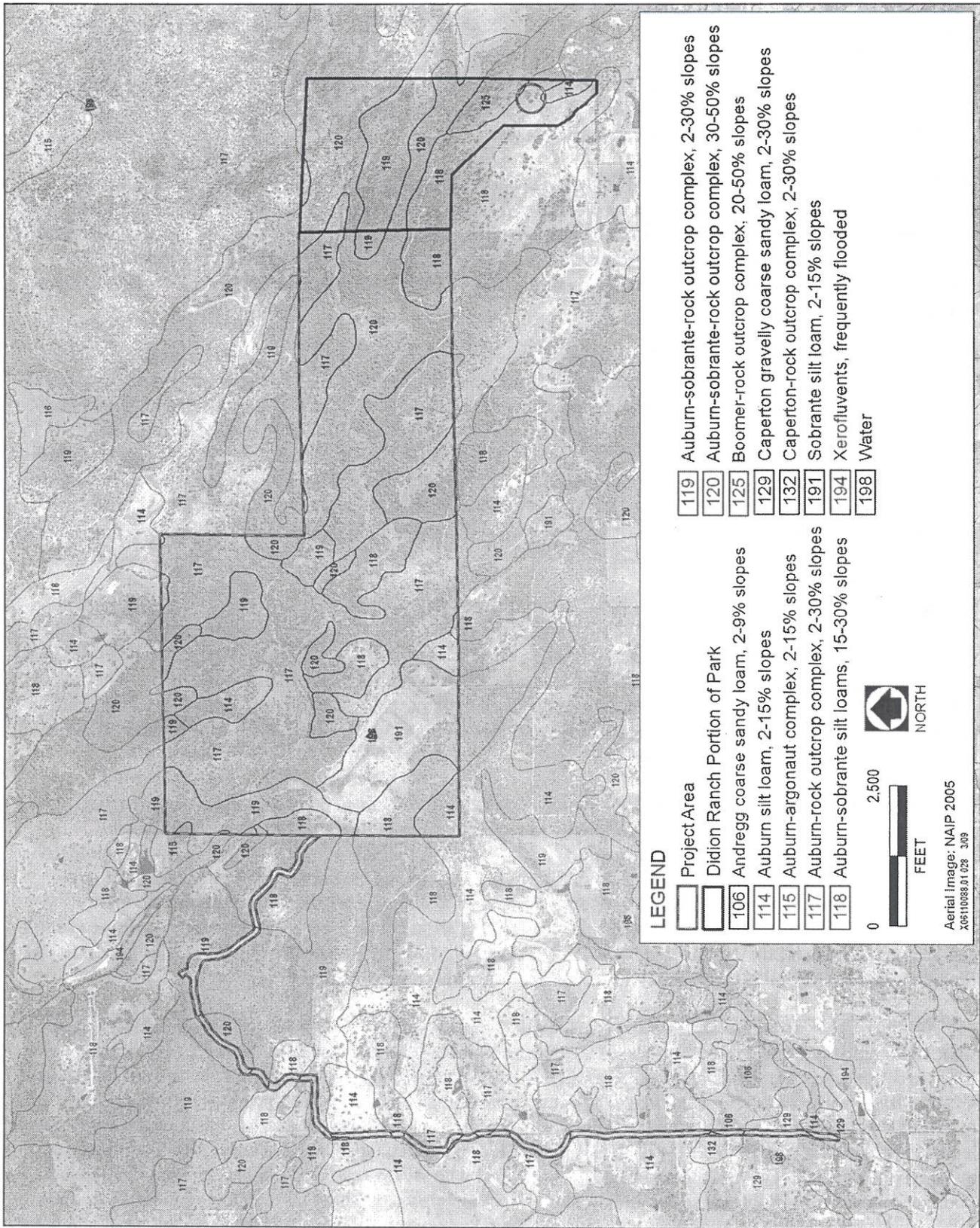
114 Auburn silt loam, 2–15% slopes—This soil is shallow and undulating to rolling. It is well drained and underlain by vertically tilted metamorphic rock. The soil forms in residuum on foothills. Typically, the surface layer is strong brown silt loam about 4 inches thick over yellowish-red silt loam subsoil. The erosion hazard for this soil is slight to moderate. This soil is used mainly for irrigated pasture and rangeland because of its shallowness. Septic tank absorption fields may not function properly because the depth to rock is generally less than 28 inches.

115 Auburn-argonaut complex, 2–15% slopes—These soils are undulating to rolling and located on broad slopes, in swales, and on concave foot slopes of metamorphic rock foothills. The Auburn soil is shallow and well drained and forms in residuum from vertically tilted basic schist and slate. This soil's surface layer is typically strong brown silt loam about 4 inches thick over yellowish-red silt loam subsoil with basic schist at a depth of 20 inches. The soil erosion hazard for Auburn soil is slight to moderate. The Argonaut soil is moderately deep and well drained and forms in residuum from metabasic rock. Typically, this soil's surface layer is strong brown loam and yellowish-red silt loam about 9 inches thick over yellowish-red clay loam with weathered basic schist at a depth of 25 inches. The soil erosion hazard for Argonaut soil is slight to moderate. Most of these soils are used for annual grassland and some irrigated pasture.

117 Auburn-rock outcrop, 2–30% slopes—These soils are undulating to hilly and rock outcrops are found on rocky side slopes of metamorphic rock hills. Typically, the Auburn soil surface layer is strong brown silt loam about 4 inches thick over yellowish-red silt loam subsoil with weather basic schist at a depth of 20 inches. Auburn soil is well drained and forms in residuum from vertically tilted metabasic bedrock. The erosion hazard for Auburn soil is slight to high. Rock outcrops consist of hard metamorphic rock that can reach 1–2 feet in height and cover up to 100 square feet. Surface runoff for rock outcrops is very rapid and there is no erosion hazard. Most of this soil is used for annual rangeland.

118 Auburn-Sobrante silt loams, 15–30% slopes—These hilly soils form on metamorphic rock foothills. The Auburn soil is shallow and well drained and forms in residuum from vertically tilted metabasic outcrop. Typically, the Auburn surface layer is strong brown silt loam about 4 inches thick over yellowish-red silt loam subsoil with weathered basic schist at a depth of 20 inches. The erosion hazard for Auburn soil is moderate to high. The Sobrante soil is moderately deep and well drained and forms in residuum from metabasic rock. Typically, the Sobrante soil surface layer is yellowish-red silt loam about 7 inches thick over yellowish-red silt and heavy loam subsoil with weathered basic schist at a depth of 33 inches. The erosion hazard for Sobrante soil is slight to high. This soil is used mostly for deciduous orchards and irrigated pasture.

119 Auburn-Sobrante-rock outcrop complex, 2–30% slopes—These undulating to hilly soils form on rock side slopes of metamorphic rock foothills. The Auburn soil is shallow and well drained and forms in residuum from vertically tilted metabasic bedrock. Typically, the Auburn soil surface layer is strong brown silt loam about 4 inches thick over yellowish-red silt loam subsoil with weathered basic schist at a depth of 20 inches. The erosion hazard for Auburn soil is slight to high. The Sobrante soil is moderately deep and well drained and forms in residuum from metabasic rock. Typically, the Sobrante soil surface layer is yellowish-red silt loam about 7 inches thick over yellowish-red silt and heavy loam subsoil with weathered basic schist at a depth of 33 inches. The erosion hazard for Sobrante soil is slight to high. Rock outcrop consists of hard metamorphic rock that can reach 1 to 2 feet in height and cover up to 500 square feet. Surface runoff for rock outcrop is very rapid and there is no erosion hazard. These soils are mostly used for deciduous orchards and irrigated pasture.



Source: Soil Conservation Service 1977

Soil Types in the Project Area

Exhibit 5-2

120 Auburn–Sobrante–rock outcrop complex, 30–50% slopes—These steep soils form on rocky canyon sides of metamorphic rock foothills. The Auburn soil is shallow and well drained and forms in residuum from vertically tilted metabasic bedrock. Typically, the Auburn soil surface layer is strong brown silt loam about 4 inches thick over yellowish-red silt loam subsoil with weathered basic schist at a depth of 20 inches. The erosion hazard for Auburn is slight to high. The Sobrante soil is moderately deep and well drained and forms in residuum from metabasic rock. Typically, the Sobrante soil surface layer is yellowish red silt loam about 7 inches thick over yellowish-red silt and heavy loam subsoil with weathered basic schist at a depth of 33 inches. The erosion hazard for Sobrante is slight to high. Rock outcrops consist of hard metamorphic rock that can reach 1–2 feet in height and cover up to 500 square feet. Surface runoff for rock outcrop is very rapid and there is no erosion hazard. These soils are mostly used for annual rangeland and watershed.

125 Boomer–rock outcrop, 30–50% slopes—This steep soil and rock outcrop are found on rocky side slopes of mountainous uplands. Typically, the Boomer soil surface layer is brown and yellowish-red gravelly loam about 10 inches thick over reddish-yellow gravelly clay loam subsoil with weather basic schist at a depth of 58 inches. Boomer soil is well drained and deep over weathered metabasic rock and forms in the residuum from amphibolite schist or meta-andesite. The erosion hazard for Boomer soil is high. Rock outcrops consist of areas of scattered hard metamorphic rock that can reach 2–5 feet in height and cover up to 500 square feet. Surface runoff for rock outcrops is very rapid and there is no erosion hazard. Most of this soil is used for wood crops.

191 Sobrante silt loam, 2–15% slopes—This soil is moderately deep, undulating to rolling, and well drained. It is underlain by weathered metabasic rock and forms in residuum on foothills. Typically, the surface layer is yellowish-red silt loam about 7 inches thick over yellowish-red silt loam subsoil with highly weathered basic schist at a depth of 33 inches. The erosion hazard for this soil is slight to moderate. This soil is used mostly for deciduous orchards and irrigated pasture.

SHRINK-SWELL POTENTIAL

Shrink-swell potential is the amount of volume change related to a loss or gain in soil moisture; soils swell when wet and shrink when dry. If the shrink-swell potential is rated moderate to high, volume changes can eventually result in damage to subsurface structures if they are not designed and constructed appropriately to resist the changing soil conditions. Soils with high clay content tend to be most affected by shrink and swell. The potential for soil to undergo shrink and swell is greatly enhanced by the presence of a fluctuating, shallow groundwater table. Volume changes of expansive soils can result in the consolidation of soft clays after the water table drops or fill is placed. The soils in the project area have a low to moderate shrink-swell potential and are therefore not considered very expansive.

NATURALLY OCCURRING ASBESTOS

Asbestiform minerals occur naturally in rock and soil as the result of natural geologic processes, often in veins near earthquake faults in the Coast Range and the foothills of the Sierra Nevada. Naturally occurring asbestos can take the form of long, thin, separable fibers. Natural weathering or human disturbance can break naturally occurring asbestos down to microscopic fibers that are easily suspended in air.

There is no health threat if asbestos fibers in soil remain undisturbed and do not become airborne. When inhaled, however, these thin fibers irritate tissues and resist the body's natural defenses. Asbestos, a known carcinogen, causes cancers of the lung and the lining of internal organs, as well as asbestosis and other diseases that inhibit lung function.

The California Geological Survey of the California Department of Conservation (DOC) completed a special report in 2006 that studies the likelihood for the presence of naturally occurring asbestos in Placer County. According to this special report, the project area is located in an area moderately likely to contain naturally occurring asbestos (DOC 2006).

The potential presence of and hazards posed by naturally occurring asbestos are discussed in greater detail in Section 9.1.3, “Existing Air Quality—Toxic Air Contaminants,” in Chapter 9.0, “Air Quality.”

5.1.5 REGIONAL SEISMICITY AND FAULT ZONES

The project area lies within the foothills fault system, which is a large fault system and the dominant structural feature of the western Sierra Nevada. The steeply dipping to vertical component faults trend northwestward through an area approximately 200 miles long and 30 miles wide. Faulted Paleozoic and Mesozoic rocks of this system are overlapped by unfaulted younger rocks. The total extent of the foothills fault system is not known but is probably not limited to the western Sierra Nevada (GSW 2007). The Bear Mountain fault zone is a major segment of the foothills fault system and is within 5 miles of the project area (PCWA 2007, USGS 2007).

The foothills of the Sierra Nevada are characterized by extremely low seismicity. Data compiled by the California Geological Survey show that 10 earthquakes with a magnitude (M) 5.5 or greater on the Richter scale have been recorded within 70 miles of the project area since 1855. The Richter scale is a logarithmic scale that expresses the magnitude of an earthquake in terms of the amount of energy generated, with 1.5 indicating the smallest earthquake that can be felt, 4.5 an earthquake causing slight damage, and 8.5 a very damaging earthquake. The moment magnitude scale, which is a successor to the Richter scale, is also used by seismologist to compare the energy released by earthquakes. Table 5-1 lists regional faults of relevance to the project area, and potential peak site accelerations from hypothetical earthquakes.

Faults Active in the Vicinity of the Project Area	Distance from Project Area (miles)	Probable Maximum Magnitude ¹
Bear Mountain	0–5	6.5
Dunnigan Hills	52	6.5
Mohawk Valley	70	6.5

¹ A measure of earthquake size calculated on the basis of seismic moment called Moment Magnitude (Mw).
Sources: USGS 2007, Caltrans 1996

Potential seismic hazards resulting from a nearby moderate to major earthquake can generally be classified as primary and secondary. The primary effect is fault ground rupture, also called surface faulting. Surface ground rupture along faults is generally limited to a linear zone a few meters wide. Common secondary seismic hazards include ground shaking, liquefaction, and subsidence. These hazards are discussed below.

SEISMIC GROUND SHAKING

The most important geologic hazard that could affect the project area is the risk to life and property from an earthquake generated by active and potentially active faults in the foothills fault system.

Ground motions can be estimated by probabilistic method at specified hazard levels. The intensity of ground shaking depends on the distance from the earthquake’s epicenter to the site, the magnitude of the earthquake, site soil conditions, and the characteristics of the source. The *Probabilistic Seismic Hazard Assessment for the State of California* (Petersen et al. 1996), published by USGS and the California Division of Mines and Geology (now known as the California Geological Survey), identifies the seismic hazard based on a review of these characteristics and historical seismicity throughout California. The results of these studies suggest there is 10% probability that the peak horizontal acceleration experienced in the project area would exceed 0.2g in 50 years. Acceleration at 10% in 50 years ranges from about 0.1g to over 1g (DOC 2007).

The DOC specifies more stringent design guidelines where a project would be located adjacent to a Class A or Class B fault as indicated on the California probabilistic seismic hazard maps. Faults with an “A” classification can produce large-magnitude events (M greater than 7.0), have a high rate of seismic activity (e.g., slip rates greater than 5 millimeters per year), and have well-constrained paleoseismic data (e.g., evidence of displacement within the last 700,000 years). Class B faults are those that lack paleoseismic data necessary to constrain the recurrence intervals of large-scale events. Faults with a “B” classification can produce an event of magnitude 6.5 or greater. A review of the available data indicates that no Class A or B faults are located within 20 miles of the project area (Cao et al. 2003).

GROUND FAILURE/LIQUEFACTION

Soil liquefaction occurs when ground shaking from an earthquake causes a sediment layer saturated with groundwater to lose strength and take on the characteristics of a fluid, thereby becoming similar to quicksand. Four types of ground failure or collapse of soil structures commonly result from liquefaction: lateral spread, flow failure, ground oscillation, and loss of bearing strength. Age is also a factor in the potential of soils to liquefy; Holocene deposits (those from approximately the last 11,000 years) are the most sensitive to liquefaction.

One consequence that may result from the occurrence of liquefaction is an associated surface expression. If a seismic event occurs over an extended duration, the liquefied soils may migrate toward the surface, resulting in ejection and subsequent sand boiling at the surface.

Liquefaction poses a hazard to engineered structures. Factors determining the liquefaction potential of a given site are the level and duration of possible seismic ground motions, the type and consistency of soils, and the depth to groundwater. Loose sands and peat deposits are susceptible to liquefaction. Liquefaction is particularly likely where land has been reclaimed from inundated areas by filling with loose sand. Clayey silts, silty clays, and clays deposited in freshwater environments are generally stable under the influence of seismic ground shaking.

Soils in the project area contain no sand or silt mineral soil particles; therefore, the project area is not considered susceptible to liquefaction.

SUBSIDENCE AND LATERAL SPREADING

Subsidence of the land surface can be induced by both natural phenomena and human activity. Natural phenomena include subsidence resulting from tectonic deformations and seismically induced settlements; soil subsidence from consolidation, hydrocompaction, or rapid sedimentation; subsidence from oxidation or dewatering of organic-rich soils; and subsidence related to subsurface cavities. Subsidence related to human activity involves withdrawal of subsurface fluids or sediments. Pumping of water from subsurface water tables for residential, commercial, and agricultural uses causes more than 80% of the identified subsidence in the United States (Galloway, Jones, and Ingebritsen 1999).

Lateral spreading is the horizontal movement or spreading of soil toward an open face, such as a streambank, the open side of fill embankments, or the sides of levees. The potential for failure from lateral spreading is highest in areas where there is a high groundwater table, where there are relatively soft and recent alluvial deposits, and where creek banks are relatively high.

The project area is underlain by consolidated metavolcanic and metasedimentary rocks; therefore, the project area is not considered susceptible to lateral spreading.

LANDSLIDING AND SLOPE STABILITY

As defined by the California Geological Survey, a landslide is the downslope movement of soil and rock material under the influence of gravity. The formation of landslides under natural conditions depends on several factors:

the type of materials, structural properties of the materials, steepness of slopes, water and rainfall, vegetation type, proximity to areas undergoing active erosion, and earthquake-generated ground shaking.

The canyon sides of Coon Creek could be prone to sliding or slumping because gradients reach 50% in some areas. In addition, two soil types in the project area—Auburn–Sobrante–rock outcrop complex and Boomer–rock outcrop—have slopes between 30% and 50%.

TIDAL WAVES AND SEISMIC SEICHES

Earthquakes may affect open bodies of water in two ways: by creating seismic sea waves and by creating seiches. Seismic sea waves (often called “tidal waves”) are caused by abrupt ground movements (usually vertical) on the ocean floor in connection with a major earthquake. Because of the distance of the project area from the ocean (i.e., greater than 100 miles), seismic sea waves would not be a factor. A seiche is a sloshing of water in an enclosed or restricted water body such as a basin, river, or lake, caused by earthquake motion; the sloshing can occur for a few minutes or several hours. In 1868, for example, an earthquake along the Hayward Fault in the San Francisco Bay Area is known to have generated a seiche along the Sacramento River. However, a seiche would not be a factor in the project area because Coon Creek is located a minimum of 400 feet above sea level and water flowing through Coon Creek is swiftly moving, which would not allow a seiche to form. There are no other open bodies of water in the project area.

5.2 REGULATORY SETTING

5.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

FEDERAL EARTHQUAKE HAZARDS REDUCTION ACT

In October 1997, the U.S. Congress passed the Earthquake Hazards Reduction Act to “reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program”. To accomplish this, the act established the National Earthquake Hazards Reduction Program (NEHRP). This program was significantly amended in November 1990 by the National Earthquake Hazards Reduction Program Act (NEHRPA), which refined the description of agency responsibilities and program goals and objectives.

The NEHRP’s mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improved building codes and land use practices; risk reduction through postearthquake investigations and education; development and improvement of design and construction techniques; improved mitigation capacity; and accelerated application of research results. The NEHRPA designates the Federal Emergency Management Agency as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Other NEHRPA agencies are the National Institute of Standards and Technology, the National Science Foundation, and USGS.

5.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

CALIFORNIA BUILDING STANDARDS CODE

The State of California provides minimum standards for building design through the California Building Code (CBC) (Title 24 of the California Code of Regulations). Where no other building codes apply, Chapter 29 of the CBC regulates excavation, foundations, and retaining walls. The CBC also applies to building design and construction in the state and is based on the federal Uniform Building Code, which is used widely throughout the country and generally adopted on a state-by-state or district-by-district basis. The CBC has been modified for California conditions with numerous more detailed and/or more stringent regulations.

The state earthquake protection law (California Health and Safety Code Section 19100 et seq.) requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Specific minimum requirements for seismic safety and structural design are set forth in Chapter 16 of the CBC. The CBC identifies seismic factors that must be considered in structural design.

Chapter 18 of the CBC regulates the excavation of foundations and retaining walls, and Appendix Chapter A33 regulates grading activities, including drainage and erosion control, and construction on unstable soils, such as expansive soils and liquefaction areas.

CALIFORNIA SEISMIC HAZARDS MAPPING ACT

The California Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690–2699.6) addresses seismic hazards other than surface rupture, such as liquefaction and induced landslides. The Seismic Hazards Mapping Act specifies that the lead agency for a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

ALQUIST-PRIOLO FAULT ZONING ACT

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Sections 2621–2630) was passed by the California Legislature in 1972 to mitigate the hazard of surface faulting to structures. The main purpose of the act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The act addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. Local agencies must regulate most development in fault zones established by the State Geologist. Before a project can be permitted in a designated Alquist-Priolo Earthquake Fault Zone, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults.

ASBESTOS AIRBORNE TOXIC CONTROL MEASURE

The California Air Resources Board has promulgated an Asbestos Airborne Toxic Control Measure (AATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (California Code of Regulations Title 17, Section 93105). In accordance with Section 39666(d) of the California Health and Safety Code, the AATCM became enforceable by the air quality management districts (AQMDs) on November 19, 2002. Any person who intends to commence construction and/or grading activities on more than 1 acre must submit an asbestos dust mitigation plan for approval by the AQMD's air pollution control officer before beginning any applicable construction or grading activities. In general, the AATCM specifies that an asbestos dust mitigation plan must include the following measures:

- ▶ measures for preventing vehicle track-out;
- ▶ measures for wetting or covering of active storage piles;
- ▶ controls for inactive disturbed areas and storage piles;
- ▶ control of traffic on on-site unpaved roads, parking lots, and staging areas;
- ▶ controls for earthmoving activities;
- ▶ control of off-site transport;
- ▶ post-construction stabilization measures;
- ▶ ambient air monitoring, if required by the air pollution control officer, and reporting of any results; and
- ▶ recordkeeping and reporting requirements.

See Chapter 9.0, "Air Quality," for background on the potential for asbestos to occur in the project area, and the projects compliance with the AATCM.

5.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

PLACER COUNTY GRADING ORDINANCE

The grading and erosion prevention ordinance of Placer County (referred to herein as the County Grading Ordinance) (Article 15.48 of the County Code) regulates grading on property within the unincorporated area of Placer County for the following purposes:

- ▶ to safeguard life, limb, health, property, and public welfare;
- ▶ to avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff on or across the permit area; and
- ▶ to ensure that the intended use of a graded site is consistent with the *Placer County General Plan* (General Plan), any adopted specific plans, applicable County ordinances (e.g., the zoning ordinance, flood damage prevention ordinance, and environmental review ordinance), and applicable chapters of the CBC.

PLACER COUNTY GENERAL PLAN

The following are the relevant goals and policies identified by the General Plan (Placer County 1994) for soils, geology, and seismicity.

GOAL 8.A: To minimize the loss of life, injury, and property damage due to seismic and geological hazards.

- ▶ **Policy 8.A.1.** The County shall require the preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geological or seismic hazards (i.e., groundshaking, landslides, liquefaction, critically expansive soils, avalanche).
- ▶ **Policy 8.A.4.** The County shall ensure that areas of slope instability are adequately investigated and that any development in these areas incorporates appropriate design provisions to prevent landsliding.
- ▶ **Policy 8.A.5.** In landslide hazard areas, the County shall prohibit avoidable alteration of land in a manner that could increase the hazard, including concentration of water through drainage, irrigation, or septic systems; removal of vegetative cover; and steepening of slopes and undercutting the bases of slopes.
- ▶ **Policy 8.A.6.** The County shall require the preparation of drainage plans for development in hillside areas that direct runoff and drainage away from unstable slopes.
- ▶ **Policy 8.A.9.** The County shall require that the location and/or design of any new buildings, facilities, or other development in areas subject to earthquake activity minimize exposure to danger from fault rupture or creep.
- ▶ **Policy 8.A.10.** The County shall require that new structures permitted in areas of high liquefaction potential be sited, designed, and constructed to minimize the dangers from damage due to earthquake-induced liquefaction.
- ▶ **Policy 8.A.11.** The County shall limit development in areas of steep or unstable slopes to minimize hazards caused by landslides or liquefaction.

5.3 IMPACTS

5.3.1 ANALYSIS METHODOLOGY

Evaluation of potential impacts on soils, geology, and seismicity was based on a review of documents pertaining to the project area, including the General Plan; field review of the project area; review of geologic maps; and review of published and unpublished geologic literature. Impacts related to soils, geology, and seismicity that would result from implementation of the proposed project have been identified by comparing existing data and environmental information with proposed project features.

5.3.2 THRESHOLDS OF SIGNIFICANCE

CEQA THRESHOLDS

Based on the Placer County CEQA checklist and the State CEQA Guidelines, the proposed project would result in a significant impact related to soils, geology, and seismicity if it would:

- ▶ expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - 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;
 - strong seismic ground shaking;
 - seismic-related ground failure, including liquefaction;
 - landslides;
- ▶ result in substantial soil erosion or the loss of topsoil;
- ▶ 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;
- ▶ be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risk to life or property; or
- ▶ have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems, where sewers are not available for the disposal of wastewater.

ISSUES NOT ANALYZED FURTHER

The proposed project would have no impact associated with the following issues, and these issues will not be analyzed further in this chapter:

- ▶ **Ground Failure/Liquefaction:** The project area is underlain by consolidated metavolcanic and metasedimentary rocks that are not susceptible to liquefaction. In addition, regional groundwater levels are expected to be greater than 50 feet in depth. Therefore, the potential for liquefaction is low.
- ▶ **Subsidence and Lateral Spreading:** Subsidence can result from tectonic deformations and seismically induced settlements; consolidation, hydro-compaction, or rapid sedimentation of soil; oxidation or dewatering

of organic-rich soils; and subsurface cavities. The potential for failure from lateral spreading is highest in areas where there is a high groundwater table, where there are relatively soft and recent alluvial deposits, and where creek banks are relatively high. The project area is underlain by consolidated metavolcanic and metasedimentary rocks that are not susceptible to liquefaction. In addition, as mentioned above, regional groundwater levels are expected to be greater than 50 feet in depth. Therefore, the risk of subsidence and lateral spreading is low.

- ▶ **Tsunami:** The potential for a tsunami in the project area is considered negligible because of the distance from the ocean, where tsunamis originate.
- ▶ **Seiche:** The potential for damaging seiches is considered very low to negligible because of the absence of a deep, large, open body of water adjacent to or in the project area.
- ▶ **Expansive Soils:** The soils in the project area have a low to moderate shrink-swell potential and are, therefore, not expansive.
- ▶ **Mineral Resources:** As mentioned at the beginning of this chapter, the proposed project would have no effect on mineral resources because it would not result in the loss of any known mineral resources and would not impede or interfere with mineral extraction operations, and because the project area is not delineated as a locally important recovery site.

5.3.3 IMPACT ANALYSIS

IMPACT 5-1 **Soils, Geology, and Seismicity—Construction- and Operation-Related Erosion Hazards.** *Based on soil types and topography, the excavation and grading of soil in the project area could result in erosion during project construction, particularly during periods of strong winds or storm events. In addition, use and maintenance of the Park could result in erosion over time.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 5-1: Obtain Authorization for Construction and Operation Activities from the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required*

Residual Significance *Less than Significant*

Rock outcrop complexes located in the project area are characterized as having no erosion potential. However, the various soil types (i.e., Auburn, Argonaut, Boomer, Sobrante) in the project area are characterized as having slight to high erosion hazards. Construction activities associated with the new parking areas, new facilities and structures, and new trail system would require excavation and grading of soil to install the necessary foundation for these recreational facilities (i.e., trails, bridges, picnic areas). Cut and fill within the Park would generally be balanced. Table 5-2 shows approximate grading amounts for each type of project facility. It is not anticipated that large amounts of material would be either imported to the site or exported off-site. Road improvements along Garden Bar Road (i.e., widening) would require grading to create a level foundation for lying new pavement and potentially excavation of existing pavement. Some fill material may need to be imported for road improvements to Garden Bar Road. The amount of material needed would be determined during the design stage for road improvements. These excavation and grading activities could result in localized erosion during construction by removing vegetative cover and exposing disturbed areas to wind and storm events.

Specific to project area, proposed major buildings would be constructed in the facility development zone and topography at the specific area identified for new buildings or structures is relatively flat and would not require significant excavation for foundations.

Table 5-2 Soil Grading Amounts by Facility Type	
Project Facility	Grading Amount (Cubic Yards)
Off-site Road Improvements	
Widening and improvements along Garden Bar Road	3,000
Widening along access road (between Garden Bar Road and the Park entrance)	1,200
On-site Facilities	
Western parking area	1,500
Construction and improvements in vicinity of ranch house	500
Trails	13,000
Didion parking area expansion	1,500
Total Grading	20,700

Natural surface trails would be constructed in a similar manner as those constructed in the Didion Ranch portion of the Park. Soil generated by full-bench trail excavation would be side cast below the location of excavation eliminating the need for soil export. Trail construction features would include grade reversals and outslowing, as well as Best Management Practices (BMP's) to prevent erosion, such as preservation of existing vegetative buffer, rock-protected outfalls, and topical seeding/straw mulch application. These types of features have shown to be effective in erosion prevention and trail stability at the Didion Ranch portion of the Park and would be incorporated into new trail construction.

Grading activities would occur on steep slopes located along Coon Creek which could affect water quality of Coon Creek. Grading activities at numerous locations adjacent to Garden Bar Road would also increase the potential for wind erosion during project construction or water erosion during a storm event.

In addition, use of the trails and other facilities, and maintenance within the Park could cause long-term erosion. The proposed trail system would be maintained as a natural-surface trail system that would increase the amount of soil exposed to wind and water erosion, and use of the trails by hikers, bikers, and equestrians could cause some long-term erosion. Regular maintenance in the Park in areas of exposed soil could also cause erosion during operation of the Park.

Because the project has the potential to result in soil erosion from construction activities within the Park and along Garden Bar Road and use and maintenance within the Park, this impact would be potentially significant.

Implementation of Mitigation Measure 5-1 would reduce this impact to a less-than-significant level.

IMPACT 5-2 **Soils, Geology, and Seismicity—Risks to People from Naturally Occurring Asbestos.** *Disturbance of naturally occurring asbestos fibers could create a health hazard. The project area is located in an area that is moderately likely to contain naturally occurring asbestos, and disturbance of soil during construction could expose workers to asbestos.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 9-1 in Chapter 9.0, "Air Quality": Conduct On-Site Soil Testing and Prepare and Implement an Asbestos Dust Control Plan, If Needed*

Residual Significance *Less than Significant*

According to the latest information available from the DOC, the project area is located in an area identified as moderately likely to contain naturally occurring asbestos because of the metamorphic and igneous rocks found in these areas that have chemical and/or physical characteristics that are favorable for the presence of naturally occurring asbestos.

The most likely settings for naturally occurring asbestos in these areas are in fault zones and shear zones that contain slivers of serpentinite and/or talc-chlorite schists. Small sheets and slivers of serpentinite too small to show on geologic maps (some of them less than 1 foot thick) are widely distributed in shear zones in the Sierra Nevada foothills. Also according to DOC, the project area is located in an area of faulting or shearing rock that may locally increase the relative likelihood of the presence of naturally occurring asbestos (DOC 2006).

Because the project area is located in an area identified as potentially containing naturally occurring asbestos, construction activities that involve soil disturbance (e.g., grading, excavation) for new facilities and structures (e.g., roadways, trails, restrooms, bridges) could expose workers to increased health risks from inhaling dust that contains asbestos. For this reason, this impact would be potentially significant.

Implementation of Mitigation Measure 9-1 in Chapter 9.0, "Air Quality," would reduce this impact to a less-than-significant level.

IMPACT 5-3 **Soils, Geology, and Seismicity—Risks to People and Structures Caused by Strong Seismic Ground Shaking or Fault Rupture.** *The project area has the potential to be affected by shock waves resulting from earthquakes in distant areas that display greater seismic activity. In addition, the Bear Mountain Fault is located within 5 miles of the project area. Although all project facilities would be designed and constructed in accordance with the current design requirements for the California Building Code and the project area is not located in an Alquist-Priolo Earthquake Fault Zone, the project could construct buildings or structures across an active fault.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 5-2: Obtain and Implement Seismic Engineering Design Recommendations*

Residual Significance *Less than Significant*

Four notable earthquakes have been reported in the northern Sierra Nevada, and the project area has the potential to be affected by shock waves resulting from earthquakes in distant areas that display greater seismic activity (e.g., the San Francisco Bay area). Therefore, the potential exists for earthquakes to occur in the project vicinity in the future. In addition, the Bear Mountain fault is within 5 miles of the project area and is identified by USGS as having "been active in the last 2 million years and is thought to pose a measurable hazard." The exact location of the Bear Mountain Fault is not known; however, according to documentation provided by DOC and USGS, the Bear Mountain Fault is located within 5 miles of the project area. Although the exact location of the fault line is

not known, one of the buildings on-site would be used for human occupancy (i.e., a caretaker residence). The intensity of ground shaking would depend on the magnitude of the earthquake, the distance from the epicenter, and the duration of shaking. The damage sustained and the degree of hazard depend on the seismic hazards of each specific site, the type of structure and its building materials, and construction quality.

The proposed project involves developing new recreational facilities, renovating existing buildings, and constructing new buildings on-site. The potential exists for new buildings or structures could be located across a fault trace or within 50 feet of such a trace (i.e., Bear Mountain fault). Because the Bear Mountain fault is identified as being “active,” there is the potential for surface rupture to occur. Although all project-related facilities and structures would be designed and constructed in accordance with the current design requirements for the CBC and the project area is not located in an Alquist-Priolo Earthquake Fault Zone (PCWA 2007), the project could construct buildings and/or structures across an active fault trace. Because the project could create a substantial increased risk of injury or property damage from strong seismic ground shaking and/or fault rupture, this impact would be potentially significant.

Implementation of Mitigation Measure 5-2 would reduce this impact to a less-than-significant level.

IMPACT **Soils, Geology, and Seismicity—Risks to People and Structures Caused by Landslides.** *Although stable slope conditions and drainage patterns may change with site alterations (e.g., cuts, fills) associated with construction of recreation facilities in the Park, field review of the project area identified no areas of shallow slope instability and/or small landslide areas. Therefore, the risk of a landslide is considered low.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Topographic maps of the project area show steep slopes along Coon Creek and along smaller valleys and gullies located in other currently inaccessible portions of the proposed Park. Transects taken for portions of Coon Creek show slopes reaching 50% gradient. Construction activities could affect steep slopes within the project area as a result of constructing new bridges, roadways, or trails and currently stable conditions could be changed by slope alterations (e.g., cuts, fills). Slope alterations required to construct new facilities or structures could also result in removing existing ground vegetation that could be needed to stabilize steep slopes.

The project proposes to construct new trails and bridges across Coon Creek; however, construction in areas with steep slopes would be avoided. In addition, road improvements along Garden Bar Road (i.e., widening) would require grading to create a level foundation for laying new pavement and potentially excavation of existing pavement. Several portions of Garden Bar Road are located adjacent to steep slopes. Similar to construction of new trails, construction in areas along Garden Bar Road with steep slopes would be avoided, if possible. In addition, soils in the project area are identified as being well-drained, and field review of the project area, including along Garden Bar Road, identified no areas of shallow slope instability or small landslide areas.

Because construction on steep slopes would be avoided and no areas of shallow slope instability have been identified, this impact would be less than significant.

IMPACT 5-5 **Soils, Geology, and Seismicity—Limited Ability for Soils to Support Operation of a Wastewater Disposal System.** *Soils in the project area are identified by USGS as having limitations for the use of septic tanks. However, on-site soil testing for the project has confirmed soils capable of supporting a conventional septic system.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

The project would include the construction and operation of a septic system to dispose of effluent generated by on-site restroom facilities and visitor structures (e.g., nature center, caretaker facility). The septic system would be located in the southwest portion of the Park within the facility development zone.

Soil data provided by USGS indicate limitations of project area soils to support the use of septic system absorption fields where effluent from a septic tank is distributed into the soil through subsurface or perforated pipe (USGS 2007). However, on-site soil testing completed as part of the project indicated soils in the southwest portion of the Park are capable of supporting a conventional septic system that would be sized to accommodate maximum daily use. Reservoir-based events would be reviewed on a case-by-case basis to determine if adequate capacity exists. The proposed septic system would be designed to have a 5-foot separation to groundwater or impermeable layer for leach lines, 150-foot setback from any public wells, and 100-foot setback from any creeks to meet Central Valley Regional Water Control Board (RWQCB) and Placer County Environmental Health Division standards (Placer County 2006). Because on-site soils are capable of accommodating a conventional septic system and the system would be designed to meet RWQCB and Environmental Health Division standards, this impact would be less than significant.

5.4 MITIGATION MEASURES

Mitigation Measure 5-1: Obtain Authorization for Construction and Operation Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required.

Mitigation Measure 5-1 applies to Impact 5-1.

A: Implement Stormwater BMPs.

Water quality BMPs shall be designed according to the *Stormwater Best Management Practice Handbooks for Construction, for New Development and Redevelopment* (CSQA 2003).

Storm drainage from on- and off-site impervious surfaces (including roads) shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, or filters for entrapment of sediment, debris and oils/greases, and other identified pollutants, as approved by the County. BMPs shall be designed at a minimum in accordance with the *Guidance Document for Volume and Flow-Based Sizing of Permanent Post-Construction Best Management Practices for Stormwater Quality Protection* (Placer Regional Stormwater Coordination Group 2005).

No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by appropriate regulatory authorities.

All BMPs shall be maintained as required to ensure effectiveness.

B: Obtain RWQCB Permit and Implement Construction BMPs.

Projects with ground disturbance exceeding 1 acre that are subject to construction storm water quality permit requirements of the National Pollutant Discharge Elimination System (NPDES) program shall obtain such permit from the Regional Water Quality Control Board and shall obtain evidence of a state-issued Waste Discharge Identification number or filing of a Notice of Intent and fees prior to start of construction.

This project is located within the area covered by the County's municipal stormwater quality permit, pursuant to the NPDES Phase II program. Project-related storm water discharges are subject to all applicable requirements of said permit. BMPs shall be designed to mitigate (minimize, infiltrate, filter, or treat) storm water runoff in accordance with "Attachment 4" of Placer County's NPDES Municipal Stormwater Permit (State Water Resources Control Board NPDES General Permit No. CAS000004).

Construction (temporary) BMPs for the project include, but are not limited to:

- ▶ Use temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils;
- ▶ Store materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water;
- ▶ Use water for dust control;
- ▶ Construct sediment control basins;
- ▶ Regular sweeping of entry and exit areas to minimize off-site sediment transport;
- ▶ Install traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and
- ▶ Use barriers, such as straw bales, perimeter silt fences, or placement of hay bales, to minimize the amount of uncontrolled runoff that could enter drains or surface water.

C: Implement Post-Development BMPs.

Post-development (permanent) BMPs for the project include, but are not limited to:

- ▶ The project will have an effective system of erosion and sedimentation control, consisting of vegetative and structural measures and management practices, to reduce the damage of erosion and costly clean-up procedures.
- ▶ Following trail construction, wattles/fiber rolls and/or gravel-filled bags will remain in place until permanent stabilization measures have proven successful.
- ▶ For the duration of the project, storm drainage within ditch systems associated with switchback construction will have stabilized ditch protection. This will consist of filter fabric, mulch, or a 3-inch gravel base.
- ▶ Plan development to fit the particular topography, soils, waterways, and natural vegetation of the site, to avoid the creation of erosion problems on the site.
- ▶ Reduce erosion hazards and runoff volumes and velocity by limiting the length and steepness of slopes. Slopes subject to erosion should not be steeper than 2:1 horizontal to vertical.

- ▶ Break up long steep slopes by benching, terracing, or diversion structures.
- ▶ Use existing vegetation to control erosion to (a) shield the soil surface from rain, (b) increase infiltration, (c) reduce velocity of runoff and (d) hold soil in place and act as a filter.
- ▶ Time the project so that grading and construction occur during the normal dry season to the extent feasible.
- ▶ The County shall also consult with the RWQCB to acquire the appropriate regulatory approvals that may be necessary to obtain Section 401 water quality certification.

Mitigation Measure 5-2: Obtain and Implement Seismic Engineering Design Recommendations.

Mitigation Measure 5-2 applies to Impact 5-3.

- a. Prior to issuance of grading permits, the applicant shall obtain the services of a qualified, licensed geotechnical engineer to examine for traces of the Bear Mountain fault within the project area. If traces of the Bear Mountain fault cross the project area, a qualified, licensed geotechnical engineer shall develop engineering design recommendations for the project area. The recommendations shall include calculation of seismic shaking hazards using the appropriate computer modeling software, and shall include specific structural design recommendations to minimize potential damage to buildings and structures from seismic events. The recommendations shall also include an examination of the traces of the Bear Mountain fault system within the project area, including surface reconnaissance, and shall make recommendations for building foundation and infrastructure design accordingly. All appropriate design recommendations shall be implemented during the project design and construction phases.
- b. No structures intended for human occupancy shall be constructed within a 100-foot-wide no building zone over the Bear Mountain fault traces. However, following completion of the seismic study required in (a) above, the no building zone may be modified if recommended by the geotechnical engineer.
- c. Prior to issuance of grading permits, the County shall obtain the services of a qualified, licensed geotechnical engineer to prepare a comprehensive final geotechnical report for the entire project area with specific design recommendations sufficient to ensure the safety of soil conditions, project structures, and site occupants. The report shall include project design and construction recommendations to address:
 - Site preparation and grading, including surface and subsurface prep work, engineered fill materials, fill placement and compaction, trench backfill, and surface drainage;
 - Foundation requirements specific to the location of each component of the proposed project;
 - Concrete slabs-on-grade, both interior and exterior;
 - Retaining and below grade walls; and
 - Pavements.

The seismic engineering design recommendations shall be incorporated into the project design. The County shall insure adequate field inspection during construction.

6.0 CULTURAL RESOURCES

This chapter discusses the cultural resources setting for the proposed project, analyzes the potential impacts on cultural resources that could result from the implementation of the proposed project, and describes mitigation measures to reduce those impacts.

6.1 EXISTING CONDITIONS

An abundance of natural resources and varied topography made the Sierra Nevada foothills, including the project area, an attractive location for prehistoric land uses and historic-era settlement. Although best known as the placer mining area that played a pivotal role in the Gold Rush of the late 1840s and the 1850s, early Native American sites can be found throughout the region as well, especially along perennial drainages such as Coon Creek.

6.1.1 PREHISTORIC ARCHAEOLOGICAL CONTEXT

Archaeological research within the Sierra Nevada and lower foothill regions over the past several decades has resulted in a substantial amount of new information about prehistory. Researchers have proposed numerous cultural systems and related chronologies in an attempt to trace cultural and technological change through time.

For the Sacramento Valley and foothill regions, Lillard and Purves (1936) recognized a three-part cultural sequence (Early, Middle, and Late Horizons) that was derived from archaeological analysis of midden and cemetery sites in Central California. This scheme was later described in more detail by Lillard, Heizer, and Fenenga (1939) and was refined by Beardsley (1948, 1954). In an attempt to unify the various hypothesized cultural periods in California, Fredrickson (1973, 1974, 1993) proposed an all-encompassing scheme for cultural development, while acknowledging that these general trends may manifest themselves differently and that there may be some variation between subregions. These general cultural periods (Paleo-Indian, Early, Middle and Late Archaic, and Emergent) are used here in connection with the chronology of prehistoric culture in the north-central Sierra Nevada, given the proximity of the project area to the Sacramento Valley.

Relevant to the project area is the document *Framework for Archaeological Research and Management: National Forests of the North-Central Sierra Nevada* (Jackson et al. 1994), which proposes a tentative cultural chronology and cultural history for the north-central Sierra Nevada. The proposed cultural chronology has been further refined through investigations conducted along the South Fork American River by Tremaine and Jackson (1994, 1995), and Boyd (1998), and has been synthesized by Jackson and Ballard (1999). This extensive analysis provides the most recent and relevant cultural/technological chronology for the project area, and forms the basis for the following discussion.

LATE PLEISTOCENE PERIOD

Archaeological sites dating to the earliest human occupation in the Sierra Nevada foothills and eastern Sacramento Valley (more than 10,000 years B.P. [before present]) have rarely been encountered. Possible exceptions are CA-SAC-370 and CA-SAC-379, located near Rancho Murieta (approximately 30 miles south-southeast of the project area). They produced numerous bifaces, cores, and raw materials (which may be indicative of prehistoric quarrying operations) from gravel strata estimated to be 12,000–18,000 years old (Moratto 1984).

EARLY HOLOCENE PERIOD

Jackson and Ballard (1999) use the all-encompassing Western Pluvial Lakes Tradition to describe this broad time frame (ca. 10,000–7000 B.P.). As they point out, this period was first defined by Bedwell (1970) as a human

adaptation to lake, marsh, and grassland environments that were prevalent around 11,000 B.P.; however, the tradition slowly disappeared ca. 8000–7000 B.P.

In the surrounding regions in California, only small isolated locales (e.g., CA-CAL-S342 [Peak and Crew 1990] and CA-CAL-629 and CA-CAL-630 [under analysis by California State University, Fresno]) have thus far yielded substantial data indicating a presence by peoples along the western front of the Sierra Nevada before 7000 B.P., and both of these have been in the foothill regions to the south of the project area.

ARCHAIC PERIOD

Characterized by generally warm and dry climatic conditions and interrupted by brief cool, wet conditions, this period (ca. 7000–3200 B.P.) appears to correspond with the appearance of handstones and milling slabs, suggesting that people were gathering and using more vegetal resources, such as seeds and other botanical constituents. Jackson and Ballard (1999) also suggest that the early part of this period (7000–4500 B.P.) can be defined by the presence of concave-base and side-notched obsidian bifaces on archaeological sites. Stemmed and large corner-notched obsidian projectile points occur during latter part of this period (4500–3200 B.P.).

Sites in the Central Valley also indicate that a great deal of trade was taking place at this time, as evidenced by the presence of obsidian from outside the area, *Haliotis* and *Olivella* shell beads and ornaments, quartz crystals, and other exotic materials (Heizer 1949, 1974; Moratto 1984). Connections between the Great Basin and Central Valley appear to have been established at least by 4000 B.P., and possibly as early as 7000 B.P., as evidenced by the exchange of marine shell beads and other artifacts for obsidian from the east side of the Sierra Nevada crest. Although this was primarily a phenomenon of the Sacramento Valley and lower foothills, similar culture elements are found at elevations up to 3,000 feet, in the foothills of the west slope, suggesting that peoples of this time frame may have acted as “middlemen” within this trade network (Bennyhoff and Heizer 1958, Bennyhoff and Hughes 1983).

EARLY SIERRAN PERIOD

This period (ca. 3200–1400 B.P.) is marked by the abundant presence of milling slabs and handstones, a substantial increase in the production of obsidian tools, and a climatic shift to a cool, wet regime. Small social and residential groups moved within the area in response to the presence of resources, exploiting resources within range of each archaeological site. Ritter noted that evidence at CA-PLA-101, located near Auburn, indicates that this was a period of seasonal occupation and land use with similarities in artifact types (i.e., projectile points) found in contexts east of the Sierra Nevada crest, but that this similarity decreases below 2,500 feet in elevation, (Ritter 1971), which would include the current project area.

MIDDLE SIERRAN PERIOD

This period (ca. 1400–600 B.P.) corresponds with a dramatic decrease in the use of obsidian, not only in the subregion, but throughout the Sierra Nevada (Hall 1983, Bouey and Basgall 1984). During this time there is also a major improvement associated with the introduction of bow and arrow technology. Widespread changes occur at similar time frames throughout central California and the western Great Basin. Social disruption is inferred from changes in artifact assemblages and land use patterns and a high incidence of violent death. This pattern is followed by relatively intensive land use, active trade, and the establishment of permanent settlements in some regions, inferred as reflecting increased populations (Jackson and Ballard 1999).

LATE SIERRAN PERIOD

Regionally, this period (ca. 600–150 B.P.) is characterized by continued intensive use of the western slope of the Sierra Nevada, including significant use of acorns, but with less of a focus on seeds; exploitation of fauna, including deer and rabbits; year-round occupation of sites below 3,500 feet; and short-term seasonal occupation of

mid- to high-elevation Sierra Nevada sites. The presence of single-component sites dating to this time period is given as evidence for this intensified use (Jackson and Ballard 1999). In some subregions, the use of the small points with contracting stems disappears abruptly and is replaced by small Desert Side-notched types, with the continued use of small corner-notched points. However, Jackson and Ballard (1999) suggest the possible reemergence of large corner-notched, stemmed, and contracting stemmed points during the latter portion of this period.

6.1.2 ETHNOGRAPHIC CONTEXT

Ethnographically, the project area is situated within the Nisenan (sometimes referred to as Southern Maidu) sphere of influence. A brief review of the ethnographic literature follows and is of value in assessing the archaeological sites that are the static remains of past activity. However, archaeological data have the potential to reconstruct patterns of former dynamic cultural systems (Binford 1980). It is through the use of ethnographic data applied to archaeology that an archaeologist has the best chance to recreate past cultural adaptations (Binford 1980).

Kroeber (1925) recognized three Nisenan dialects: Northern Hill, Southern Hill, and Valley. The Nisenan territory included the drainages of the Yuba, Bear, and American Rivers, and the lower drainages of the Feather River, extending from the crest of the Sierra Nevada to the banks of the Sacramento River. According to Bennyhoff (1961), the southern boundary with the Miwok was probably a few miles south of the American River, bordering a shared area used by both Miwok and Nisenan groups that extended to the Cosumnes River. It appears that while the foothill Nisenan had distrust for the valley peoples, the relationship between the Nisenan and the Washoe to the east was primarily friendly. Elders recall intergroup marriage and trade, primarily involving the exchange of acorns for fish procured by the Washoe (Wilson 1972).

Native American groups would have exploited any number of faunal and floral resources. However, as in many foothill and valley regions throughout California, various species of oak provided the most important staple food, although the black oak (*Quercus kelloggi*) was apparently the most preferred (Matson 1972). Early-fall acorn harvests provided the region's native inhabitants with a reliable, large-scale food source that could sustain populations through the winter months. Other important floral foodstuffs capable of being stored for long periods included nuts from the gray pine (*Pinus sabiniana*) and buckeye (*Aesculus californica*), as well as hazelnuts (*Corylus rostrata*).

Native Americans used numerous techniques and weapons for hunting, including the bow and arrow, drives, and decoys. Nets, traps, rodent hooks, and fire were all used in hunting small game. Fish could be caught with nets, gorges, hooks, and harpoons within the larger perennial drainages of the foothill regions. One technique apparently involved using soap root and turkey mullein to poison the water so that fish could be gathered easily. Freshwater clams and mussels were also gathered in the larger waterways, such as the American River. Other aquatic food sources available to native populations near the project area would have included fish such as salmon and sturgeon, which would have been netted or caught with the aid of weirs.

The virtual destruction of the Nisenan culture in the 19th century paired with the traditional Nisenan reluctance make it difficult to discuss Nisenan spiritual beliefs and practices in any detail. However, historic records document several observances and dances, some of which are still performed today, that were important ceremonies in early historic times. In general, the basic religious system noted throughout central California, the Kuksu cult, appeared among the Nisenan. Cult membership was restricted to those initiated in its spirit and deity-impersonating rites. However, the Kuksu cult was only one of several levels of religious practice among the Nisenan. Various dances associated with mourning and the changing of seasons were also important. One of the last major additions to Nisenan spiritual life occurred sometime shortly after 1872 with a revival of the Kuksu cult as an adaptation to the Ghost Dance religion (Wilson and Towne 1978). Today descendants of the Nisenan continue to live in the Sierra Nevada foothills, where they are involved in reviving their cultural identity and the preservation of their cultural past.

6.1.3 HISTORICAL CONTEXT

EXPLORATION AND EARLY IMMIGRANT ROUTES

The Sierra Nevada foothills and the Sacramento Valley were virtually unsettled by Europeans other than early Spanish explorers before the Gold Rush. In 1844 the Stevens-Townsend-Murphy Party entered California via Donner Pass, passing along the divide just north of the North Fork American River near Auburn (Egan 1977 in Jackson et al. 1982). John Fremont traversed this same route a year later. However, this route was not the first to be used by immigrant groups immigrating to California. The first was the Bidwell-Bartelson Party, which crossed into Tuolumne County in 1841 and was followed by others who were using the Pit River route to the north.

GOLD RUSH ERA

A wave of gold seekers descended on California, and specifically the foothill and mountain regions of the Sierra Nevada, after gold was discovered at Coloma on the South Fork American River in January 1848. The 1850 U.S. Census, while most likely biased against minority groups that tend to be underrepresented, put the population of Placer County at 11,417. This total consisted of 6,945 whites, 3,019 Chinese, 89 blacks, 634 other foreign races, and 730 Native Americans (U.S. Census 1850).

PROGRESSION OF MINING TECHNOLOGY

To interpret the remains of mining operations found within the project area, it is necessary to look at the progression of mining practices in the region in the context of the gold-bearing deposits, the progression of mining technology, and the application of capital. Restrained by technology and capital, gold production, like other mining operations, has gone through periods of boom and bust. Initially, during the late 1840s, gold deposits were easily accessed, and technology and capital outlay was limited to a pan, pick, and shovel. With this technology, mining was at first concentrated on productive gravel and sand-bar deposits located along perennial drainages.

Other than the simple pick, pan, and shovel methods used in the earliest days of the Gold Rush, with only a small amount of additional capital, an increased amount of gravel could be processed using a rocker—a rectangular box, about 4 feet long and mounted on rockers, that sorted gravel and collected gold in riffles located at the bottom. Use of this device resulted in the formation of cooperatives in which claims could be worked by small groups, with one person digging gravel, another loading the gravel into the rocker, and a third pouring water into the device to wash the gravel deposits. Although Euro-American miners who favored more technologically advanced methods abandoned these devices by the mid-1850s, rockers continued to be used by the Chinese into the 1900s (Williams 1930 in Maniery 1992).

Two other devices used by early placer miners were the “Long Tom,” which became common by around 1850, and its variant, the longer sluice box, which came into use by 1851. Both required a constant flow of water from one end while dirt was shoveled in from the sides and gold was trapped in riffles at the bottom of the apparatus. Because a larger amount of dirt and gravel could be processed, larger groups operated these extraction devices (Kelly and McAleer 1986, Williams 1930 in Maniery 1992).

Both of these methods required large amounts of water, but ground sluicing required even greater amounts. This technique consisted of washing gold-bearing gravels over exposed bedrock. Parallel rows of stacked stones at acute angles are commonly found at ground sluicing sites. Because of this patterning, some have suggested that they are associated with Chinese mining operations. However several studies at mining sites with both Chinese and Euro-American miners have found no correlation with ethnicity (Johnson and Theodoratus 1984a, 1984b; Lindstrom 1988; Kelly and McAleer 1986; LaLande 1981, 1983a, 1983b, 1985; Ritchie 1981; Steeves 1984; Tordoff and Seldner 1987 in Maniery 1992). At first these methods were used to mine the easily accessed placer

deposits along the rivers and streams, and as these gave out, attention turned to the Eocene and Tertiary gravels situated on the slopes and ridges surrounding drainages.

The next technological event to affect how gold was extracted was the advent of hydraulic mining. The development of this method is attributed to Anthony Chabot and Edward Matteson, who were the first to use hydraulic mining at Buckeye Hill and American Hill near Nevada City. At first, low-pressure canvas hoses and nozzles were used. However, these were rapidly replaced by iron pipe and improved nozzles, allowing water to be diverted under much greater pressure. Although there is no mention of hydraulic mining within the project area, this method was employed farther east at Hayden Hill and Green Valley. Millions of tons of silt and sand washed into streams and rivers as a result of these operations, clogging drainages from the foothills to San Francisco Bay. As a response to numerous lawsuits, an injunction was imposed against the industry in 1884, and the Caminetti Act authorized the U.S. Army Corps of Engineers (USACE) to oversee hydraulic mining operations.

LOCAL MINING EXPRESSIONS

Mining sites consist of concentrations of artifacts and features that reflect the plethora of operations and technologies that have been used in the area. These cycles of occupation and abandonment create layers or components of mining technology and systems that are horizontally stratified, often altering or obliterating previous operations, and that can often be viewed as discontinuous with underground structure (Hardesty 1988). Many times only fragments of technologies and operations are visible. For example, Lindstrom (1989) found that finer sediments were carried away during the washing process of placer mining operations, and only larger cobbles or boulders remained at the processing site.

Mining camps were ubiquitous in mid-19th century Placer County. Some of the known camps—Dutch Flat, Horseshoe Bar, Smith’s Bar, and Iowa Hill—were farther upslope along the American River than the project vicinity. Two camps in the project vicinity are Gold Hill and Virginiatown, along Auburn Ravine approximately 5 miles south of the project area. Gold Hill, which was in the Ophir Mining District, was organized as a town in 1852. The community had a sizable population, as indicated by the 444 votes cast in the presidential election of that year (Hoover 1990). Virginiatown was founded in June 1851. The first railroad in California was built in 1852 by Captain John Brislow and was used to carry ore to Auburn Ravine (Hoover 1990, Gudde 1975). The town boasted a population of more than 2,000 by 1858, and a post office named Virginia was located there between 1858 and 1860. The county directory indicated that a lack of water prevented development until a ditch could be built from the Bear River in 1861. It was at Virginiatown that Philip Armour had his butcher shop, which is said to have been the nucleus of the great Armour meat packing business in Chicago (Gudde 1975). Another town, Whiskey Diggins southwest of the project area, appears to have been formed around 1855 (Foster and Foster 1994). In 1876, the community changed its name to Valley View, and after the turn of the century the community became a resort (named Kilaga Springs) because of the healthful mineral waters.

As easily mined deposits along perennial streams and rivers were rapidly depleted during the initial Gold Rush, a need arose to divert water to remote locations for placer mining. Several water conveyance systems were used to divert water. One system was the Whiskey Diggins Canal, which passes through the southern portion of the project area. The canal was constructed in the 1850s by the Gold Hill and Bear River Water Company to divert water from Deadman Creek, immediately east of the project area. The water conveyance system was subsequently sold to a Mr. Hall in 1861. After three changes in ownership during the 1870s, the South Yuba Water and Mining Company purchased the water conveyance system in May 1890. Pacific Gas and Electric Company purchased the entire South Yuba Water and Mining Company system, including the Whiskey Diggins Canal, in 1905, and in 1933 sold the canal to Nevada Irrigation District. By the late 19th century, the increase of new mining camps appearing in Placer County slowed considerably, and other economic pursuits, such as ranching and agriculture, became the backbone of the Placer County’s economy.

RANCHING AND AGRICULTURE

Ranching and agriculture, which had once been support systems that provided food to the miners, grew to become dominant industries. As thousands of miners poured into the area during the early 1850s, farmers and ranchers put additional acreage into production to meet the demand for potatoes, flour, and various dairy products.

The first of such settlements in Placer County was Sicard's Ranch, a Mexican grant on the south bank of the Bear River, west of the project area. The grant was given to Theodore Sicard in 1844. Sicard, a French sailor, built an adobe house on the land in 1846, which later became a prominent stopping place for travelers on the way to Sutter's Fort in Sacramento. Sicard and fellow countryman Claude Chana, who had arrived at the ranch in late 1846, planted peach and almond trees, which became the start of the commercial orchard business in the Sacramento Valley. Chana later bought the Sicard grant, and sold the products of his orchard, vineyard, and vegetable garden to area miners (Hoover 1990).

Another locally notable agricultural figure was John A. Livingston, who planted fruit trees on approximately 300 acres north of Newcastle. Livingston controlled four ranches in the Auburn area and eventually served as secretary of the Placer County Land Company (Foster and Foster 1990).

The 1855 General Land Office (GLO) plat map depicts farms and agricultural land in the vicinity, but none are depicted within the project area. Land patent indices list John F. Hicken and John B. Hicken as the earliest known owners of land. Their property, acquired in 1884 and 1886, encompassed the northeast and northwest sections of Section 22 in Township 13 North, Range 7 East (land patent records 2625 and 3222).

John B. Hicken was born in Prussia in 1836. It is unclear when he and his wife Maria Eliza immigrated to the United States; however, they were in Wisconsin by 1859, which is where their son John F. Hicken was born. John B. Hicken is listed as a stock raiser in the 1900 Placer County census. The property he owned was then valued at \$2,000 (U.S. Census 1900).

The most recent owner of the Spears Ranch property was Bradley Spears, who held ownership of the property from 1985 to 2003. Before his ownership, the property was in foreclosure for approximately 10 years. Before the foreclosure the property was owned by a Mr. Art Wildberger, who purportedly ran a cattle ranch on the property from 1940 to 1975 (Spears, pers. comm., 2006). Today the land is owned by Placer County.

6.1.4 PREFIELD AND FIELD METHODOLOGY

Cultural resources investigations for the proposed project consisted of several elements: prefield research, review of previous cultural resources studies and historic maps, Native American consultation, field surveys, and documentation of resources. All aspects of the cultural resources study were conducted in accordance with guidelines outlined in the state Office of Historic Preservation's *Instructions for Recording Historical Resources* (OHP 1995) and the federal *Secretary of the Interior's Standards and Guidelines for the Identification of Cultural Resources* (48 *Federal Register* 44720–23) as amended on September 1983.

PREFIELD RESEARCH

To determine whether previously documented or unrecorded cultural resources are present within and immediately adjacent to the Spears Ranch portion of the Park and along Garden Bar Road, EDAW conducted background research. Research for the Didion Ranch portion of the Park was conducted as part of the 2004 Initial Study/Mitigated Negative Declaration (IS/MND) for the Didion property (Placer County 2004). Prefield research consisted of a records search at the North Central Information Center (NCIC) of the California Historical Resources Information System. Records maintained by the NCIC include California Department of Parks and Recreation Series 523 archaeological site records, site location maps, maps of previous study coverage, National

Register of Historic Places (NRHP) nomination forms, and relevant historical documentation and maps. The NCIC research also included a review of the following sources, all of which are on file at the information center:

- ▶ The NRHP, published by the National Park Service in 1996, as well as computer updates for 1966–September 2006
- ▶ The California Register of Historic Resources, published by the State of California in 2006
- ▶ *California Points of Historical Interest*, published by the State of California in 1992, as well as updates
- ▶ *Historic Spots in California*, published by the State of California in 1966
- ▶ *Directory of Properties in the Historical Resources Inventory*, published by the State of California in 1976, as well as updates
- ▶ The historic property data file (the Office of Historic Preservation’s current computer lists dated April 16, 2004, and December 13, 2007)
- ▶ *California Historical Landmarks*, published by the Office of Historic Preservation in 1990
- ▶ The GLO plat map for Township 13 North, Range 7 East
- ▶ The California Department of Transportation’s Historic Bridge Inventory (published in 1987, 2000, and 2004)
- ▶ U.S. Geological Survey historic maps (1885–87 Sacramento sheet and 1954 Gold Hill quadrangle)

HISTORIC MAPS

A review of historic maps of the Spears Ranch portion of the Park and Garden Bar Road were conducted. The 1867 GLO plat map for Township 13 North, Range 7 East does not depict any structures or roads within the project area; however, several features are indicated in the surrounding area. An unnamed road is located in the southern half of Sections 21 and 22 to the south of the project area. The Myers house is depicted in the northwest corner of Section 31 and Sheridan/Auburn Road is shown in Sections 7 and 8, northwest of the project area. A survey map of the Heredia Estate prepared in 1889 depicts a feature with an illegible label in the southeast quarter of the southeast quarter of Section 16, and an unnamed road that bisects the eastern half of Section 16.

NATIVE AMERICAN CONSULTATION

EDAW, on behalf of the County, initiated the consultation process with appropriate Native American groups with a possible interest in the cultural resources studies and the proposed project. EDAW contacted the Native American Heritage Commission (NAHC) in Sacramento and requested a list of suitable tribal organizations and individuals and a search of the NAHC Sacred Lands files. The Sacred Lands files search revealed that no known sites of cultural or spiritual importance to the present-day Native American community were known to exist within the area of potential effects for the proposed Park or Garden Bar Road improvements. The NAHC also provided contact information (Table 6-1) for the following groups and individuals from the Auburn area.

Letters were sent to each of the contacts noted in Table 6-1 before the field survey was conducted. One organization, the United Auburn Indian Community of the Auburn Rancheria, sent a letter expressing concern about Native American sites and remains that may be located in the project vicinity, and requesting a copy of this EIR. Although Section 106 does not apply to the EIR, it is required by the USACE as part of the processing of acquiring a Section 404 permit. In accordance with Section 106, consultation between Placer County and the United Auburn Community and its representatives is ongoing.

**Table 6-1
Native American Contacts Provided by the Native American Heritage Commission**

Individual	Address	Affiliation
Rose Enos	15310 Bancroft Road Auburn, CA 95603	Maidu/Washoe
Christopher Suehead	Todd Valley Miwok-Maidu Cultural Foundation P.O. Box 1490 Foresthill, CA 95631	Miwok/Maidu
Jessica Tavares, Chairperson	United Auburn Indian Community of the Auburn Rancheria 575 Menlo Drive, Suite 2 Rocklin, CA 95765	Maidu/Miwok
Jeff Murray or Nicholas Fonseca	Shingle Springs Band of Miwok Indians P.O. Box 1340 Shingle Springs, CA 95682	Maidu/Miwok
Source: Data provided by EDAW in 2006		

6.1.5 SURVEY RESULTS

EDAW cultural resource specialists conducted an intensive field survey of the Spears Ranch portion of the Park between October 16 and October 27, 2006, and Garden Bar Road on December 13, 2007. The Didion Ranch portion of the Park was surveyed as part of the 2004 IS/MND for the Didion property (Placer County 2004).

The majority of the sites and features identified during the EDAW cultural resources surveys (see Table 6-2) are related to, or likely related to, three distinct cultural phases or themes: prehistoric resource procurement, placer mining activities that were conducted from the middle of the 19th century until at least the early decades of the 20th century, and ranching activities that began at approximately the same time as mining activities and continued into the 21st century. Small-scale placer mining continues today in the vicinity of the Park, but it is avocational. No commercial ventures are operating in the area. Ranching and other agricultural endeavors are the continued staple industries of the area, and parts of the project area are still being used for cattle grazing. Resources identified during the EDAW cultural resources surveys are briefly described below.

6.1.6 PREHISTORIC FINDS

Nine prehistoric sites were identified during the survey. Of these, eight are milling features (e.g., mortars formed in bedrock or large boulders) and the ninth is a pitted boulder containing cupules. A description of these features is provided below.

MILLING FEATURES

Cultural Resource HF-4: Bedrock Milling Feature

This cluster of eight mortars, formed within a horizontal exposure of volcanic bedrock, is located alongside Coon Creek, near the top of the falls (see Exhibit 3-4 for the location of the falls). The exposed bedrock measures about 36 feet (11 meters [m]) by 54 feet (16.5 m) and exhibits depressions formed by water and gravel tumbling. Eight of these depressions have been modified and exhibit attributes consistent with mortars formed in bedrock. Although there are no sediments on the downslope side of the feature, there is the potential for the presence of shallow cultural materials on the upslope side, adjacent to the feature.

Table 6-2 Cultural Resources Documented during the Cultural Resources Surveys					
Resource Number	Association	Description	Location (USGS Gold Hill Quad)		
			Township	Range	Section(s)
HF-1	Historic	Historic homestead	13N	7E	22
HF-2	Historic	Placer mining works	13N	7E	16
HF-3	Historic	Ranch site	13N	7E	21 and 22
HF-4	Prehistoric	Bedrock milling feature	13N	7E	22
HF-5	Prehistoric	Bedrock milling feature	13N	7E	22
HF-6	Prehistoric	Bedrock milling feature	13N	7E	16
HF-7	Historic	Concrete dam	13N	7E	16
HF-8	Prehistoric	Bedrock milling feature	13N	7E	22
HF-9	Historic	Whiskey Diggins Canal	13N	7E	21 and 22
HF-10	Historic	Small placer mining works	13N	7E	22
HF-11	Prehistoric	Bedrock milling feature	13N	7E	22
HF-12	Prehistoric	Bedrock milling feature	13N	7E	22
HF-13	Prehistoric	Bedrock milling feature	13N	7E	21
HF-14	Prehistoric	Bedrock milling feature	13N	7E	21
HF-15	Prehistoric	Cupule boulder	13N	7E	21
HF-16	Historic	Canals	13N	7E	21
HF-17	Historic	Placer mining remnant	13N	7E	16
HF-18	Historic	Isolated stove parts	13N	7E	22

Note: USGS = U.S. Geological Survey
Source: Data provided by EDAW in 2006

Cultural Resource HF-5: Bedrock Milling Feature

HF-5 is a collection of three milling features on horizontal exposure of bedrock. The site is situated at the base of a north-trending slope along Coon Creek. The bedrock exhibits naturally occurring depressions formed by fluvial processes. Several of these depressions have been modified by cultural use to form mortars. A total of 18 definitive mortars were identified, many of which were filled with leaves, rock, or soil. Because they were not excavated, complete descriptions and measurements were not made during the site visit. Individual milling features range from 4 inches to 10.6 inches (11–27 centimeters [cm]) in diameter and are up to 10 inches (25 cm) deep. Because of the location at the base of a slope, there is the potential for additional constituents to be present in shallow subsurface contexts immediately upslope of and adjacent to the feature.

Cultural Resource HF-6: Bedrock Milling Feature

HF-6 is a cluster of six mortars formed on a horizontal exposure of volcanic bedrock alongside Coon Creek. The bedrock exhibits naturally occurring depressions formed by water wash and gravel tumbling. Six of these depressions have been modified and exhibit attributes consistent with mortars formed in bedrock. The mortars range in size from 4 inches to 10 inches (10–25 cm) in diameter and are 3 inches to 8 inches (8–20 cm) deep.

Although additional constituents were not observed, there is the potential for the presence of shallow subsurface cultural deposits adjacent to the milling feature.

Cultural Resource HF-8: Bedrock Milling Feature

HF-8 is a cluster of three mortars formed on a horizontal exposure of volcanic bedrock. This location is alongside Coon Creek, upstream of the steep canyon formed by the creek. The bedrock exposure measuring 7 feet by 5 feet (2 m x 1.5 m) contains three mortars, one of which was submerged within the creek at the time of the survey. The mortars range from 6 inches to 7.5 inches (16–19 cm) in diameter, and are roughly 4 inches (11 cm) deep. No sediments are located adjacent to the feature; therefore, subsurface deposits that may include additional artifact constituents are not believed to be present at this site.

Cultural Resource HF-11: Bedrock Mortars

HF-11 is a pair of mortars formed within a large volcanic boulder. The site is located on the southern bank of Coon Creek. The boulder exhibits naturally occurring depressions formed by water wash and gravel tumbling. Two of these shallow depressions have been modified and exhibit attributes consistent with mortars formed in bedrock. The mortars range from 9 inches to 12 inches (23–30 cm) in diameter and are 5 inches to 11 inches (12–27 cm) deep. There is a lack of depositional sediments adjacent to the boulder; therefore, subsurface deposits are most likely not present.

Cultural Resource HF-12: Bedrock Milling Feature

HF-12 is a cluster of five mortars formed in a horizontal exposure of volcanic bedrock, situated at the confluence of Coon Creek and Deadman Creek. The bedrock, measuring 23 feet by 4 feet (7 m x 1.2 m), exhibits naturally occurring depressions formed by water wash and gravel tumbling. Five of these depressions have been modified and exhibit attributes consistent with mortars formed in bedrock. The mortars are all conical in shape and range between 5 inches and 8 inches (12–20 cm) in diameter and 2 inches to 6 inches (4–16 cm) deep. The feature is situated directly adjacent to Coon Creek and lacks associated depositional sediments; therefore, subsurface cultural materials are not believed to be present.

Cultural Resource HF-13: Bedrock Mortars

HF-13 consists of two mortars formed within a large volcanic boulder. The site is located on the northern bank of Coon Creek, approximately 400 feet (125 m) from the main creek crossing and the intersection of three main access roads. The boulder exhibits three depressions formed by water. Two of these have been modified and exhibit attributes consistent with mortars formed in bedrock. The mortars range in size between 6 inches and 8 inches (16–20 cm) in diameter and are 2 inches to 3 inches (4–7 cm) deep. Because the dense vegetation in this area prevents a thorough investigation of the adjacent surface, there is the potential for the presence of shallow subsurface cultural materials directly adjacent to the feature.

Cultural Resource HF-14: Single Bedrock Mortar

HF-14 is a single mortar located within a horizontal exposure of volcanic bedrock. This cone-shaped mortar is 9 inches by 6.5 inches by 5 inches (24 cm x 16.5 cm x 12 cm).

ADDITIONAL PREHISTORIC RESOURCE

Cultural Resource HF-15: Cupule Boulder

HF-15 is a pitted boulder containing 13 cupules. Each cupule is round and slightly dished, measuring 0.4 inches to 2 inches (1–5 cm) in diameter and 0.2 inch to 0.4 inch (0.5–1 cm) deep. The feature is located alongside Coon Creek, directly adjacent to two historic canals (cultural resource HF-16, described below). Payen (1966) described

a similar feature at the Lincoln Mound site (CA-PLA-14) southwest of the Park. Investigations at Placer Ranch, about 5 miles north of Roseville and 10 miles southwest of the project area, resulted in the location of several pitted boulders, one of which (CA-PLA-627H) exhibited 40 small cupules (Foster et al. 1976).

Although previous investigations and research in the project vicinity have noted the presence of pitted boulders, and other research has documented their presence in the Coast Range west of Fresno, on the west side of the Sierra Nevada in Plumas County, and elsewhere in Northern California, they are far from ubiquitous. Some researchers (e.g., Payen 1966) suggest that these features are a type of rock art associated with earlier time periods and are associated with the Great Basin rock art tradition. Where they are located on horizontal exposures, some have referred to these features as “rain” rocks, used by shamans who would cover and then uncover them during rain-invoking rituals. Cupules found in the southern Sierra Nevada are interpreted as being made by young women during their puberty initiations (Whitley 2000, 2001). Because of their uniqueness and the potential association with spiritual rituals, the feature is considered a unique archaeological resource and eligible for inclusion in the CRHR under criterion 4 (see Section 6.2.2, “State Plans, Policies, Regulations, and Laws,” below).

No other cultural constituents were observed in association with this prehistoric feature. Because of its location adjacent to a canal, it is possible that this boulder was moved from its original location during the construction of the canal.

6.1.7 HISTORIC-ERA FINDS

Nine historic-era sites were identified during the survey. Of these, three consist of resources related to early settlement and ranching, four are related to the history of mining and prospecting in the area, and one is a historic water conveyance system. These features are described below.

EARLY SETTLEMENT– AND RANCHING-RELATED RESOURCES

Cultural Resource HF-1: Historic Homestead

HF-1 is located near the falls at the confluence of Deadman and Coon Creeks, along the edge of a trail that originates from the Didion Ranch portion of the Park. The site, consisting of three features, appears to be the remains of an early homestead, possibly associated with the occupation of John F. and John B. Hicken in 1884, or an earlier short-term residence associated with Gold Rush–era mining and prospecting. Of the three features documented on the site, feature 1 is a rock chimney structure; feature 2 is a reinforced earthen pad (possibly a tent or structure platform); and feature 3 is a small trench or canal, with several associated pieces of milled lumber (one of which is driven into the creek bank). Although no associated artifacts were observed, dense vegetation may be obscuring additional constituents.

Cultural Resource HF-3: Ranch Site

This ranch site encompasses more than 300 acres near the Park’s southwestern corner. The constituents at this site consist of a house foundation (feature 1) with associated refuse, a water conveyance system (feature 2) with associated stock ponds, an earthen pad (feature 3), a group of rock cairns (feature 4), and four buildings (two residences and two sheds), and a dilapidated chicken coop and corral situated within an improved pasture area. The property also contains what appears to be a collapsed chicken coop composed of wooden posts and wire mesh and a dilapidated wooden corral.

Cultural Resource HF-18: Isolated Stove Parts

This isolated non-associated find is a collection of six cast iron stove fragments. A door fragment has an embossed maker’s mark.

MINING- AND PROSPECTING-RELATED RESOURCES

Cultural Resource HF-2: Placer Mining Works

HF-2 is the remnants of a placer mining and prospecting operation. The site contains two loci that incorporate various archaeological remains. The features at locus 1 consist of a collection of five prospect pits, approximately 30 rock piles, and three trenches. The features contained in locus 2 of the site seem to be associated more with prospecting activities and consist of several pits, trenches, their associated back dirt piles, and four widely distributed artifacts.

Cultural Resource HF-7: Concrete Dam

This site consists of a concrete dam formed onto a bedrock exposure, an excavated diversion canal consisting of segments that have been excavated into bedrock, and other segments that are lined with concrete. The concrete dam (feature 1) is located on the northern bank of Coon Creek, approximately 2,800 feet from the western boundary of the Park. At one time, this feature diverted water into a diversion channel (feature 2) that parallels Coon Creek. Two artifacts were located within and near feature 1—a horseshoe that is cemented to the natural rock outcrop above the dam wall, and a metal frame located downstream of the dam. The metal piece appears to be a frame for the gate that was once in place in the diversion channel. The dates “1922” and “1936” appear within a square concrete inscription tablet placed at the center of the main wall of the dam. The concrete used in dam construction appears to be similar to that used in the structural remains associated with ranching site HF-3, suggesting that the features at these two sites may have been built at the same time or by the same individual. The previous owner of the property, Bradley Spears, indicated that Art Wildberger operated a cattle ranch on the property from 1940 to 1975 (Spears, pers. comm., 2006). Therefore, the dam and residence at HF-3 are most likely associated with an unknown previous owner who predates ownership by Wildberger.

Cultural Resource HF-10: Small Placer Mining Works

HF-10 is a small placer mining locale situated near the base of a south-facing slope, approximately 65 feet north and upslope of Coon Creek. The three features observed at this location consist of a trench (feature 1), a circular pit (feature 2) with stacked cobbles, and a collection of at least five rock piles (feature 3). Dense grass prevents the full description of all the features, and artifacts and additional features may be present. However, given the limited areal extent of the mining operation, it appears to have been one of short duration, possibly occurring during the 1850s to 1870s or during the Great Depression.

Cultural Resource HF-16: Canals

HF-16 consists of two parallel canals (canals 2 and 3) that extend for a distance of approximately 350 feet. Canal 2 is rock lined and is situated just upslope of Coon Creek. Canal 3 is excavated into bedrock.

Cultural Resource HF-17: Placer Mining Remnant

HF-17 is a stacked rock pile that appears to be a remnant of placer mining operations. The feature consists of three courses of 40–50 stacked cobbles and boulders. The remnant of a ditch/canal with a prominent berm on the downslope side extends along the south side of Coon Creek for an undetermined distance. No artifacts or other associated constituents were observed.

WATER CONVEYANCE SYSTEM

Cultural Resource HF-9: Whiskey Diggings Canal

Three segments of the Whiskey Diggings Canal are located within the Spears Ranch portion of the Park. Portions of the canal located immediately south of the current Park were formally recorded by Foster and Foster (1994).

The first ditch segment within the project area enters the property at the southeast boundary near the midpoint of the eastern section line of Section 22. It exits and then reenters the Spears Ranch portion of the Park on the eastern side of the midpoint of the section, then exits again on the west side of Section 22. The final segment documented here as part of HF-3 is a small, curving segment that is found near the middle of the western boundary of Section 22. The ditch appears as it is described by Foster and Foster (1994), with the exception of several segments that are lined with black mesh, improvements related to ongoing maintenance by Nevada Irrigation District. The overall depth is approximately 2 feet (0.6 m) and the width is approximately 6 feet (1.8 m). A maintenance road parallels the canal on the downslope side.

6.2 REGULATORY SETTING

6.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

SECTION 106 NATIONAL HISTORIC PRESERVATION ACT

As part of the process involved in acquiring a Section 404 from the Corps compliance with Section 106 of the National Historic Preservation Act is required. Section 106 of the National Historic Preservation Act of 1966 and its implementing regulations (Title 36, Section 800 of the Code of Federal Regulations [i.e., 36 CFR 800], as amended in 1999) requires federal agencies to consider the effects of their actions, or those they fund or permit, on properties that may be eligible for listing or are listed in the NRHP.

The NRHP is a register of districts, sites, buildings, structures, and objects of significance in American history, architecture, archaeology, engineering, and culture. The regulations provided in 36 CFR 60.4 describe the criteria used to evaluate cultural resources for inclusion in the NRHP. Cultural resources can be significant on the national, state, or local level. Properties may be listed in the NRHP if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- (a) are associated with events that have made a significant contribution to the broad patterns of our history;
- (b) are associated with the lives of persons significant in our past;
- (c) embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) have yielded, or may be likely to yield, information important in prehistory or history.

To determine whether an undertaking could affect historic properties, cultural resources (archaeological, historical, and architectural properties) must be identified, inventoried, and evaluated for listing in the NRHP. Although compliance with Section 106 is the responsibility of the lead federal agency, the work necessary to comply can be undertaken by others. The Section 106 review process involves a four-step procedure:

- ▶ Initiate the Section 106 process by establishing the undertaking, developing a plan for public involvement, and identifying other consulting parties.
- ▶ Identify historic properties by determining the scope of efforts, identifying cultural resources, and evaluating their eligibility for inclusion in the NRHP.
- ▶ Assess adverse effects by applying the criteria of adverse effect on historic properties (resources that are eligible for inclusion in the NRHP).

- ▶ Resolve adverse effects by consulting with the State Historic Preservation Officer and other consulting agencies, including the Advisory Council on Historic Preservation if necessary, to develop an agreement that addresses the treatment of historic properties.

6.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

The California Environmental Quality Act (CEQA) provides for the documentation and protection of significant prehistoric and historic resources. Before a discretionary project is approved, the potential impacts of the project on archaeological and historical resources must be considered (Public Resources Code [PRC] Sections 21083.2 and 21084.1, State CEQA Guidelines Section 15064.5 [California Code of Regulations (CCR) Section 15064.5]).

A variety of cultural resources can be determined to be historical resources under CEQA, including traces of prehistoric habitation and activities and historic-era sites and materials. In general, traces of human activity more than 50 years old are typically treated as a potential cultural resource. However, because projects can extend over a period of years from planning to implementation, the minimum age generally used in practice for resources to be considered for possible historic qualities is 45 years.

Prehistoric and historic cultural resources in the Spears Ranch portion of the Park may be eligible for inclusion in the CRHR. Listing, or eligibility for listing, in the CRHR is the primary consideration in whether or not a resource is subjected to further research and documentation. CEQA states that if a project would result in significant impacts on important historical resources, then alternative plans or mitigation measures must be considered. However, only significant historical resources need to be addressed. CEQA Section 5024.1 (PRC Section 5024.1) and Section 15064.5 of the State CEQA Guidelines (CCR Section 15064.5) include listing or eligibility for listing on the California Register of Historical Resources in the definition of a significant historical resource.

A cultural resource may be eligible for listing in the CRHR if it:

- (1) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (2) is associated with the lives of persons important in our past;
- (3) embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values; or
- (4) has yielded, or may be likely to yield, information important in prehistory or history.

If a prehistoric or historic resource does not necessarily meet any of the four CRHR criteria, but does meet the definition of a "unique" archeological resource as outlined in PRC Section 21083.2, it may still be treated as a significant resource. A "unique" archeological resource is defined as:

...an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

As a matter of policy, public agencies should avoid damaging effects on historic and archaeological resources, particularly those that are eligible for the CRHR. When impacts cannot be avoided, their effects can be mitigated through:

- ▶ avoiding resources during construction phases,
- ▶ incorporating sites into open space,
- ▶ capping resources with chemically neutral stable fill,
- ▶ deeding a site into a permanent conservation easement, or
- ▶ recovering data about the site (testing and excavation).

The State CEQA Guidelines also provide for a measure of protection for Native American human remains (CCR Section 15064.5[d]) and for the accidental discovery of cultural resources (CCR Section 15064.5[e]). These are particularly important provisions in that they take into account the possibility that significant resources not noted as a result of previous research efforts may be present within a project area and need to be treated in a way commensurate with CEQA standards. Section 15064.5(e) of the State CEQA Guidelines (i.e., CCR Section 15064.5[e]) requires that excavation activities be stopped whenever human remains are uncovered, and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of a Native American, the NAHC must be contacted within 24 hours, and the provisions for treating or disposing of the remains and any associated grave goods as described in CCR Section 15064.5 must be followed.

6.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND LAWS

The following are the relevant goal and policies identified by the *Placer County General Plan* (Placer County 1994) for cultural resources.

GOAL 5.D: To identify, protect, and enhance Placer County’s important historical, archaeological, paleontological, and cultural sites and their contributing environment.

- ▶ **Policy 5.D.1.** The County shall assist the citizens of Placer County in becoming active guardians of their community’s cultural resources.
- ▶ **Policy 5.D.2.** The County shall solicit the cooperation of the owners of cultural and paleontological resources, encourage those owners to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.
- ▶ **Policy 5.D.3.** The County shall solicit the views of the Native American Heritage Commission and/or the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.
- ▶ **Policy 5.D.4.** The County shall coordinate with the cities and municipal advisory councils in the County to promote the preservation and maintenance of Placer County’s paleontological and archaeological resources.
- ▶ **Policy 5.D.5.** The County shall use, where feasible, incentive programs to assist private property owners in preserving and enhancing cultural resources.
- ▶ **Policy 5.D.6.** The County shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a County-wide cultural resource data base, to be maintained by the Department of Museums.
- ▶ **Policy 5.D.7.** The County shall require that discretionary development projects be designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts,

whenever possible, shall be reduced to a less-than-significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.

- ▶ **Policy 5.D.8.** The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.
- ▶ **Policy 5.D.9.** The County shall use the State Historic Building Code to encourage the preservation of historic structures.
- ▶ **Policy 5.D.10.** The County will use existing legislation and propose local legislation for the identification and protection of cultural resources and their contributing environment.
- ▶ **Policy 5.D.11.** The County shall support the registration of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark). The County shall assist private citizens seeking these designations for their property.
- ▶ **Policy 5.D.12.** The County shall consider acquisition programs as a means of preserving significant cultural resources that are not suitable for private development. Organizations that could provide assistance in this area include, but are not limited to, the Archaeological Conservancy, The Nature Conservancy, and the Placer Land Trust.

6.3 IMPACTS

6.3.1 ANALYSIS METHODOLOGY

SUMMARY OF METHODOLOGY

As described above in Section 6.1.4, “Prefield and Field Methodology,” cultural resources investigations for the Spears Ranch portion of the Park and Garden Bar Road consisted of a staged approach that included prefield research, review of previous cultural resources studies and historic maps, Native American consultation, field surveys, and documentation of resources. Resources were assessed for their potential for eligibility for inclusion in the NRHP and CRHR. All aspects of the cultural resources study were conducted in accordance with the *Secretary of the Interior’s Guidelines for the Treatment of Historic Properties*, and documented according to the guidelines outlined in *Instructions for Recording Historical Resources* (OHP 1995).

RESOURCE ELIGIBILITY

One of the most important considerations in determining the potential consequences of the proposed project on documented cultural resources is the level of significance each site or feature possesses when measured against the NRHP and CRHR criteria (see Section 6.2, “Regulatory Setting,” above). The potential for eligibility of each documented resource within the project area and in the vicinity is summarized below in Table 6-3. Additional work may be required to complete the eligibility or mitigate for impacts if the project cannot be redesigned to avoid direct or indirect impacts.

**Table 6-3
Preliminary NRHP/CRHR Resource Eligibility**

Resource Number	Association	Resource Type	NRHP and CRHR Eligibility
HF-1	Historic	Historic homestead	Not eligible under NRHP criteria (a)–(c) or CRHR criteria 1–3; potentially eligible under NRHP criterion (d) and CRHR criterion 4
HF-2	Historic	Placer mining works	Not eligible
HF-3	Historic	Ranch site	Not eligible
HF-4	Prehistoric	Bedrock milling feature	Not eligible under NRHP criteria (a)–(c) or CRHR criteria 1–3; potentially eligible under NRHP criterion (d) and CRHR criterion 4
HF-5	Prehistoric	Bedrock milling feature	Not eligible under NRHP criteria (a)–(c) or CRHR criteria 1–3; potentially eligible under NRHP criterion (d) and CRHR criterion 4
HF-6	Prehistoric	Bedrock milling feature	Not eligible under NRHP criteria a–c or CRHR criteria 1–3; potentially eligible under NRHP criterion d and CRHR criterion 4
HF-7	Historic	Concrete dam	Not eligible
HF-8	Prehistoric	Bedrock milling feature	Not eligible under NRHP criteria a–c or CRHR criteria 1–3; potentially eligible under NRHP criterion d and CRHR criterion 4
HF-9	Historic	Whiskey Diggins Canal	Not eligible
HF-10	Historic	Small placer mining works	Not eligible
HF-11	Prehistoric	Bedrock milling feature	Not eligible under NRHP criteria a–c or CRHR Criteria 1–3; potentially eligible under NRHP criterion d and CRHR criterion 4
HF-12	Prehistoric	Bedrock milling feature	Not eligible under NRHP criteria a–c or CRHR criteria 1–3; potentially eligible under NRHP criterion d and CRHR criterion 4
HF-13	Prehistoric	Bedrock milling feature	Not eligible under NRHP criteria a–c or CRHR criteria 1–3; potentially eligible under NRHP criterion d and CRHR criterion 4
HF-14	Prehistoric	Bedrock milling feature	Not eligible under NRHP criteria a–c or CRHR criteria 1–3; potentially eligible under NRHP criterion d and CRHR criterion 4
HF-15	Prehistoric	Cupule boulder	Not eligible under NRHP criteria a–c or CRHR criteria 1–3; eligible under NRHP criterion d and CRHR criterion 4
HF-16	Historic	Canals	Not eligible
HF-17	Historic	Placer mining remnant	Not eligible
HF-18	Historic	Isolated stove parts	Not eligible

Source: Data compiled by EDAW in 2006

Of the nine prehistoric sites, eight are milling features, and one is a boulder with small cupules. Three of these milling features (HF-8, HF-12, and HF-14) lack associated sediments or deposits that have the potential to contain additional archaeological deposits. However, ethnographic data supplied elsewhere indicate that ethnographic studies may supply additional information on the formation and composition of work groups and on the types of resources and the methods of processing that occurred at each of these locations. The remaining five milling features (HF-4, HF-5, HF-6, HF-11, and HF-13) are in locations containing sediments. The results of archaeological testing elsewhere indicate that these features have the potential to possess associated subsurface cultural constituents that can yield data addressing one or more of the research issues established for this project. Therefore, because of their data potential, all of these sites are recommended as potentially eligible for inclusion in the NRHP and CRHR. The remaining site is the boulder with associated cupules (HF-15). Because of the uniqueness and the potential association with spiritual rituals, the feature is considered a unique archaeological resource and eligible for inclusion in the NRHP under criterion d and the CRHR under criterion 4.

Of the nine historic-era resources, an isolated stove (HF-18) is not considered significant because of a lack of association. The Whiskey Diggins Canal (HF-9) lacks integrity, unique features, association, and archaeological deposits that would qualify it as eligible for the NRHP or CRHR. Similarly, the ranch site (HF-3) lacks integrity, associations, or architecturally unique elements that would qualify for inclusion in the NRHP or CRHR. Of the placer mining/prospecting-related sites (HF-2, HF-7, HF-10, HF-16, and HF-17), none appear to be specific to a particular era. All display various impacts on their integrity and lack associated archaeological deposits, precluding them from being associated with a particular era or event. Therefore, none are considered eligible for the NRHP or CRHR. Although a suspected historic homestead (HF-1) does not appear to qualify for eligibility under NRHP criteria a–c or CRHR criteria 1–3, because of dense vegetation there is the potential for surface and subsurface archaeological deposits that may further an understanding of life ways on early homesteads of the region. Therefore, pending further investigations, including subsurface testing, the site is recommended as potentially eligible for inclusion in the NRHP under criterion d and the CRHR under criterion 4.

6.3.2 THRESHOLDS OF SIGNIFICANCE

Based on the Placer County CEQA checklist and Appendix G of the State CEQA Guidelines, the proposed project would result in a potentially significant impact on cultural resources if it would:

- ▶ cause a substantial adverse change in the significance of a unique archaeological resource or a historical resource as defined in Section 21083.2 of CEQA and Section 15064.5 of the State CEQA Guidelines, respectively; or
- ▶ disturb any human remains, including those interred outside of formal cemeteries.

Section 15064.5 of the State CEQA Guidelines defines “substantial adverse change” as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings.

6.3.3 IMPACT ANALYSIS

IMPACT 6-1	Cultural Resources—Potential for Loss of or Damage to Potentially Significant Cultural Resources. <i>Nine potentially significant cultural resources and one significant cultural resource have been documented within the Spears Ranch portion of the Park. The proposed project has the potential to damage or destroy these cultural resources, either directly by construction or by increased public use.</i>
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Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 6-1: Modify Project Plans to Avoid Potentially Significant Cultural Resources and Actively Monitor Resources for Indirect Effects*

Residual Significance *Less than Significant*

Of the nine potentially significant cultural resources and one significant archaeological resource, an existing trail crosses one historic site (HF-1), and no project-related activities would disturb potentially significant archaeological deposits that may be associated with this resource. Adverse effects on the prehistoric sites considered potentially eligible for the NRHP under criterion d and for the CRHR under criterion 4 because of the potential presence of subsurface deposits (HF-4, HF-5, HF-6, HF-11, and HF-13) would be avoided through modifications of project design and implementation. Similarly, the bedrock milling features considered potentially eligible because of the potential for information that could be derived from further ethnographic research (HF-8, HF-12, and HF-14) would be avoided during project design and implementation. Trails and other project facilities that would involve ground disturbance would be designed to avoid each of these sites.

Increasing public recreation use of the project area would create a risk of indirect damage to potentially significant or significant cultural resources. Cultural resources sites can be subject to vandalism or other damage by Park users. As part of the County's plans for management of the Park, monitoring of potential indirect impacts on sites that could occur as a result of public use of the Park would be conducted by the County or members of the local Native American community, or both. If indirect impacts from visitor use were to be considered a threat to resource values, protective barriers would be installed to avoid or minimize these impacts.

HF-15, a cupule boulder, appears to have been displaced from its original location. However, this resource represents unique values associated with potential spiritual use and is of considerable interest to the local Native American community. Consultation between the County and the local Native American community regarding this resource is ongoing. Because the boulder no longer appears to be located in its original context, relocation to a site suitable to the Native American community is not considered an adverse effect.

For the reasons described above for resources HF-4, HF-5, HF-6, HF-11, and HF-13 and resources HF-8, HF-12, and HF 14, this impact would be potentially significant. Implementation of Mitigation Measure 6-1 would reduce this impact to a less-than-significant level.

IMPACT 6-2 **Cultural Resources—Potential for Disturbance of Undiscovered Cultural Resources.** *The project vicinity is known to contain numerous historic and prehistoric resources. In addition, buried traces of historic-era activity and early Native American occupation that remain undocumented may be present within and in the vicinity of proposed trails. Ground-disturbing activities during construction of trails and Park facilities could disturb undiscovered cultural resources.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 6-2: Protect Previously Unknown Cultural Resources*

Residual Significance *Less than Significant*

Although the entire Spears Ranch portion of the Park and Garden Bar Road were subject to an intensive archaeological inventory, and methods of identifying resources located on and above the ground surface were used, it is possible that presently unidentified cultural deposits are present in subsurface contexts. Subsurface prehistoric resources may take the form of stone tools and tool fragments, rock concentrations, burned and/or unburned shell or bone, and/or darkened sediments containing some of the above-mentioned constituents. Historic-era deposits can include fragments of glass, ceramic, and metal objects; milled and split lumber; and

structure and feature remains, such as building foundations and dumps. Because the potential exists for disturbing undiscovered cultural resources, this impact would be potentially significant. Implementation of Mitigation Measure 6-2 would reduce this impact to a less-than-significant level.

IMPACT 6-3 **Cultural Resources—Potential for Disturbance of Unknown Human Interments.** *Although no evidence of human interments was found in documentary research or during the archaeological inventory evidence of prehistoric and historic use of the project area has been found. If undiscovered human remains are present, ground-disturbing activities during construction of trails and other Park facilities could adversely affect presently unmarked human interments.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 6-3: Stop Potentially Damaging Work if Human Remains are Uncovered During Construction*

Residual Significance *Less than Significant*

The entire Spears Ranch portion of the Park and Garden Bar Road were subject to an intensive archaeological inventory, and the project vicinity is known to contain numerous historic and prehistoric resources. No evidence of human remains was found within or near the project area through a review of documentary research and completion of an archaeological inventory; however, potentially unmarked Native American or historic-era human interments could be present, because evidence of prehistoric and historic use of the project area has been found. Undiscovered human interments could be encountered during project-related ground-disturbing activities. Because unknown or undocumented subsurface human remains could be uncovered during construction of trails or Park facilities, this impact would be potentially significant. Implementation of Mitigation Measure 6-3 would reduce this to a less-than-significant level.

6.4 MITIGATION MEASURES

Mitigation Measure 6-1: Modify Project Plans to Avoid Potentially Significant Cultural Resources and Actively Monitor Resources for Indirect Effects.

Mitigation Measure 6-1 applies to Impact 6-1.

The County will prepare detailed design of trails, roads, and other Park facilities to ensure that direct effects associated with project implementation avoids all significant and potentially significant documented cultural resources in the project area. As part of the County’s ongoing operational responsibility, usage trends that threaten any potentially significant documented cultural resources will be actively managed to avoid damage. If designing such trails and facilities to avoid potential impacts is not feasible or if management of Park usage indicates potential impacts to significant or potentially significant cultural resources, an approved treatment plan shall be drafted and implemented to mitigate the significant impacts. Such a plan may include one or more of the following elements:

- ▶ vegetation removal and surface inspection;
- ▶ ethnographic studies or Native American consultation, or both;
- ▶ subsurface testing; and
- ▶ if necessary, data recovery.

Implementation of this mitigation measure would reduce Impact 6-1 to a less-than-significant level.

Mitigation Measure 6-2: Protect Previously Unknown Cultural Resources.

Mitigation Measure 6-2 applies to Impact 6-2.

Given the potential for subsurface deposits, if undocumented resources are encountered during construction, all destructive work in the vicinity of the find shall cease until a qualified professional archaeologist can assess the significance of the find and, if appropriate, provide recommendations for treatment. Appropriate measures for treatment may include no action, avoidance of the resource through relocation of Park facilities, subsurface testing, and potentially data recovery. For any such discovery, a memorandum documenting the results of the evaluation shall be provided to the County by the archaeologist, and the County shall forward the memorandum to the California Department of Parks and Recreation and the State Historic Preservation Officer.

Implementation of this mitigation measure would reduce Impact 6-2 to a less-than-significant level.

Mitigation Measure 6-3: Stop Potentially Damaging Work if Human Remains are Uncovered during Construction.

Mitigation Measure 6-3 applies to Impact 6-3.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the construction contractor or the County, or both, shall immediately halt potentially damaging excavation in the area of the burial and notify the County coroner and a qualified professional archaeologist to determine the nature of the remains. The coroner shall examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands, in accordance with Section 7050(b) of the Health and Safety Code. If the coroner determines that the remains are those of a Native American, he or she shall contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). After the coroner's findings are presented, the County, the archaeologist, and the NAHC-designated Most Likely Descendant (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed.

Upon the discovery of Native American remains, the procedures above regarding involvement of the County coroner, notification of the NAHC, and identification of a MLD shall be followed. The County shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours after being granted access to the site to complete a site inspection and make recommendations. A range of possible treatments for the remains may be discussed: nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment. Assembly Bill (AB) 2641 (Chapter 863, Statutes of 2006) suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641 includes a list of site protection measures and states that the County shall comply with one or more of the following measures:

- ▶ Record the site with the NAHC or the appropriate Information Center.
- ▶ Utilize an open-space or conservation zoning designation or easement.
- ▶ Record a document with the county in which the property is located.

The County or its authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The County or its authorized representative may also reinter the remains in a location not subject to further disturbance if it rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner. Adherence to these procedures and other provisions of the California Health and Safety Code and AB 2641 would reduce potential impacts on human remains to a less-than-significant level.

7.0 VISUAL RESOURCES

This chapter describes the existing visual characteristics of the project area and evaluates the visual impacts of the proposed project. The visual impact analysis considers existing scenic resources and the potential visibility of the proposed project from surrounding areas, including both the physical characteristics of project facilities and changes in light and glare in the project area. The descriptions of the existing visual setting are accompanied by photographs of representative views, taken during a site visit on July 28, 2007.

7.1 ENVIRONMENTAL SETTING

7.1.1 REGIONAL AND LOCAL VISUAL CHARACTER

VISUAL CHARACTER OF THE PROJECT AREA

The project area is located in the Sierra Nevada foothills of western Placer County (Exhibits 3-2 and 3-3 in Chapter 3.0, “Project Description”). The project area is mostly undeveloped consisting primarily of oak woodland and chaparral vegetation, although several residences are located along Garden Bar Road and, in general, to the west and south of the Park. Additionally, an existing residence and ranch-related structures (e.g., storage building, corral) are located in the central portion of the project area. Coon and Deadman Creeks transect the project area. Garden Bar Road is the closest roadway to the project area; however, the Park is not visible from Garden Bar Road because of intervening vegetation and topography. The portion of the project that includes improvements to Garden Bar Road would be visible to many of the residences along this road. Ridgelines of the surrounding foothills dominate views from within the project area and are the nearest visually prominent landforms (Exhibits 7-1a and 7-1b).

VISUAL CHARACTER OF THE SURROUNDING AREA

The project area is located in a rural area approximately 5 miles northwest of Auburn. The project vicinity is highly vegetated and consists of rolling terrain. Although some of the surrounding areas are developed with rural residences, only one house is visible from within the facility development zone inside the Park, approximately 1,600 feet to the west, with views from the house’s location on top of a ridge (see Exhibit 7-2 and KOP 2 in Exhibit 7-3). Surrounding views include undulating topography and vegetation common in the foothills including pockets of chaparral, oak woodlands, and grasslands with extended views into and around Coon Creek.

7.1.2 VISIBILITY FROM THE SURROUNDING AREA

Key observation points (KOPs) are the primary focus of the visual analysis. KOPs are generally selected to represent the most critical locations from which a project area may be seen. KOPs are used to evaluate existing landscapes and potential impacts on visual resources with various levels of sensitivity, in different landscape types and terrain, and from various vantage points. The KOP images were developed using Google Earth Pro 2008 utilizing topography and satellite imagery.

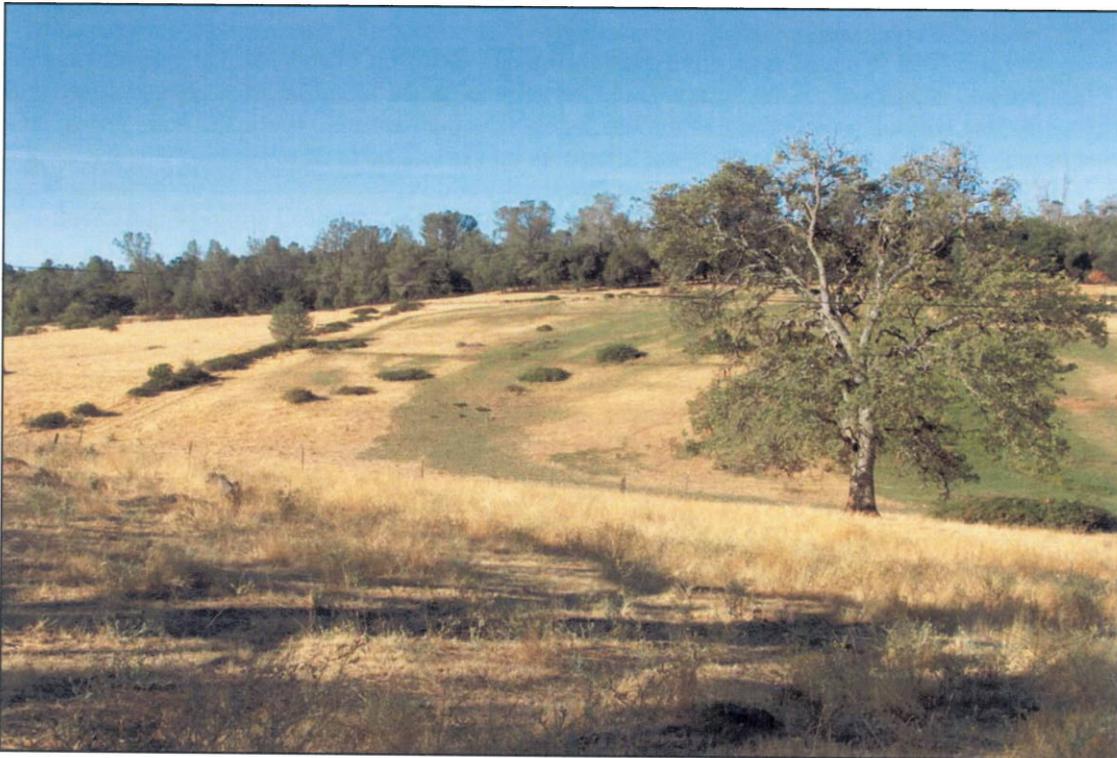
The Park is not readily visible from any prominent off-site locations (e.g., Garden Bar Road, rural residences) and only one potential KOP (i.e., the house located on top of the ridge approximately 1,600 feet to the west) was identified as having potential views of proposed project facilities. The project lacks additional KOPs with views of proposed facilities because the project area is secluded, heavily vegetated, and protected from views from the outside by surrounding topography. For the analysis of potential visual impacts associated with the proposed project, 11 KOPs were selected (Exhibits 7-4 through 7-14) as public or private vantage points from which the project area would be potentially visible by residents or users. Refer to Exhibit 7-3 for specific locations of KOPs in relation to the project area. The surrounding landscape is primarily open grazing land, rural residential, or oak woodland.



Source: Photograph provided by EDAW in 2007

View of Surrounding Areas to the West from the Existing Ranch House

Exhibit 7-1a



Source: Photograph provided by EDAW in 2007

View of Surrounding Areas to the South from the Existing Ranch House

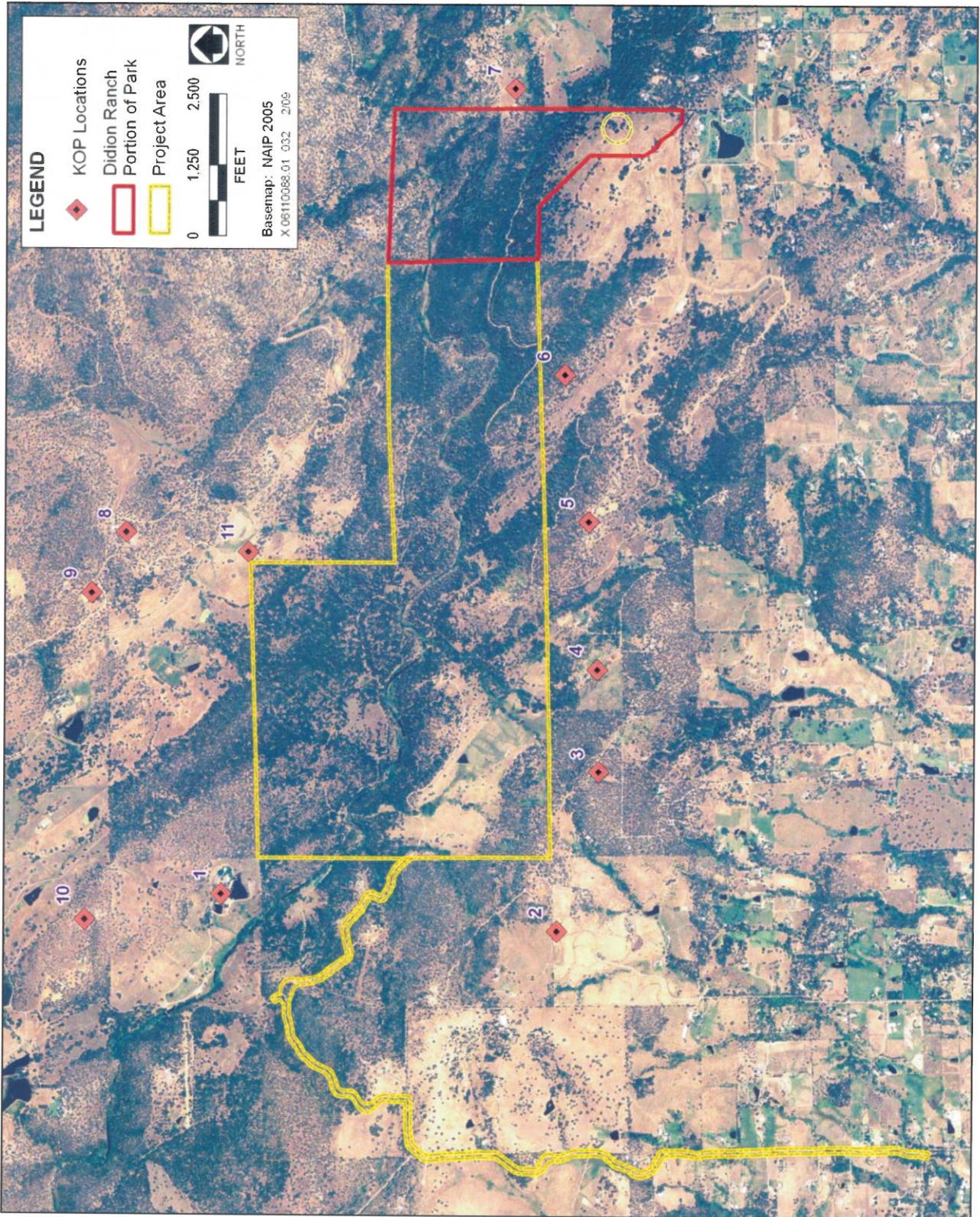
Exhibit 7-1b



Source: Photograph provided by EDAW in 2007

Nearby Ridgetop Home with Views into the Project Area

Exhibit 7-2



Source: Data provided by EDAW in 2008

Key Observation Points Location Map

Exhibit 7-3



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking Southeast from Key Observation Point 1**

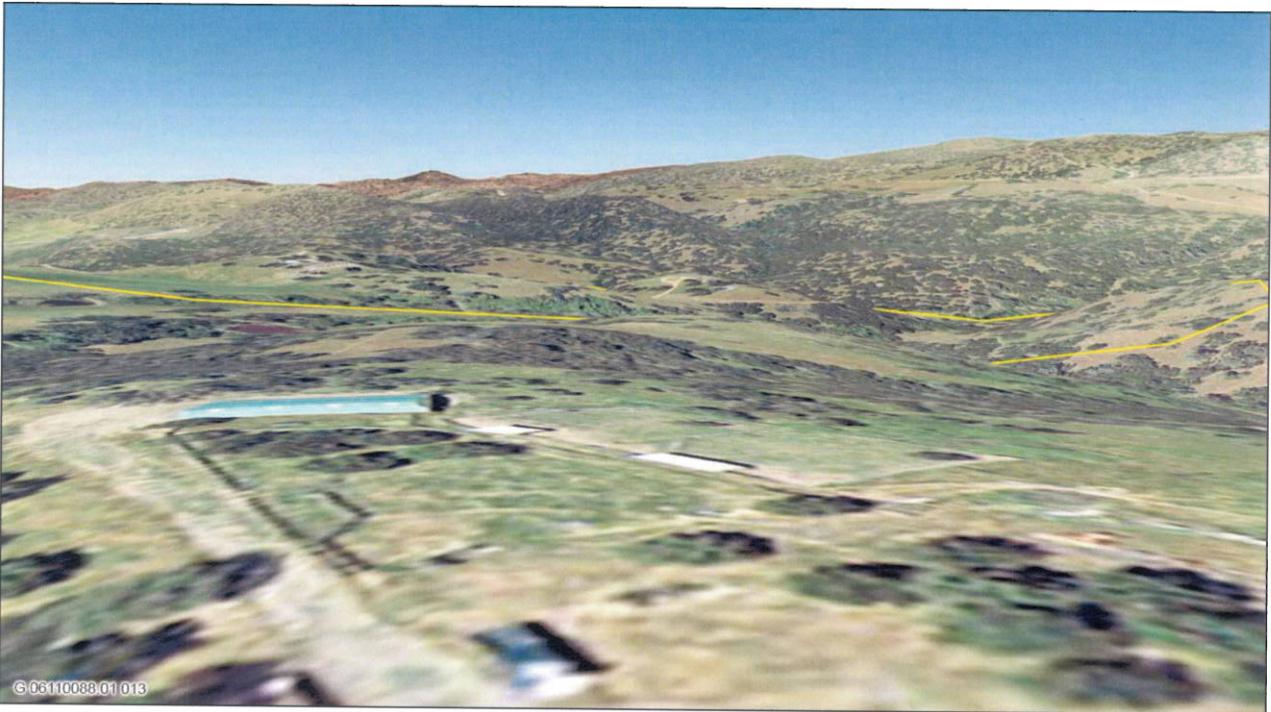
Exhibit 7-4



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking Northeast from Key Observation Point 2**

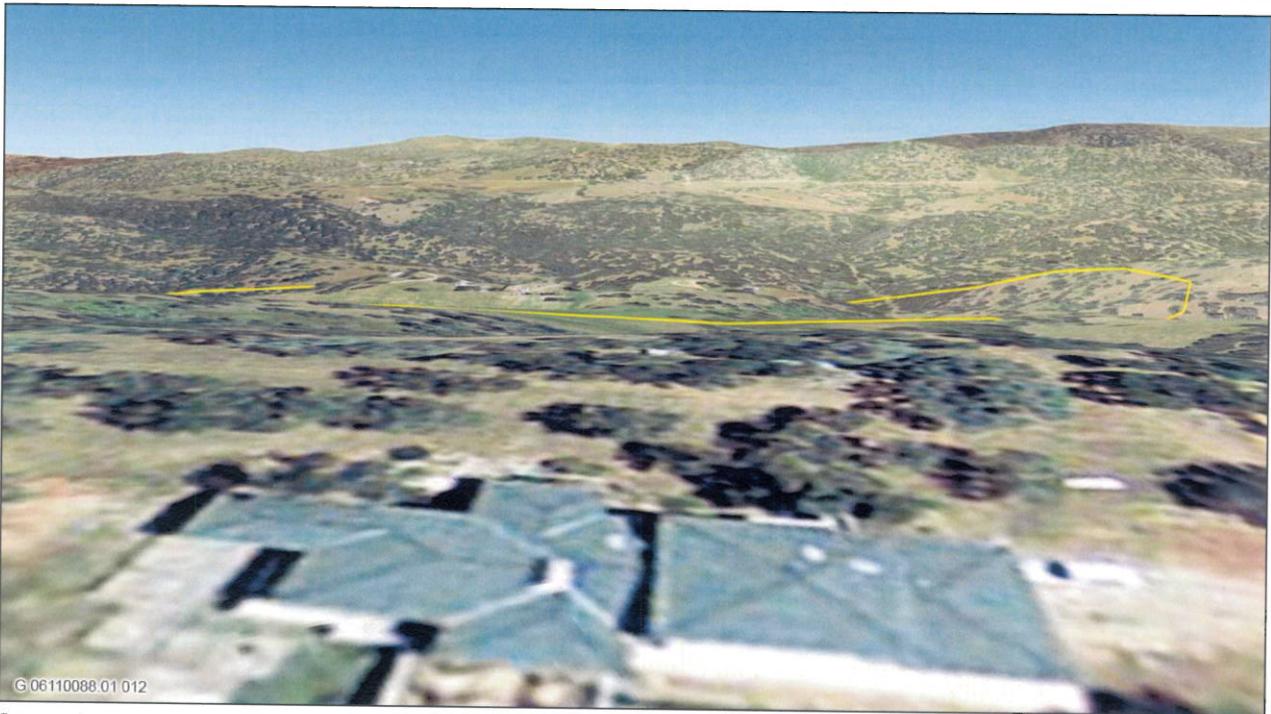
Exhibit 7-5



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking North from Key Observation Point 3**

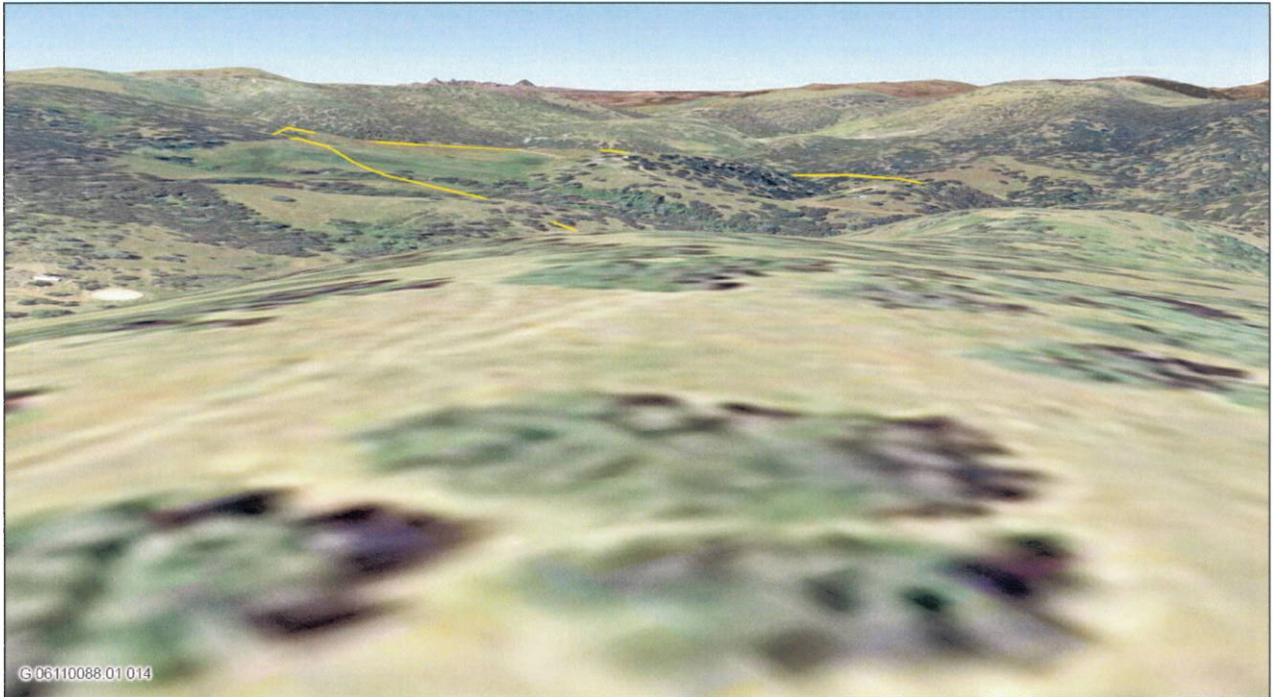
Exhibit 7-6



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking North from Key Observation Point 4**

Exhibit 7-7



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking Northwest from Key Observation Point 5**

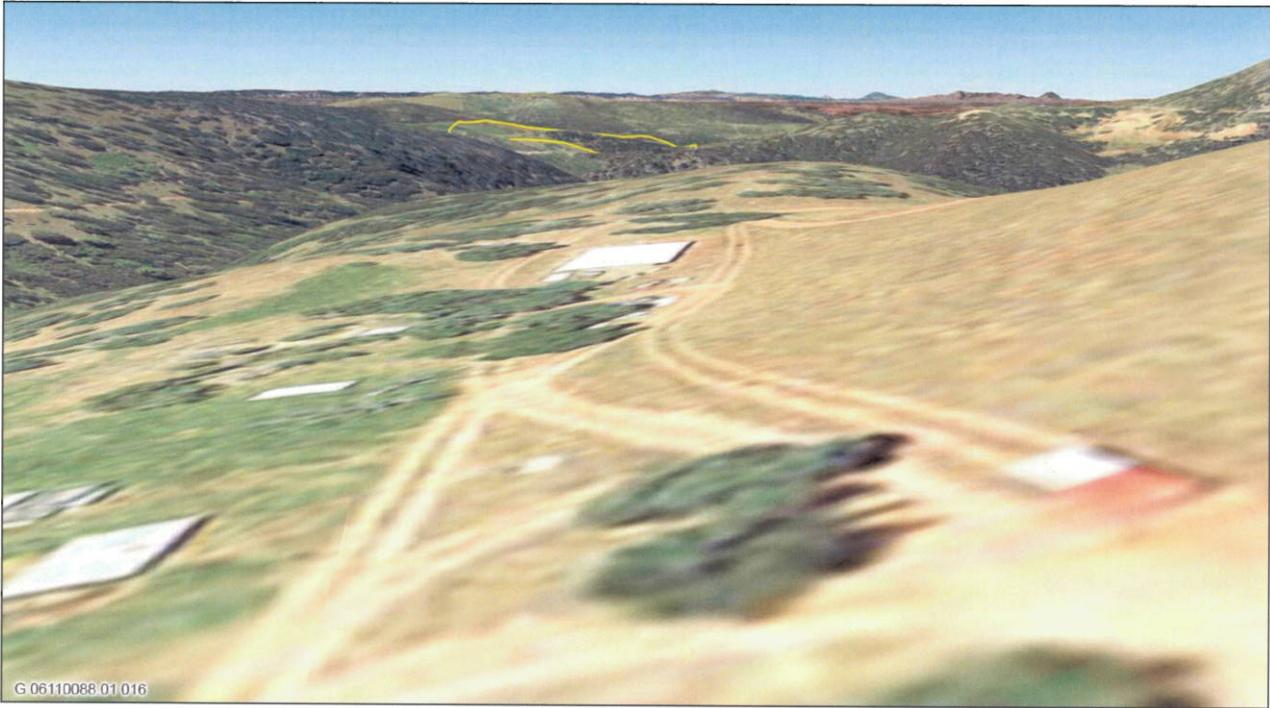
Exhibit 7-8



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking Northwest from Key Observation Point 6**

Exhibit 7-9



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking West from Key Observation Point 7**

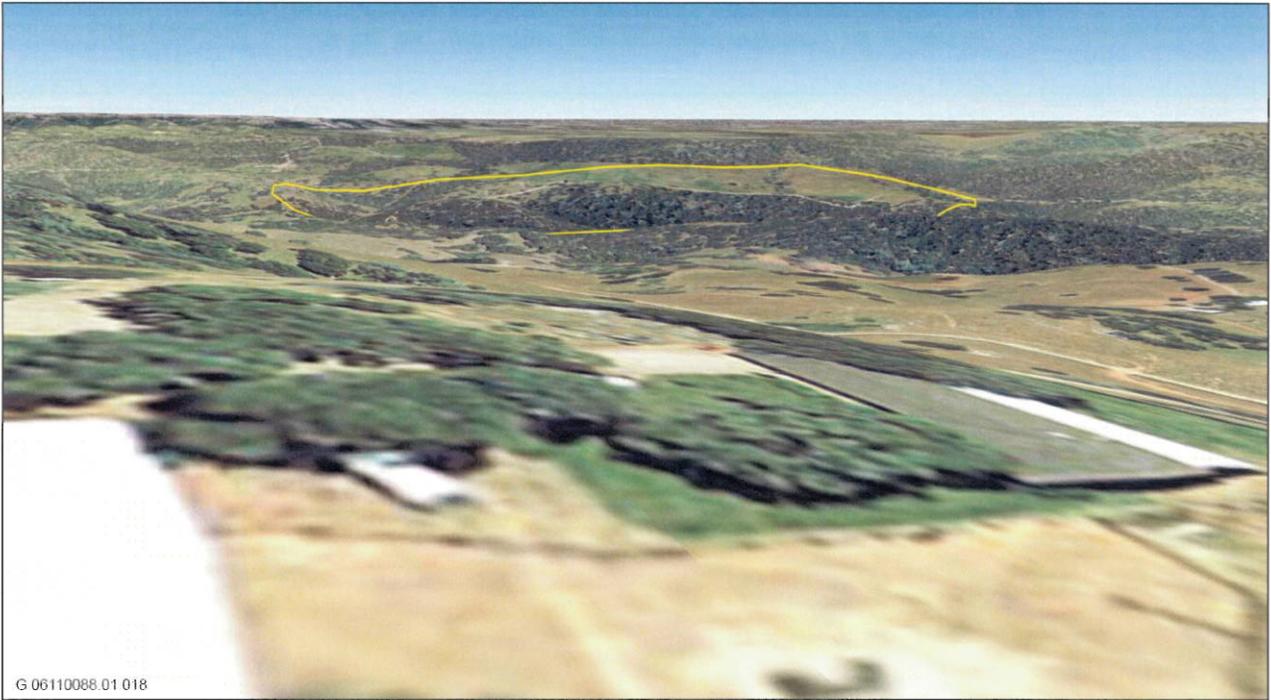
Exhibit 7-10



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking Southwest from Key Observation Point 8**

Exhibit 7-11



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking Southwest from Key Observation Point 9**

Exhibit 7-12



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking Southeast from Key Observation Point 10**

Exhibit 7-13



Source: Google Earth Pro 2008

**Simulated View of Facility Development Zone –
View Looking Southwest from Key Observation Point 11**

Exhibit 7-14

For each of the KOPs shown above, the facility development zone is outlined in yellow. The facility development zone is the location where major facility development within the Park is proposed to occur. As shown in the KOPs, the facility development zone in the Park can be viewed from off-site locations, which primarily include rural residences located at a higher elevation than the project area. However, views from these KOPs are from a minimum 0.25-mile distance and include varying, rolling topography. The exhibits simulating the potential visibility from the KOPs show a digital representation of the surrounding topography, but do not show the surrounding vegetation (e.g., trees) or buildings in three-dimensional images. Intervening vegetation plays an important role in screening potential views of the facility development zone from surrounding homes.

As mentioned previously, only one residence is visible from the Spears Ranch portion of the Park because of the heavy vegetation within and surrounding the project area, including near the homes in some cases. Line of sight to a home from within the facility development zone is a good indicator of visibility from the home back to the zone. The 11 KOPs show the facility development zone in the Park as being potentially visible, because the depiction only takes into account the topography. However, vegetation adjacent to a KOP, between a KOP and the project area, and within the project area would partially or completely obscure views of the project area. Several rural residences have views of the existing facilities within the Didion Ranch portion of the Park including the existing parking area. However, these views are also largely obscured by vegetation and diminished by the view distance.

Construction activities occurring along Garden Bar Road would be visible at numerous locations along Garden Bar Road, including from residences along the road. Therefore, specific KOPs were not identified. Improvements to Garden Bar Road would also require removal of trees adjacent to the roadway. Potential impacts to the overall visual character along Garden Bar Road are analyzed in Impact 7-3 below.

7.2 REGULATORY SETTING

7.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws related to visual resources are applicable to the proposed project.

7.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

CALIFORNIA SCENIC HIGHWAY PROGRAM

California's Scenic Highway Program was created by the California Legislature in 1963 and is managed by the California Department of Transportation. The goal of this program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to highways. A highway may be designated "scenic" depending on the amount of the natural landscape that travelers can see, the scenic quality of the landscape, and the extent to which development intrudes on travelers' enjoyment of the view.

There are no state-designated highways within the viewshed of the project area. State Route 49, which is located approximately 20 miles northeast of the project area, has been deemed eligible for listing as a scenic highway but has not been officially designated (Caltrans 2007). No portions of the project area are visible from State Route 49.

7.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

PLACER COUNTY GENERAL PLAN

The following are the relevant goals and policies identified by the *Placer County General Plan* (General Plan) (Placer County 1994) for visual resources, including scenic routes.

GOAL 1.K: To protect the visual and scenic resources of Placer County as important quality-of-life amenities for County residents and a principal asset in the promotion of recreation and tourism.

- ▶ **Policy 1.K.1.** The County shall require that new development in scenic areas (e.g., river canyons, lake watersheds, scenic highway corridors, ridgelines and steep slopes) is planned and designed in a manner which employs design, construction, and maintenance techniques that:
 - avoids locating structures along ridgelines and steep slopes;
 - incorporates design and screening measures to minimize the visibility of structures and graded areas; and
 - maintains the character and visual quality of the area.
- ▶ **Policy 1.K.5.** The County shall require that new roads, parking, and utilities be designed to minimize visual impacts. Unless limited by geological or engineering constraints, utilities should be installed underground and roadways and parking areas should be designed to fit the natural terrain.
- ▶ **Policy 1.L.3.** The County shall protect and enhance scenic corridors through such means as design review, sign control, undergrounding utilities, scenic setbacks, density limitations, planned unit developments, grading and tree removal standards, open space easements, and land conservation contracts.
- ▶ **Policy 1.L.5.** The County shall encourage the development of trails, picnicking, observation points, parks, and roadside rests along scenic highways.
- ▶ **Policy 1.L.7.** The County shall encourage the use of bicycles as an alternative mode of travel for recreational purposes in scenic corridors.

7.3 IMPACTS

7.3.1 ANALYSIS METHODOLOGY

This visual impact analysis is based on a field survey, review of aerial photographs, and a review of existing KOPs of the area (Exhibit 7-2) in relation to the surrounding vicinity. The elements of the proposed project were compared to existing views of the area to determine how the project area would change from existing conditions. A site reconnaissance of the study area was conducted on July 28, 2007.

7.3.2 THRESHOLDS OF SIGNIFICANCE

CEQA THRESHOLDS

Based on the Placer County CEQA checklist and the State CEQA Guidelines, the proposed project would result in a potentially significant impact on visual resources if it would:

- ▶ have a substantial adverse effect on a scenic vista;
- ▶ substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway;
- ▶ substantially degrade the existing visual character or quality of the site and its surroundings; or
- ▶ create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

CRITERIA USED IN VISUAL ASSESSMENT

The aesthetic quality of an area is determined through an assessment of the variety and contrasts of the area's visual features, the character of those features, and the scope and scale of the scene. The aesthetic quality of an area depends on the relationships between the area's features and their importance in the overall view. Visual images dominate observers' impressions of the aesthetic qualities of an area. Therefore, evaluating scenic resources requires a method that objectively characterizes visual features, assesses their quality in relation to the visual character of the surrounding area, and identifies their importance to the individuals viewing them. This process is derived from established federal procedures for visual assessment and is commonly used for a variety of project types.

Both natural and created features in a landscape contribute to the perceived visual quality of that landscape. Landscape characteristics influencing visual quality include geologic, hydrologic, botanical, wildlife, recreation, and urban features. A commonly used set of criteria for defining and evaluating visual quality includes the concepts of vividness, intactness, and unity. None of these is itself equivalent to visual quality; all three must be high to indicate high quality. These terms are defined as follows (FHWA 1983):

- ▶ "Vividness" is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns.
- ▶ "Intactness" is the visual integrity of the natural and human-built landscape and its freedom from encroaching elements.
- ▶ "Unity" is the visual coherence and compositional harmony of the landscape considered as a whole.

The quality of views of areas that could be affected by the proposed project is evaluated based on the relative degree of vividness, intactness, and unity apparent in the views, and also on viewer sensitivity. Viewer sensitivity is a function of several factors:

- ▶ visibility of the landscape,
- ▶ proximity of viewers to the visual resources,
- ▶ frequency and duration of views,
- ▶ number of viewers,
- ▶ types of individuals and groups of viewers, and
- ▶ viewers' expectations.

The sensitivity of a view of the landscape is also determined by the extent of the public's concern for a particular view. Areas of high visual sensitivity are highly visible to the general public. Scenic highways, tourist routes, and recreation areas are considered more visually sensitive than more urbanized locations. A determination finding that a potential visual impact has significance would be based on a change in visual character as determined by the obstruction of a public view, creation of an aesthetically offensive public view, or adverse changes to objects having aesthetic significance. The distance of a view from landscape elements plays an important role in the determination of an area's visual quality. Landscape elements are considered higher or lower in visual importance based on their position relative to the viewer. Generally, the closer a resource is to the viewer, the more dominant, and therefore visually important, it is to the viewer.

ISSUES NOT ANALYZED FURTHER

The proposed project would have no impact associated with the following issues, and these issues will not be analyzed further in this chapter:

- ▶ **Scenic vistas or scenic highways:** There are no scenic vistas or scenic highways in the project area that could be affected by the proposed project. Therefore, these issues are not discussed further.

7.3.3 IMPACT ANALYSIS

IMPACT 7-1	Visual Resources—Short-Term Changes in Visual Resources Associated with Project Construction. <i>Construction activity, construction equipment, and areas of vegetation removal would be temporarily visible during and immediately after construction of proposed project facilities (e.g., bridges, trails, viewing boardwalk, roads, parking areas). However, these changes in views would be minimal and not visible from most off-site locations. In addition, all views of construction activities would be temporary.</i>
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Significance *Less than Significant*

Mitigation *None Warranted*
Proposed

Residual *Less than Significant*
Significance

Construction of the proposed project facilities would result in minor changes to the visual character of the project area and the Didion Ranch portion of the Park as a result of vegetation removal and other construction activities. Specifically, construction activities occurring along and associated with improving Garden Bar Road would place

construction vehicles and workers within visual range of residences located near Garden Bar Road. Construction activities would also be visible to travelers along Garden Bar Road.

Residences and travelers along Garden Bar Road would have unobstructed views of construction activities occurring along Garden Bar Road because of their close proximity (within 200 feet). Although views of construction activities are not a common occurrence along Garden Bar Road, the number of viewers would be relatively small, because of the remote location. In addition, construction activities would not occur along the entire stretch of Garden Bar Road at the same time, but would occur at a specific location for a temporary time period then move to another specific location and time period. Construction activities would most likely exceed viewers' expectations for Garden Bar Road; however, construction activities would result only in a short-term change of views along Garden Bar Road. Therefore, construction impacts associated with improving Garden Bar Road would be less than significant.

Specific to the Park, crew members and their vehicles would be present on-site along with a Sweco trail dozer and/or other construction equipment during project construction. Some vegetation would be cleared during construction of trail and road alignments. The proposed trail and road alignments would bypass as many trees as possible, particularly native oaks greater than 6 inches in diameter at breast height (dbh). All cut vegetation would be chipped or lopped and broadcast to the area surrounding the proposed trail and road alignments.

Similar to the construction of trails and roads, construction of site-specific structures (e.g., picnic areas, bridges, viewing boardwalk, information kiosk, restrooms), parking areas, and improvements to the access road from Garden Bar Road would place construction crew members and equipment in the project area. Construction crew members and equipment would also be present near the existing parking area within the Didion Ranch portion of the Park. Some vegetation would be cleared during construction of structures and parking areas. However, these facilities and improvements would avoid trees when possible, particularly native oaks greater than 6 inches dbh. Any cut vegetation would be chipped and broadcast to the area surrounding the structures and parking areas.

Views of construction activities occurring within the Spears Ranch portion of the Park would be partially or completely obscured from rural residences near the project area (within 0.5-mile) because of dense vegetation surrounding and within the project area. Although occupants of nearby residences, as shown in KOPs exhibits above (see Section 7.1.2), appear to have clear views of the project area, the topography, trees, and dense foliage surrounding these residences and located between the residences and the project area obstruct views towards the project area. However, one KOP (refer to Exhibit 7-2 and KOP 2 in Exhibit 7-3) would have a clear view of the facility development zone within the Park and several residences would have views of expansion of the Didion Ranch parking area and associated helistop relocation. Although there would be some views of construction activities in the Park, the number of viewers would be relatively small because of the remote location and dense vegetation. In addition, construction activities would not occur at one location and at the same time but would occur at different locations for a temporary time period then move to a different location for another time period. Construction activities would alter the short-term views of the project area. However, because visibility of construction activity is a temporary impact and the views are at least partially obscured by topography and vegetation, this is considered to be less than significant.

IMPACT 7-2 **Visual Resources—Long-Term Changes in Visual Resources Associated within the Proposed Regional Park.** *The proposed project would introduce new physical elements into the landscape; however, the proposed facilities of the Park (e.g., bridges, trails, viewing boardwalk, restroom, picnic areas, expanded parking area) would be in a remote location, avoiding visually obtrusive effects.*

Significance *Less than Significant*

Mitigation *None Warranted*
Proposed

Residual *Less than Significant*
Significance

The Park is located in a remote area and visibility from off-site locations is limited because of intervening, dense vegetation and topography. As shown in KOPs (see Section 7.1.2 above), the project area may be viewed from off-site locations that primarily include rural residences located at a higher elevation than the proposed facilities. However, views from these KOPs include rolling topography, and do not show the existing vegetation. Several residences have views of the Didion Ranch parking area; however, a parking area exists in this area and expansion of this area would be small (i.e., 0.35 acre) and would be consistent with existing views. Relocation of the existing helistop on the Didion Ranch portion of the Park to adjacent to the parking area would cause a change in views; however, it would be consistent with existing views of the parking area. The area disturbed by construction would be revegetated following construction and views of the Didion Ranch facilities would be partially screened by vegetation and/or distance. In addition, only one residence has a line of sight into the facility development zone of the Park, because of the heavy vegetation within and surrounding the project area. Therefore, the proposed Park would not be prominently visible from off-site locations and would not cause a substantial change in long-range views from the surrounding area. Park facilities would not be located near any scenic rock outcrops and would incorporate natural colors and materials such as stone, rock, and wood, consistent with the natural character of the project area.

The one KOP (i.e., residence) with an unobstructed view of the Spears Ranch portion of the Park (refer to KOP 2 in Section 7.1.2) has a distant view of the existing ranch house because an open field is located between this KOP and the Park and the intervening topography descends. This building and several other existing structures in the project area would be retained and converted to Park facilities (e.g., caretaker's residence) and several new structures (i.e., bunkhouses) would be constructed in this area. The use of existing buildings on-site and construction of several new buildings would not significantly change the overall views from any of the KOPs. Other facilities associated with the Park (e.g., bridges, information kiosk, restrooms, trails) would not be easily visible from KOPs primarily because of distance and intervening vegetation. Specifically, the viewing boardwalk, caretaker residence, Didion Ranch parking area and helistop, information kiosk, and vehicle crossing located in the central portion of the project area (see Exhibit 3-3) would be the only structures or facilities visible to off-site KOPs, because these structures or facilities would be located in an open area of the Park. Structures constructed outside of the facility development zone including picnic pavilions and vault toilets would be placed in such a manner as to provide visual screening from neighboring homes.

Although facilities and structures associated with the project may be partially visible from several off-site locations, structures and facilities associated with the proposed project would be constructed of similar material types and of similar size as currently found in the project area and, therefore, would be similar-in-nature to the type of structures viewers expect to see in the project area. Because of the limited visibility of the project area (i.e., limited viewers), far distance to viewers, and views of structures and facilities would be similar to existing views of structures (i.e., expectations) in the project area, implementation of the project would have a less-than-significant impact on long-term views of the project area.

IMPACT **Visual Resources—Long-Term Changes in Visual Resources Associated with the Improvements to**
7-3 **Garden Bar Road.** *The proposed project would widen Garden Bar Road which would require removal of existing trees. The removal of trees would result in a substantial physical change to the visual environment of the road and would occur within close proximity of viewers, including adjacent residents.*

Significance *Significant*

Mitigation Proposed *Mitigation Measure 7-1: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts; and Mitigation Measure 12-8 in Chapter 12.0, "Biological Resources": Protect Oak Woodland Habitat*

Residual Significance *Significant and Unavoidable*

Widening of Garden Bar Road would change the visual character of the project area as a result of vegetation removal from construction activities. Specifically, widening associated with improving Garden Bar Road for access to the Park would require removal of numerous existing trees. The widening is necessary to provide room for safe curves, appropriate lines of sight for drivers, and space for vehicles traveling in opposite directions to pass each other. Although construction activities would avoid native trees larger than 6 inches dbh to the extent possible and the roadway would remain a two-lane road, a large number of trees would need to be removed (between 100 and 250, depending on the final roadway design). The precise number of trees to be removed is not yet known, because detailed engineering design would be required before a specific inventory of affected trees could be conducted. The majority of potential oak tree removal would be within the Spears Ranch portion of the Park and the densely-vegetated area within 0.5-mile of the Spears entrance along Garden Bar Road. Although Garden Bar Road is not a scenic highway or scenic vista, existing views from adjacent residences and travelers along Garden Bar Road would change. The views of trees lining Garden Bar Road are important in creating the aesthetic character of the project area for travelers on the road and local residents. These views could be changed indefinitely. Therefore, changes to the scenic character of Garden Bar Road would be a significant impact. Implementation of Mitigation Measure 7-1 and 12-8 would reduce this impact, but not to a less-than-significant level. This impact would remain significant and unavoidable.

IMPACT 7-4 **Visual Resources—Increased Light and Glare.** *The proposed Park would include some security lighting and lighting at the caretaker's residence. However, the lighting in the project area would not change substantially compared to existing lighting.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

The proposed Park would include lighting at buildings, including the caretaker's residence, restrooms, bunkhouses, and existing ranch house. Security lighting would also be included at the parking area located at the western-most portion of the Park (see Exhibit 3-3, "Project Description"). No other lighting would be included as part of the project. Security lighting and lighting used at the caretaker's residence is anticipated to be similar to lighting that has been used by the previous resident at the existing ranch house. Similarly, lighting provided as part of the project is anticipated to be similar to the brightness and scale of lighting currently used at the rural residences in the surrounding area. The County would use lighting that is low wattage and directed downward to minimize excess glare or skyglow. Occasional campfires may also create localized nighttime lighting; however, the lighting would be minimal and would be limited to the camp area within the facility development zone.

Recognizing the small amount of additional lighting and the glare-minimizing design criteria, the potential for nighttime glare and skyglow in the project area would be less than significant.

7.4 MITIGATION MEASURES

Mitigation Measure 7-1 applies to Impact 7-3

Mitigation Measure 7-1: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts.

To address the potential degradation of visual quality resulting from tree removal, the County shall revegetate and restore all disturbed areas. Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate initial growth. To the extent feasible, restoration of trees and shrubs shall reduce visual impacts for affected properties. Revegetation of disturbed areas shall promote restoration of vegetation over time that is as consistent as feasible with the surrounding natural landscape, recognizing constraints of the right-of-way and available space. The County shall prepare a restoration and revegetation plan that implements actions intended to mitigate the impacts on trees and vegetation removed along Garden Bar Road. The plan will be prepared in conjunction with detailed roadway engineering design, so that precise areas of disturbance are known and the revegetation process can be coordinated with roadway implementation. Portions of the revegetation plan may be implemented on adjacent property outside the County road right-of-way by agreements with willing property owners.

Implementation of Mitigation Measures 7-1 and 12-8 would reduce the impact related to visual resources, but not to a less-than-significant level. This impact would remain significant and unavoidable.

8.0 TRANSPORTATION AND CIRCULATION

This chapter describes existing transportation facilities in the project area and vicinity. It describes the existing roadway network, as well as other current circulation elements (bikeways, bridges, and parking conditions), and discusses the transportation impacts of the proposed project. There are no transit, light rail, or airport facilities in the project vicinity; therefore, these types of facilities will not be discussed further in this chapter. Additional information on transportation and circulation in the project vicinity is provided in Appendices B and C.

8.1 ENVIRONMENTAL SETTING

8.1.1 ROADWAYS

Public access to the Park is currently provided by Mears Drive, a County road, via Mt. Pleasant Road and Mt. Vernon Road. Restricted access to the Park is provided via Garden Bar Road. The existing condition of these roadways is described as follows and illustrated in Exhibit 8-1.

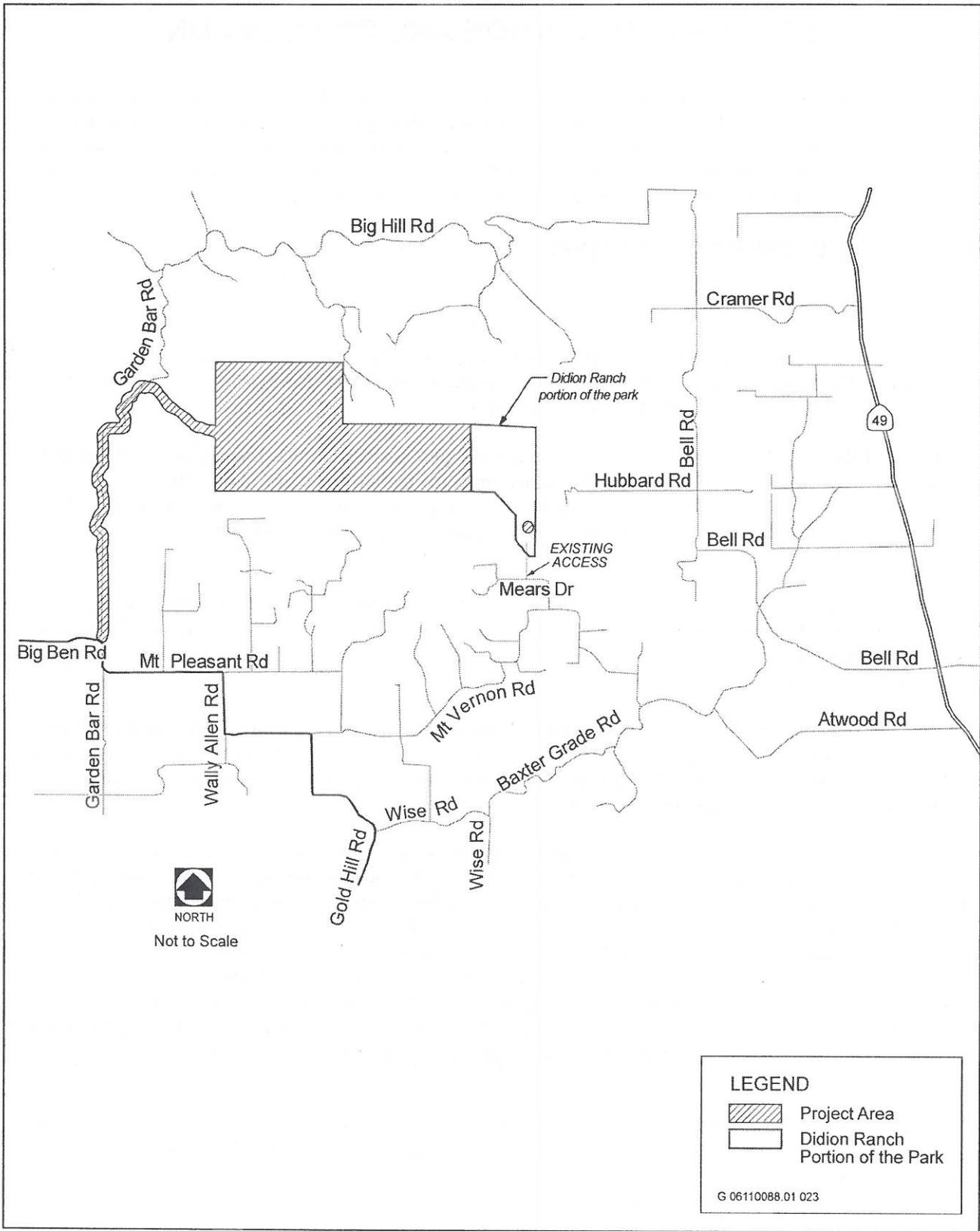
Mt. Pleasant Road is a local east-west road that extends for approximately 3 miles linking Big Ben Road and Mt. Vernon Road. Mt. Pleasant Road follows the rolling terrain of the foothills west of Auburn. The road itself is 20–22 feet wide with gravel shoulders of varying width. The County’s ultimate buildout design standard for Mt. Pleasant Road calls for 32 feet of pavement (traveled way and shoulders) within a 60-foot right-of-way with a design speed of 35 mph.

Mt. Vernon Road is a rural collector road that extends east from an intersection with Wise Road for about 7 miles into the City of Auburn. The County’s ultimate buildout design standard for Mt. Vernon Road from Wise Road to Joerger Road is for 32 feet of pavement (traveled way and shoulders) within a 60-foot right-of-way with a design speed of 35 mph.

Mears Drive is a local street that connects the Didion Ranch portion of the Park with Mt. Vernon Road. This two-lane road features 20 feet of pavement and limited shoulders. The County’s ultimate buildout design standard for Mears Drive north of Mt. Vernon Road is for 32 feet of pavement (traveled way and shoulders) within a 60-foot right-of-way with a design speed of 30 mph.

Garden Bar Road is a local road that extends north from an intersection with Fruitvale Road across Mt. Pleasant Road along the west side of the Park and terminates at a private gated road approximately 1.5 miles north of the Park. The northern portion of Garden Bar Road (i.e., Garden Bar Road North) extends from the intersection with Mt. Pleasant Road to the northern terminus. The southern portion of Garden Bar Road (i.e., Garden Bar Road South) extends from the intersection with Fruitvale Road to the intersection with Mt. Pleasant Road. The alignment and width of Garden Bar Road vary greatly along its length. In the area of the proposed project the road varies from approximately 15 to 20 feet in width. Shoulders are most often nonexistent and horizontal curves with radii as short as 80 feet exist at various locations. The County’s ultimate buildout design standard for Garden Bar Road is for 32 feet of pavement (traveled way and shoulders) within a 60-foot right-of-way with a design speed of 35 mph.

The existing daily traffic volumes for roadways in the project vicinity are presented in Table 8-1, including the applicable levels of service (LOS). (See Section 8.2.1, “Federal Plans, Policies, Regulations, and Laws,” below for LOS definitions.)



Source: Data provided by Kd Anderson & Associates in 2008

Roadways in the Project Vicinity

Exhibit 8-1

Road	From	To	Class	Pavement	Weekday		Weekend	
					Daily Volume	Level of Service	Daily Volume	Level of Service
Garden Bar Road (N)	Mt. Pleasant Road	Park Entrance	Mountainous Rural	<18 feet	285	B	260	A
Mt. Pleasant Road	Big Bend Road	Garden Bar Road (N)	Rolling Rural	>18 feet	375	A	310	A
Mt. Pleasant Road	Garden Bar Road (S)	Wally Allen Road	Rolling Rural	>18 feet	910	B	710	B
Garden Bar Road (S)	Mt. Pleasant Road	Wise Road	Rolling Rural	>18 feet	885	B	715	B
Mears Drive	Mt. Vernon Road	Mears Place	Rolling Rural	>18 feet	377	A	314	A

Source: Data provided by Kd Anderson & Associates in 2008

8.1.2 INTERSECTIONS

The quality of traffic flow is often governed by the operation of key intersections. The intersections in the project vicinity described below were evaluated in consultation with County staff. Existing LOS for project-area intersections are shown in Table 8-2.

Intersection	Control	Weekday				Traffic Signal Warrants Met?	
		A.M. Peak Hour (7:00 to 9:00 a.m.)		P.M. Peak Hour (4:00 to 6:00 p.m.)		a.m. peak hour	p.m. peak hour
		LOS	Average Delay (seconds per vehicle)	LOS	Average Delay (seconds per vehicle)		
Mt. Pleasant Road/ Garden Bar Road (North) EB left turn SB left+right turn	SB Stop	A A	7.3 8.7	A A	7.3 8.8	No	No
Mt. Pleasant Road/ Garden Bar Road (South) EB left turn NB left+right turn	NB Stop	A A	7.4 8.9	A A	7.3 8.7	No	No

Notes:
EB = eastbound; NB = northbound; SB = southbound; LOS = level of service
Source: Data provided by Kd Anderson & Associates in 2008

GARDEN BAR ROAD (NORTH)/MT. PLEASANT ROAD

The Garden Bar Road (North)/Mt. Pleasant Road intersection is a “tee” intersection controlled by a stop sign on the southbound Garden Bar Road approach. The intersection is located on a horizontal curve along Mt. Pleasant Road. There are no turn lanes on Mt. Pleasant Road at the northern Garden Bar Road intersection.

GARDEN BAR ROAD (SOUTH)/MT. PLEASANT ROAD

The Garden Bar Road (South)/Mt. Pleasant Road intersection is a “tee” intersection controlled by a stop sign on the northbound Garden Bar Road approach. The intersection is located on a horizontal curve along Mt. Pleasant Road. There are no turn lanes on Mt. Pleasant Road at the southern Garden Bar Road intersection.

8.1.3 PEDESTRIAN/BICYCLE FACILITIES

Dedicated pedestrian and bicycle facilities are limited in this area of the county. *The Placer County Regional Bikeway Plan* (2002) notes the location of existing and planned bicycle facilities in the incorporated and unincorporated areas of the county. There are no designated facilities in the immediate area of the proposed project.

The Didion Ranch portion of the Park provides natural-surface multiple-use trails that are used by equestrians, bikers, and hikers. However, use of the Didion Ranch trails typically requires trail users to haul their horses or bicycles to the Park by car or truck.

8.2 REGULATORY SETTING

8.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

LEVELS OF SERVICE

As defined by the Transportation Research Board, LOS describes the operating conditions of a roadway based on such factors as speed, travel time, maneuverability, delay, and safety. The LOS for a given facility is designated with a letter between A and F, with A representing the best operating conditions and F representing the worst. These letter designations are described in more detail in Table 8-3.

LOS	Description
A	Free Flow: Almost no platoons of three or more cars. Driver delayed no more than 30% by slow-moving vehicles.
B	Free Flow: Some platoons form. Driver delayed no more than 45% by slow-moving vehicles.
C	Stable Flow: Noticeable increase in platoon formation and size. Drivers delayed no more than 60% by slow-moving vehicles.
D	Approaching Unstable Flow: Heavy platooning. Passing becomes more difficult. Drivers delayed no more than 75% by slow-moving vehicles.
E	Unstable Flow: Intense platooning. Passing is virtually impossible. Drivers delayed more than 75% by slow-moving vehicles.
F	Forced Flow: Queues form behind breakdown points.

Note: LOS = level of service
Source: Transportation Research Board 2000

8.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

No state plans, policies, regulations, or laws related to transportation and circulation are applicable to the proposed project.

8.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

PLACER COUNTY GENERAL PLAN

The following are the relevant policies identified by the *Placer County General Plan* (Placer County 1994) for transportation and circulation.

- ▶ **Policy 3.A.7.** [Placer] County shall develop and manage its roadway system to maintain the following minimum LOS.
 - LOS “C” on rural roadways, except within one-half mile of state highways where the standard shall be LOS “D.”
 - LOS “C” on urban/suburban roadways except within one-half mile of state highways where the standard shall be LOS “D.”
- ▶ **Policy 3.A.10.** The County shall strive to meet the level of service standards through a balanced transportation system that provides alternatives to the automobile.
- ▶ **Policy 3.D.1.** The County shall promote the development of a comprehensive and safe system of recreational and commuter bicycle routes that provides connections between the County’s major employment and housing areas and between its existing and planned bikeways.
- ▶ **Policy 3.D.2.** The County shall work with neighboring jurisdictions to coordinate planning and development of the County’s bikeways and multipurpose trails with those of neighboring jurisdictions.
- ▶ **Policy 3.D.3.** The County shall pursue all available sources of funding for the development and improvement of trails for nonmotorized transportation (bikeways, pedestrian, and equestrian).
- ▶ **Policy 3.D.4.** The County shall promote nonmotorized travel (bikeways, pedestrian, and equestrian) through appropriate facilities, programs, and information.
- ▶ **Policy 3.D.6.** The County shall support the development of parking areas near access to hiking and equestrian trails.

8.3 IMPACTS

8.3.1 ANALYSIS METHODOLOGY

Impacts on transportation and circulation that would result from the proposed project were identified by comparing existing service capacity and facilities against anticipated future demand associated with implementation of the proposed project. The *Traffic Safety Study for Garden Bar Road* (Placer County 2007) (Appendix C) was also prepared for the project to analyze traffic safety issues related to Garden Bar Road.

8.3.2 THRESHOLDS OF SIGNIFICANCE

Based on the Placer County CEQA checklist and the State CEQA Guidelines, the proposed project would result in a potentially significant impact on traffic or circulation if it would:

- ▶ cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system;
- ▶ result in inadequate emergency access;
- ▶ result in insufficient parking capacity on-site or off-site;
- ▶ cause a substantial increase in hazards attributable to a design feature;
- ▶ exceed, individually or cumulatively, a LOS standard established by the county congestion management agency for designated roadways; or
- ▶ conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

As mentioned above, there are no transit, light rail, or airport facilities in the project vicinity; therefore, the proposed Park would not have an impact on any of these types of facilities. The proposed Park would not conflict with any policies supporting alternative transportation. Because the proposed project would have no impact on these resources, they are not discussed further in this chapter.

8.3.3 IMPACT ANALYSIS

IMPACT 8-1 **Transportation and Circulation—Temporary Increase in Traffic during Construction.** *During construction of the proposed Park, local roadways would experience an increase in traffic from daily commutes by construction workers and delivery trucks. However, this increase in traffic would be temporary and is not expected to be substantial in relation to the existing traffic load and capacity of area roadways.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

During construction of the proposed project, there would be a temporary increase in construction-related traffic from delivery trucks and construction workers traveling to and from the project area. The number of workers would vary over the life of the construction activity. The maximum number of workers who would be commuting to the project area at any given time would be four 15-person California Conservation Corps crews and 10–15 other workers/delivery drivers. The crews would commute in four vans, one per 15-person crew. Therefore, it is expected that the maximum number of vehicle trips generated in any one day would be four vans and 10–15 other worker/delivery vehicles.

This would be in addition to ongoing daily trips generated by County maintenance staff and members of the public visiting the Didion Ranch portion of the Park. Carpooling among construction workers would be encouraged by the County to reduce the number of vehicle trips to the extent possible. Construction of the trail system and associated recreational facilities is expected to generate a total of 400 delivery trucks over the duration of project construction (i.e., several years) to haul needed materials (e.g., concrete and lumber) to and from the project area. For Phase 1 of construction, truck traffic is expected to be approximately 10–20% of the total number of truck trips (i.e., 40–80 truck trips).

Because the local roads providing access to the Park are currently operating at LOS C or better, this increase in traffic would constitute a temporary and very small increase in traffic and would not be substantial in relation to existing traffic load and capacity of Mt. Vernon Road, Mears Drive, Mt. Pleasant Road, or Garden Bar Road. In addition, this increase in traffic would be intermittent with the active periods of construction. Therefore, this impact would be less than significant.

IMPACT 8-2 **Transportation and Circulation—Increase in Traffic Impacts Associated with Use of Garden Bar Road.** *Additional automobiles and trucks with equestrian trailers entering and exiting the proposed Park entrance via Garden Bar Road could cause an increase in traffic impacts in the project area. Garden Bar Road would be improved with the project and the Park entrance would be designed for safe ingress and egress of trucks and trailers.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Planned improvements to Garden Bar Road are presented in *Traffic Safety Study for Garden Bar Road* (Placer County 2007) (Appendix C). The improvements are proposed in 3 phases. In Phase 1, the access road between Garden Bar Road and the Park would be improved. Daily public automobile access would not be allowed into this Park entrance in Phase 1; County maintenance access and potential classroom-sized events with restricted bus and automobile travel to the Park would be allowed by appointment. Prior to opening the Park to general public vehicle access, the improvements in Phase 2 are intended to provide a minimum 18-foot roadway width, where feasible. In areas along Garden Bar Road and the access road from Garden Bar Road to the Park entrance where the County determines that status trees, significant rock outcroppings, and other valuable natural features within the proposed widening corridor should be preserved or where adequate road right-of-way does not currently exist and is not obtainable through market value based willing seller negotiations, alternatives such as turnouts, striping, and/or signage may be considered and approved in lieu of full width widening for those discreet areas. Public automobile and bus access would be allowed into the Spears Ranch portion of the Park via Garden Bar Road with Phase 2 improvements; however, horse trailer access would not be allowed. Prior to allowance of general access by horse trailers, Phase 3 improvements would provide a 20-foot roadway width and parking suitable for horse trailers. Ultimately, in Phase 3 horizontal and vertical curve radii would be designed to 35 mph and 25 mph standards. While recognizing that the 25-mph design does not meet the County’s requirements for a rural secondary road, the safety study notes:

Due to the nature of the existing roadway the standard for a rural secondary roadway is not considered appropriate for this setting and would result in unnecessary widening of the existing road and change in character of the roadway given the existing and future use levels. The County Fire Department’s requirement is an 18 foot wide all-weather surface and is considered appropriate for Phase 3.

A traffic safety hazard could result if portions of a street are designed to substantially lower speeds than others and motorists are surprised to encounter reduced speed conditions. However, in this case, warning signage would be established and the results of the improvements proposed in the safety study would be consistent with the expectations of motorists on Garden Bar Road north of Mt. Pleasant Road.

Although the proposed improvements would not bring all of Garden Bar Road north of Mt. Pleasant Road up to adopted County standards for minimum horizontal and vertical curves, substantive and strategic improvements would be made to enhance traffic safety. Proper signage would also improve safety.

In addition to proposed improvements along Garden Bar Road, the proposed entrance to the Park would be realigned and may be converted to a three-way stop. These improvements would improve sight distance at this location. Signage in both directions noting the presence of the Park entrance would also improve driver awareness and safety of entering and exiting the Park. The need for a three-way stop at the entrance would be reviewed by the County Department of Public Works after the Park is opened.

Trucks with equestrian trailers using Garden Bar Road to travel to and from the Park could increase impacts to traffic in the project area after they are allowed to access the Park with completion of Phase 3. However, additional improvements would be made to Garden Bar Road under Phase 3 of the project to allow safe access for trucks and trailers. Improvements made to the Park entrance would also be designed for safe ingress and egress of these trucks and trailers. Because Garden Bar Road and the Park entrance would be improved before trucks and trailers would be allowed to access the Park from Garden Bar Road, this impact would be less than significant.

IMPACT 8-3 **Transportation and Circulation—Increase in Traffic with Operation of the Park.** *The proposed Park would add approximately 255 one-way vehicle trips per day (weekday) to 460 one-way vehicle trips per day (weekend) during peak visitation periods, with 25–30 of those one-way trips expected during weekday peak commute hours. This traffic increase would not result in conditions in excess of adopted standards at intersections or on individual roadway segments.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

The impacts associated with the proposed project have been evaluated based on the amount of traffic generated and added to access roads to the project vicinity. Improvements to Garden Bar Road, the Park, Park entrance, and parking areas, as outlined in Exhibit 3-1 and Appendices B and C, would be completed prior to allowance of public access associated with each improvement. At full project buildout (i.e., Phases 1-3) the project could ultimately add approximately 255 one-way vehicle trips per day during the week and 460 one-way vehicle trips per day on weekends to roadways in the project vicinity during peak seasons and favorable weather conditions (See Table 8-4). This would equate to 128 round trips per day on weekdays and 230 round trips per day on weekends visiting the Park. As defined in this EIR, each vehicle visiting the Park makes two trips per visit, one ingress trip and one egress trip. Of the 255 weekday vehicle trips, the project could add approximately 28 one-way trips in the a.m. peak commute hours and 27 one-way trips in the p.m. peak commute hours. During the highest hour on a weekend the project could add approximately 80 trips to area roadways.

Table 8-4 Trip Generation Forecast					
Land Use	Trip Generation				
	Daily Total	Weekday		Weekend	
		a.m.	p.m.	Daily Total	Peak Hour
Hidden Falls Regional Park	255	28	27	460	80
Source: Data provided by Kd Anderson & Associates in 2008					

The Park would be used primarily by residents of western Placer County living in an area bounded by State Route (SR) 49 on the east, SR 65 on the west, and the Rocklin–Roseville urban area to the south. The assignment of project trips to roadways in the project vicinity would reflect the location of planned parking facilities and the travel time between those facilities and destinations of Park users. Once the Garden Bar Road improvements and the Didion Ranch parking area expansion are completed, the total number of daily trips is expected to be split between Garden Bar Road and Mears Drive. The exact percentage of the total that would be observed on each roadway is not known; however, to estimate a worst-case evaluation of project impacts on Garden Bar Road, it is assumed that 100% of the project trips would be on Garden Bar Road. Initial use of the Spears Ranch portion of the Park may occur before Garden Bar Road access is developed, and during that time, fewer trips to the Park are expected and 100% of the trips would be on Mears Drive.

Table 8-5 identifies the peak-hour LOS at intersections in the project vicinity under existing and existing plus project conditions. As shown, the addition of project-related traffic would not result in conditions in excess of adopted standards. All local roadways would continue to operate at LOS A or B.

Table 8-5 Existing plus Project Peak Hourly Intersection Levels of Service											
Intersection	Control	Weekday								Traffic Signal Warrants Met?	
		A.M. Peak Hour (7:00 to 9:00 a.m.)				P.M. Peak Hour (4:00 to 6:00 p.m.)					
		Existing		Existing Plus Project		Existing		Existing Plus Project		A.M. Peak Hour	P.M. Peak Hour
		LOS	Average Delay (seconds per vehicle)	LOS	Average Delay (seconds per vehicle)	LOS	Average Delay (seconds per vehicle)	LOS	Average Delay (seconds per vehicle)		
Garden Bar Road/Access SB left turn WB left+right turn	WB Stop	-	-	-	-	-	-	-	-	No	No
Mt. Pleasant Road/ Garden Bar Road (N) EB left turn SB left+right turn	SB Stop	A	7.3	A	7.3	A	7.3	A	7.3	No	No
Mt. Pleasant Road/ Garden Bar Road (S) EB left turn NB left+right turn	NB Stop	A	7.4	A	7.4	A	7.3	A	7.3	No	No
Notes: EB = eastbound; NB = northbound; SB = southbound; WB = westbound; LOS = level of service; Source: Data provided by Kd Anderson & Associates in 2008											

Table 8-6 identifies the daily traffic volumes added to roads in the project vicinity if all traffic associated with the project uses Garden Bar Road. As indicated, total volumes do not result in LOS in excess of minimum County standards (i.e., LOS C). In addition, the County would pay a traffic impact fee to the Capital Improvement Program in accordance with Section 15.28.010 of the Placer County Code to further off-set any traffic impacts of the project on area roadways.

Because the traffic increase associated with operation of the Park would not result in conditions in excess of adopted standards at intersections or on individual roadway segments, this impact would be less than significant. It should also be noted that, while project-related traffic would not exceed adopted standards resulting in a significant impact, safety improvements to existing roadway segments in the project vicinity are proposed in phases as part of the proposed project (summarized in Table 3-1, in Chapter 3.0, "Project Description.")

Road	From	To	Class	Weekday				Weekend					
				Existing		Existing Plus Project		Existing		Existing Plus Project			
				Daily Volume	LOS	Daily Volume Project	Total	LOS	Daily Volume	LOS	Daily Volume Project	Total	LOS
Project Access via Garden Bar Road													
Garden Bar (N)	Mt. Pleasant Road	Park Entrance	Mountainous Rural	285	A	256	541	B	260	A	460	720	B
Mt. Pleasant	Big Bend Road	Garden Bar (N)	Mountainous Rural	375	A	82	457	B	310	A	148	458	B
Mt. Pleasant	Garden Bar Road (S)	Wally Allen	Mountainous Rural	910	B	90	1,000	C	710	B	162	872	B
Garden Bar (S)	Mt. Pleasant	Wise	Mountainous Rural	885	B	84	869	B	715	B	152	867	B
Interim Access via Mears Drive Only													
Mears Drive	Mears Place	Mt. Vernon	Mountainous Rolling	377	A	255	632	A	314	A	460	774	B
Source: Data provided by Kd Anderson & Associates in 2008													

IMPACT 8-4 **Transportation and Circulation—Increase in Traffic related to Reservation-based Events in the Park.** *Reservation-based events at the Park could cause an increase in automobile, truck, and bus traffic in addition to regular Park use. Use of Garden Bar Road by buses and/or delivery trucks could impact traffic flow along the road.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 8-1: Implement Traffic Control Measures During Park Reservation-based Events*

Residual Significance *Less than Significant*

The proposed project may include use of the Park for reservation-based events, such as training and race meets for cross-country runners, and educational field trips. Garden Bar Road would be improved as outlined in Table 3-1 and Appendix C prior to general public access to the Park by trucks and buses along Garden Bar Road. It is expected that reservation-based events requiring reservations (i.e., those involving less than 200 individuals) would generate an increase in vehicular traffic. Peak traffic would be immediately prior to the start and immediately following each event. Buses for reservation-based events could include a combination of school buses and charter buses. Although Garden Bar Road is a designated school bus route and improvements would be made to Garden Bar Road prior to allowing reservation-based events, use of Garden Bar road by charter buses or large trucks could impact traffic flow, if oncoming vehicles are present because of the limited turning radii of large vehicles negotiating the two-lane Garden Bar Road.

Large events (defined as those involving 200 or more individuals on-site at any given time and/or that exceed the parking capacity of the Park) would be required to obtain a Temporary Event Permit from the County and would undergo separate environmental review. Because of the variable nature of large events and event-specific impacts related to large events cannot be fully evaluated at this time and would require separate environmental review.

Therefore, because delivery truck or bus traffic related to reservation-based events could adversely affect traffic flow on Garden Bar Road, this impact would be potentially significant. Implementation of Mitigation Measure 8-1 would reduce this impact to a less-than-significant level.

IMPACT 8-5 **Transportation and Circulation—Adequacy of Parking for Park Visitors.** *There would be increased demand for parking at the Park and adequate parking would be provided to accommodate Park visitors. Large events that could result in an exceedance of parking capacity would be required to obtain a Temporary Event Permit and undergo separate environmental review.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Parking options being considered for the Park include a surfaced parking area to accommodate anticipated uses and a gravel equestrian parking area, a gravel overflow parking area, a parking area to accommodate the nature center, and a handicapped accessible parking area near the emergency access bridge. The western parking area proposed at the Spears Ranch entrance to the Park would include 50 parking spaces for cars, 12 unpaved parking spaces for trucks and trailers, and a gravel overflow area. Currently there are 50 parking spaces for cars and six parking spaces for trucks and equestrian trailers in the Didion Ranch portion of the Park. The parking area in the Didion Ranch portion of the Park would also be expanded as part of the proposed project to include up to 12 additional parking spaces for trucks and trailers. In addition, up to 25 additional paved car parking stalls may be developed adjacent to the existing Didion parking area. Therefore, it is expected that adequate parking would be provided to accommodate daily use of the Park.

Although, adequate parking would be provided for daily use, large events at the Park could exceed the capacity of the parking areas. Therefore, large events would be required to obtain a Temporary Event Permit and would undergo separate environmental review.

Because parking areas would be provided on both sides of the Park and the sizes of the parking areas are expected to be adequate to accommodate Park users, and events that could exceed the capacity of the parking areas would

be required to undergo separate environmental review that would require measures to ensure adequate parking, this impact would be less than significant.

IMPACT 8-6 **Transportation and Circulation—Potential Interference with Emergency Response Routes.** *The proposed trail system would have several access points to provide adequate access for emergency response vehicles and personnel within the Park.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

There are no known existing emergency response or evacuation routes in the project area. Emergency access within the Park would include 10 miles of existing roads that would be accessible to emergency vehicles and personnel within the Spears Ranch portion of the Park. In addition, an emergency access bridge across Coon Creek would provide emergency access to the northern portion of the Park. Garden Bar Road would be improved to the County Fire Department’s requirements before the Spears Ranch portion of the Park would be opened to public automobile and bus access (with the exception of limited, managed classroom-sized events and handicapped access conducted by appointment). The proposed project would also include a new helistop in the Spears Ranch portion of the Park and a relocated helistop in the Didion Ranch portion of the Park for emergency helicopter access. Because the proposed project would not interfere with any emergency response routes and would provide adequate emergency access on-site, this impact would be less than significant.

8.4 MITIGATION MEASURES

Mitigation Measure 8-1: Implement Traffic Control Measures During Park Reservation-based Events.

Mitigation Measure 8-1 applies to Impact 8-4.

Reservation-based events (involving less than 200 people on-site at a given time) would be regulated by the County Parks Division Reservation System. The Reservation System would include, but not be limited to, applicable restrictions on:

- ▶ event start and end times so as to minimize impacts to traffic along Garden Bar Road and not to exceed peak usage capacity or coincide with scheduled use of the road by school buses;
- ▶ regulation of number and types of vehicles so as not to exceed parking capacity (i.e., 50 paved stalls and 20 truck and trailer gravel stalls) in combination with daily use;
- ▶ the range of vehicle sizes allowed on Garden Bar Road during Phases 1 and 2 to be determined by the County Department of Public Works. Vehicles exceeding the maximum unrestricted size on Garden Bar Road shall be subject to County-imposed traffic controls;

The County may also regulate the days and/or times of reservation-based events to avoid peak days or times such as holiday weekends, as necessary.

Implementation of this mitigation measure would reduce Impact 8-4 to a less-than-significant level.

9.0 AIR QUALITY

This chapter includes a description of existing air quality, a summary of applicable regulations, and analyses of potential short-term and long-term impacts of the proposed project on air quality. The methods of analysis for short-term construction, long-term regional (operational), local mobile source, odor, and toxic air contaminant (TAC) emissions are consistent with the recommendations of the Placer County Air Pollution Control District (PCAPCD). Mitigation measures are recommended as necessary to reduce significant air quality impacts.

9.1 ENVIRONMENTAL SETTING

The project area is located in the western portion of Placer County, California, which is within the Sacramento Valley Air Basin (SVAB). The SVAB also comprises all of Butte, Colusa, Glenn, Sacramento, Shasta, Sutter, Tehama, Yolo, and Yuba Counties and the eastern portion of Solano County. Western Placer County is also part of the Sacramento Federal Ozone Nonattainment Area, which comprises Sacramento and Yolo Counties and parts of El Dorado, Solano, and Sutter Counties. PCAPCD works in conjunction with the air pollution control and air quality management districts of these contiguous jurisdictions to develop plans to bring the entire ozone nonattainment area into compliance.

Ambient concentrations of air pollutants are determined by the amount of emissions released by pollutant sources and the ability of the atmosphere to transport and dilute such emissions. Terrain, wind, atmospheric stability, and the presence of sunlight all affect transport and dilution. Therefore, existing air quality conditions in the project area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources, as discussed separately below.

9.1.1 TOPOGRAPHY, CLIMATE, AND METEOROLOGY

Land within the SVAB is relatively flat, bordered by the north Coast Range to the west and the northern Sierra Nevada to the east. Air flows into the SVAB through the Carquinez Strait, the only breach in the western mountain barrier, and moves across the Sacramento–San Joaquin Delta (Delta) from the San Francisco Bay Area.

The Mediterranean climate of the project area is characterized by hot, dry summers and cool, rainy winters. During the summer, daily temperatures range from 50 degrees Fahrenheit (°F) to more than 100°F. The inland location and surrounding mountains shelter the area from many of the ocean breezes that keep the coastal regions moderate in temperature.

Most precipitation in the SVAB results from air masses that move in from the Pacific Ocean, usually from the west or northwest during the winter months. More than half the total annual precipitation falls during the winter rainy season (November–February); the average winter temperature is a moderate 49°F. Periods of dense and persistent low-level fog, which are most prevalent between storms, are common during the winter months in the SVAB. The prevailing winds are moderate in speed and vary from moisture-laden breezes from the south to dry-land flows from the north.

The mountains surrounding the SVAB create a barrier to airflow, which leads to the entrapment of air pollutants when meteorological conditions are unfavorable for transport and dilution. Poor air movement occurs most frequently in fall and winter when high-pressure cells are present over the project area and meteorological conditions are stable. The lack of surface winds during these periods, combined with the reduced vertical flow caused by less surface heating, reduces the influx of air and results in the concentration of pollutants. Surface concentrations of air pollutant emissions are highest when these conditions occur in combination with agricultural burning activities or temperature inversions, which hamper dispersion by creating a ceiling over the area and trapping air pollutants near the ground.

May–October is ozone season in the SVAB, and is characterized by poor air movement in the mornings and the arrival of the Delta sea breeze from the southwest in the afternoons. In addition, longer daylight hours provide a plentiful amount of sunlight to fuel photochemical reactions between reactive organic gases (ROG) and oxides of nitrogen (NO_x), which in turn result in ozone formation. Typically, the Delta breeze transports air pollutants northward out of the SVAB; however, during approximately half of the time from July to September, a phenomenon known as the Schultz Eddy prevents this from occurring. The Schultz Eddy phenomenon causes the wind pattern to shift southward, blowing air pollutants back into the SVAB. This phenomenon exacerbates the concentration of air pollutant emissions in the air basin and contributes to violations of the ambient air quality standards.

The winds and unstable atmospheric conditions associated with the passage of winter storms result in periods of low air pollution and excellent visibility. Precipitation and fog tend to reduce or limit some pollutant concentrations. For instance, clouds and fog block sunlight, which is required to fuel photochemical reactions that form ozone. Because carbon monoxide (CO) is partially water soluble, precipitation and fog also tend to reduce concentrations of CO in the atmosphere. In addition, respirable particulate matter with an aerodynamic diameter of 10 micrometers or less (PM_{10}) can be washed from the atmosphere through wet deposition processes, such as rain, snow, and fog. However, between winter storms, high pressure and light winds contribute to low-level temperature inversions and stable atmospheric conditions, resulting in the concentration of air pollutants (e.g., CO, PM_{10}).

The local meteorology of the project area is represented by measurements recorded at the Auburn station. The normal annual precipitation, which occurs primarily from November through March, is approximately 35 inches. January temperatures range from a normal minimum of 35.9°F to a normal maximum of 54.1°F. July temperatures range from a normal minimum of 61.5°F to a normal maximum of 92.3°F (NOAA 1992). The predominant wind direction and speed is from the south-southwest at 10 mph (ARB 1994).

9.1.2 EXISTING AIR QUALITY—CRITERIA AIR POLLUTANTS

Concentrations of several air pollutants—ozone, CO, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable and fine particulate matter (PM_{10} and $\text{PM}_{2.5}$), and lead—are used as indicators of ambient air quality conditions. These pollutants are commonly referred to as “criteria air pollutants” because they are the most prevalent air pollutants known to be deleterious to human health, and extensive documentation is available on the health-effects criteria for these pollutants.

Source types, health effects, and future trends associated with each air pollutant are described below along with the most current attainment area designations and monitoring data for the project area and vicinity.

OZONE

Ozone is a photochemical oxidant, a substance whose oxygen combines chemically with another substance in the presence of sunlight, and the primary component of smog. Ozone is not directly emitted into the air, but is formed through complex chemical reactions between precursor emissions of ROG and NO_x in the presence of sunlight. ROG are volatile organic compounds that are photochemically reactive. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NO_x are a group of gaseous compounds of nitrogen and oxygen that results from the combustion of fuels.

A highly reactive molecule, ozone readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high ROG and NO_x levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional scale, ozone is a regional pollutant.

Ozone located in the upper atmosphere (stratosphere) acts in a beneficial manner by shielding the earth from harmful ultraviolet radiation that is emitted by the sun. However, ozone located in the lower atmosphere (troposphere) is a major health and environmental concern. Meteorology and terrain play a major role in ozone formation. Generally, low wind speeds or stagnant air coupled with warm temperatures and clear skies provide the optimum conditions for formation. As a result, summer is generally the peak ozone season. Because of the reaction time involved, peak ozone concentrations often occur far downwind of the precursor emissions. In general, ozone concentrations over or near urban and rural areas reflect an interplay of emissions of ozone precursors, transport, meteorology, and atmospheric chemistry (Godish 2004).

The adverse health effects associated with exposure to ozone pertain primarily to the respiratory system. Scientific evidence indicates that ambient levels of ozone affect not only sensitive receptors, such as asthmatics and children, but healthy adults as well. Exposure to ambient levels of ozone ranging from 0.10 part per million (ppm) to 0.40 ppm for 1–2 hours has been found to significantly alter lung functions by increasing respiratory rates and pulmonary resistance, decreasing tidal volumes (the amount of air inhaled and exhaled), and impairing respiratory mechanics. Ambient levels of ozone above 0.12 ppm are linked to such symptoms as throat dryness, chest tightness, headache, and nausea. In addition to the above adverse health effects, evidence exists relating ozone exposure to an increase in the permeability of respiratory epithelia; such increased permeability leads to an increased response of the respiratory system to challenges, and a decrease in the immune system's ability to defend against infection (Godish 2004).

Emissions of the ozone precursors ROG and NO_x have decreased over the past several years because of more stringent motor vehicle standards and cleaner burning fuels. The ozone problem in the SVAB ranks among the most severe in the state. Peak levels have not declined as much as the number of days that standards are exceeded. From 1990 to 2006, the maximum peak 8-hour indicator decreased by 12%. The numbers of state and national 8-hour exceedance days have declined by 43% and 40%, respectively. Most of this progress has occurred since 2003. However, the numbers of exceedance days in 2005 and 2006 were among the lowest in this 17-year period (ARB 2007). Data from 2005 showing the trend in 3-year averages of 8-hour ozone data indicate that only the northern portion of the SVAB now attains the federal 8-hour ozone standard (ARB 2007).

Carbon Monoxide

CO is a colorless, odorless, and poisonous gas produced by incomplete burning of carbon in fuels, primarily from mobile (transportation) sources. In fact, 77% of the nationwide CO emissions are from mobile sources. The other 23% consists of CO emissions from wood-burning stoves, incinerators, and industrial sources.

CO enters the bloodstream through the lungs by combining with hemoglobin, which normally supplies oxygen to the cells. However, CO combines with hemoglobin much more readily than oxygen does, resulting in a drastic reduction in the amount of oxygen available to the cells. Adverse health effects associated with exposure to CO concentrations include such symptoms as dizziness, headaches, and fatigue. CO exposure is especially harmful to individuals who suffer from cardiovascular and respiratory diseases (EPA 2008a).

The highest CO concentrations are generally associated with cold, stagnant weather conditions that occur during the winter. In contrast to problems caused by ozone, which tends to be a regional pollutant, CO problems tend to be localized.

Nitrogen Dioxide

NO₂ is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO₂ are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO₂ (EPA 2008a). The combined emissions of NO and NO₂ are referred to as NO_x and reported as equivalent NO₂. Because NO₂ is formed and depleted by reactions associated with photochemical

smog (ozone), the NO₂ concentration in a particular geographical area may not be representative of the local NO_x emission sources.

Inhalation is the most common route of exposure to NO₂. Because NO₂ has relatively low solubility in water, the principal site of toxicity is in the lower respiratory tract. The severity of the adverse health effects depends primarily on the concentration inhaled rather than the duration of exposure. An individual may experience a variety of acute symptoms such as coughing, difficulty with breathing, vomiting, headache, and eye irritation during or shortly after exposure. After a period of approximately 4–12 hours, an exposed individual may experience chemical pneumonitis or pulmonary edema with breathing abnormalities, cough, cyanosis, chest pain, and rapid heartbeat. Severe, symptomatic NO₂ intoxication after acute exposure has occasionally been linked with prolonged respiratory impairment with such symptoms as chronic bronchitis and decreased lung function (EPA 2008a).

Sulfur Dioxide

SO₂ is produced by such stationary sources as coal and oil combustion, steel mills, refineries, and pulp and paper mills. The major adverse health effects associated with SO₂ exposure pertain to the upper respiratory tract. SO₂ is a respiratory irritant; constriction of the bronchioles occurs with inhalation of SO₂ at 5 ppm or more. On contact with the moist mucous membranes, SO₂ produces sulfurous acid, which is a direct irritant. Concentration rather than duration of exposure is an important determinant of respiratory effects. Exposure to high SO₂ concentrations may result in edema of the lungs or glottis and respiratory paralysis.

Particulate Matter

Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM₁₀. PM₁₀ consists of particulate matter emitted directly into the air, such as fugitive dust, soot, and smoke from mobile and stationary sources; construction operations; fires and natural windblown dust; and particulate matter formed in the atmosphere by condensation and/or transformation of SO₂ and ROG (EPA 2008a). Fine particulate matter (PM_{2.5}) is a subgroup of PM₁₀, consisting of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less (ARB 2007).

The adverse health effects associated with PM₁₀ depend on the specific composition of the particulate matter. For example, health effects may be associated with metals, polycyclic aromatic hydrocarbons (PAH), and other toxic substances adsorbed onto fine particulate matter (referred to as the “piggybacking effect”), or with fine dust particles of silica or asbestos. Generally, effects may result from both short-term and long-term exposure to elevated concentrations of PM₁₀ and may include breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, alterations to the immune system, carcinogenesis, and premature death (EPA 2008a). PM_{2.5} poses an increased health risk because the particles can deposit deep in the lungs and may contain substances that are particularly harmful to human health.

Direct emissions of PM₁₀ increased in the SVAB from 1975 and 2005 and are projected to increase through 2020. PM₁₀ emissions in the SVAB are dominated by emissions from areawide sources, primarily fugitive dust from vehicle travel on unpaved and paved roads, dust from farming operations, fugitive dust from construction and demolition, and residential fuel combustion. Annual average PM_{2.5} concentrations in the SVAB remained relatively steady from 1975 through 2005 and are projected to increase slightly through 2020; by contrast, annual average concentrations of PM_{2.5} in California decreased slightly from 1999 through 2005, with more significant drops in 2001 and 2003. The trends are different because of differences in state and national monitoring methods (e.g., measurement techniques and averaging times). PM_{2.5} emissions in the SVAB are dominated by emissions from the same areawide sources as PM₁₀ (ARB 2007).

Lead

Lead is a metal found naturally in the environment and in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline (discussed in detail below), metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.

Twenty years ago, mobile sources were the main contributor to ambient lead concentrations in the air. In the early 1970s, the U.S. Environmental Protection Agency (EPA) set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. EPA banned the use of leaded gasoline in highway vehicles in December 1995 (EPA 2008a).

As a result of EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector have declined dramatically (95% between 1980 and 1999), and levels of lead in the air decreased by 94% between 1980 and 1999. Transportation sources, primarily airplanes, now contribute only 13% of lead emissions. A National Health and Nutrition Examination Survey reported a 78% decrease in the levels of lead in people's blood between 1976 and 1991. This dramatic decline can be attributed to the move from leaded to unleaded gasoline (EPA 2008a).

The decrease in lead emissions and ambient lead concentrations over the past 25 years is California's most dramatic success story with regard to air quality management. The rapid decrease in lead concentrations can be attributed primarily to phasing out the lead in gasoline. This phase-out began during the 1970s, and subsequent California Air Resources Board (ARB) regulations have virtually eliminated all lead from gasoline now sold in California. All areas of the state are currently designated as in attainment for the state lead standard (EPA does not designate areas for the national lead standard). Although the ambient lead standards are no longer violated, lead emissions from stationary sources still pose "hot spot" problems in some areas. As a result, ARB identified lead as a TAC.

MONITORING STATION DATA AND ATTAINMENT AREA DESIGNATIONS

Concentrations of criteria air pollutants are measured at several monitoring stations in the SVAB. The Auburn–Dewitt C Avenue and Roseville–North Sunrise Avenue stations are the closest to the project area with recent data for ozone, NO₂, CO, PM₁₀, and PM_{2.5}. Table 9-1 summarizes the air quality data from these stations for the most recent 3 years.

Both ARB and EPA use this type of monitoring data to designate areas according to attainment status for criteria air pollutants published by the agencies. The purpose of these designations is to identify areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are "nonattainment," "attainment," and "unclassified." The "unclassified" designation is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. In addition, the California designations include a subcategory of the nonattainment designation, called "nonattainment-transitional." The nonattainment-transitional designation is given to nonattainment areas that are progressing and nearing attainment. The most recent attainment designations with respect to the Placer County portion of the SVAB are shown in Table 9-2 for each criteria air pollutant.

EMISSIONS INVENTORY

Mobile sources are the largest contributor to the estimated annual average levels of ROG, CO, and NO_x in Placer County, accounting for approximately 58%, 69%, and 87%, respectively, of the total emissions. Areawide sources account for approximately 87% and 76% of the county's PM₁₀ and PM_{2.5} emissions, respectively. Stationary and mobile sources account for approximately 15% and 61%, respectively, of the County's emissions of oxides of sulfur (SO_x) (ARB 2008a).

**Table 9-1
Summary of Annual Ambient Air Quality Data (2004–2006)**

	2004	2005	2006
OZONE			
Auburn—Dewitt C Avenue Monitoring Station			
Maximum concentration (1-hour/8-hour average, ppm)	0.118/0.101	0.120/0.107	0.129/0.114
Number of days state standard exceeded (1-hour)	14	11	25
Number of days national 1-hour/8-hour standard exceeded	0/12	0/10	1/29
CARBON MONOXIDE (CO)			
Roseville—North Sunrise Avenue Monitoring Station			
Maximum concentration (1-hour/8-hour average, ppm)	2.6/1.93	2.0/1.27	—
Number of days state standard exceeded (8-hour)	0	0	—
Number of days national standard exceeded (1-hour/8-hour)	0/0	0/0	—
NITROGEN DIOXIDE (NO₂)			
Roseville—North Sunrise Avenue Monitoring Station			
Maximum concentration (1-hour average, ppm)	0.067	0.079	0.063
Number of days state standard exceeded	0	0	0
Annual average (ppm)	0.013	0.013	0.013
FINE PARTICULATE MATTER (PM_{2.5})			
Roseville—North Sunrise Avenue Monitoring Station			
Maximum concentration (µg/m ³) ¹	47.8	59.2	54.10
Number of days national standard exceeded (measured ²)	0	0	0
RESPIRABLE PARTICULATE MATTER (PM₁₀)			
Roseville—North Sunrise Avenue Monitoring Station			
Maximum concentration (µg/m ³)	43.0	58.0	55.0
Number of days state standard exceeded (measured/calculated ²)	0/0	1/5.8	1/5.8
Number of days national standard exceeded (measured/calculated ²)	0/0	0/0	0/0
Notes: µg/m ³ = micrograms per cubic meter; ppm = parts per million; — = data not available			
¹ State and national statistics may differ for the following reasons: State statistics are based on California-approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers. State statistics are based on local conditions while national statistics are based on standard conditions. State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.			
² Measured days are those days that an actual measurement was greater than the level of the state daily standard or the national daily standard. Measurements are typically collected every 6 days. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.			
Sources: ARB 2008b, EPA 2008b			

Table 9-2 Summary of Ambient Air Quality Standards and Western Placer County Designations						
Pollutant	Averaging Time	California		National Standards ¹		
		Standards ^{2,3}	Attainment Status ⁴	Primary ^{3,5}	Secondary ^{3,6}	Attainment Status ⁷
Ozone	1-hour	0.09 ppm (180 µg/m ³)	N (Serious)	–	–	–
	8-hour	0.07 ppm (137 µg/m ³)	–	0.08 ppm (157 µg/m ³)	Same as Primary Standard	N (Serious)
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m ³)	A	35 ppm (40 mg/m ³)	–	U/A
	8-hour	9 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)		
Nitrogen Dioxide (NO ₂) ⁸	Annual Arithmetic Mean	0.030 ppm (56 µg/m ³)	–	0.053 ppm (100 µg/m ³)	Same as Primary Standard	U/A
	1-hour	0.18 ppm (338 µg/m ³)	A	–		–
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	–	–	0.030 ppm (80 µg/m ³)	–	U
	24-hour	0.04 ppm (105 µg/m ³)	A	0.14 ppm (365 µg/m ³)	–	
	3-hour	–	–	–	0.5 ppm (1300 µg/m ³)	–
	1-hour	0.25 ppm (655 µg/m ³)	A	–	–	–
Respirable Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	N	–	Same as Primary Standard	A
	24-hour	50 µg/m ³		150 µg/m ³		
Fine Particulate Matter (PM _{2.5})	Annual Arithmetic Mean	12 µg/m ³	N	15 µg/m ³	Same as Primary Standard	U
	24-hour	–	–	35 µg/m ³		
Lead ⁹	30-day Average	1.5 µg/m ³	A	–	–	–
	Calendar Quarter	–	–	1.5 µg/m ³	Same as Primary Standard	–
Sulfates	24-hour	25 µg/m ³	A	No National Standards		
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m ³)	U			
Vinyl Chloride ⁹	24-hour	0.01 ppm (26 µg/m ³)	U/A			

**Table 9-2
Summary of Ambient Air Quality Standards and Western Placer County Designations**

Pollutant	Averaging Time	California		National Standards ¹		
		Standards ^{2,3}	Attainment Status ⁴	Primary ^{3,5}	Secondary ^{3,6}	Attainment Status ⁷
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient of 0.23 per kilometer—visibility of 10 miles or more (0.07—30 miles or more for Lake Tahoe) because of particles when the relative humidity is less than 70%.	U		No National Standards	

Notes: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; ppm = parts per million

¹ National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. The PM_{10} 24-hour standard is attained when 99% of the daily concentrations, averaged over 3 years, are equal to or less than the standard. The $\text{PM}_{2.5}$ 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the U.S. Environmental Protection Agency for further clarification and current federal policies.

² California standards for ozone, CO (except Lake Tahoe), SO_2 (1- and 24-hour), NO_2 , particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

³ Concentration expressed first in units in which it was issued (i.e., parts per million [ppm] or micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]). Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

⁴ Unclassified (U): The data are incomplete and do not support a designation of attainment or nonattainment.

Attainment (A): The state standard for that pollutant was not violated at any site in the area during a 3-year period.

Nonattainment (N): There was at least one violation of a state standard for that pollutant in the area.

Nonattainment/Transitional (NT) (a subcategory of the nonattainment designation): The area is close to attaining the standard for that pollutant.

⁵ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

⁶ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

⁷ Nonattainment (N): Any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant.

Attainment (A): Any area that meets the national primary or secondary ambient air quality standard for the pollutant.

Unclassifiable (U): Any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

⁸ On February 19, 2008, the Office of Administrative Law approved a new NO_2 ambient air quality standard, which lowers the 1-hour standard to 0.19 ppm and establishes a new annual standard of 0.030 ppm. These changes became effective March 20, 2008.

⁹ ARB has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Sources: ARB 2008c, 2008d; EPA 2008c

9.1.3 EXISTING AIR QUALITY—TOXIC AIR CONTAMINANTS

Concentrations of TACs, or in federal parlance, hazardous air pollutants (HAPs), are also used as indicators of ambient-air-quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

According to the *California Almanac of Emissions and Air Quality* (ARB 2007), most of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and presence or absence of an emission control system.

Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, ARB has made preliminary estimates of concentrations based on a PM exposure method. This method uses the ARB emissions inventory's PM₁₀ database, ambient PM₁₀ monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Diesel PM poses the greatest health risk among these 10 TACs. Based on receptor modeling techniques, ARB estimated the diesel PM health risk in the SVAB in 2000 to be 360 excess cancer cases per million people. The health risk of diesel PM in the SVAB has been reduced by 52% since 1990. In that time, levels of all TACs except para-dichlorobenzene, acetaldehyde and formaldehyde have declined (ARB 2007).

According to ARB's Community Health Air Pollution Information System, no major stationary sources of TACs are located within 2 miles of the project area (ARB 2008e, 2008f). Vehicles on Garden Bar Road, Mt. Pleasant Road, Mt. Vernon Road, and other roads in the vicinity are sources of diesel PM and other TACs associated with vehicle exhaust.

NATURALLY OCCURRING ASBESTOS

Naturally occurring asbestos may be found in at least 44 of California's 58 counties. Asbestos is the name for a group of naturally occurring silicate minerals. Exposure to asbestos may result in inhalation or ingestion of asbestos fibers, which over time may result in damage to the lungs or membranes that cover the lungs, leading to illness or even death.

Naturally occurring asbestos, often found in serpentine rock formations, is present in several foothill areas of the county. When material containing naturally occurring asbestos is disturbed, asbestos fibers may be released and become airborne, thereby creating a potential health hazard.

The California Geological Survey has recently developed an enhanced 1:1,000,000 scale map that has improved the overall identification of locations in the county. The map denotes areas of the county that are more or less likely to contain naturally occurring asbestos, based on available soil and geologic studies and some field verification. Where an area is characterized as having a lower overall probability of presence of naturally occurring asbestos, the likelihood of presence is slight, but in some instances naturally occurring asbestos might be found within such an area. Similarly, a location in the area identified as being most likely to have naturally occurring asbestos may not contain it.

The California Geological Survey's map shows areas of higher probability for asbestos-containing rock within the broad zone of faults that follow the low foothills and lie in a southeast-to-northwest band (Higgins and Clinkenbeard 2006). The communities of Auburn, Colfax, Meadow Vista, and Foresthill are among those that are within this fault band. Generally, there are no areas of high probability of occurrence of naturally occurring asbestos in areas of the county west of Folsom Lake or south of Wise Road. The communities of Roseville, Granite Bay, Rocklin, Lincoln, Loomis, Penryn, and Newcastle lie within geologic areas that have a lower probability for the presence of naturally occurring asbestos. There are some isolated areas of higher probability of presence of naturally occurring asbestos within the Tahoe National Forest.

Deposits of naturally occurring asbestos have been found in rock other than ultramafic and serpentine rock; for example, deposits have been found in metavolcanic rocks such as the Copper Hill Volcanics in the Folsom vicinity. Metavolcanic rock formations are prevalent to the northeast, north, and west of Auburn. Finally, in areas of sedimentary or alluvial rock deposits like those in western Placer County, it is possible that analytically detectable naturally occurring asbestos may be found.

According to *Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California* (Higgins and Clinkenbeard 2006) and *A General Location Guide for Ultramafic Rocks in California—Areas More Likely to Contain Naturally Occurring Asbestos* (Churchill and Hill 2000), the project area is located in an area that is moderately likely to contain naturally occurring asbestos.

9.1.4 EXISTING AIR QUALITY—ODORS

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

The human nose is the sole sensing device for odors. The ability to detect odors varies considerably among the population and is quite subjective. Some individuals can smell very minute quantities of specific substances; others may not have the same sensitivity but may be sensitive to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person (e.g., an odor from a fast food restaurant) may be perfectly acceptable to another. It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition occurs only with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the odor is quite difficult to detect or recognize. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

There are no notable sources of disagreeable odors in the vicinity of the project area.

9.1.5 EXISTING AIR QUALITY—GREENHOUSE GASES AND GLOBAL CLIMATE CHANGE

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected back toward space.

This absorbed radiation is then emitted from the earth, not as high-frequency solar radiation, but as lower frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency (longer wavelength) radiation. Most solar radiation passes through GHGs; however, GHGs have strong absorption properties in wavelength bands along the electromagnetic spectrum where the atmosphere, in its natural composition, does not. This range of absorption spectra (from wavelengths of 8–13 micrometers) is known as the “infrared atmospheric window” region of the electromagnetic spectrum, where infrared radiation is selectively absorbed by GHGs. As a result, radiation that otherwise would have escaped back into space is instead “trapped,” resulting in a warming of the atmosphere. This phenomenon, known as the “greenhouse effect,” is responsible for maintaining a habitable climate on the earth. Without the greenhouse effect, the planet would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect include carbon dioxide (CO₂), methane (CH₄), ozone, nitrous oxide (N₂O), and fluorinated compounds. Human-caused emissions of these GHGs exceeding natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth’s climate, known as global climate change or global warming (Ahrens 2003). It is extremely unlikely that global climate change of the past 50 years can be explained without the contribution from human activities (IPCC 2007).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule depends on multiple variables and cannot be pinpointed, it is understood that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO₂ emissions, approximately 54% is sequestered through ocean uptake, uptake by forest regrowth in the Northern Hemisphere, and other terrestrial sinks within a year, whereas the remaining 46% of human-caused CO₂ emissions remains stored in the atmosphere (Seinfeld and Pandis 1998).

Similarly, impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and TACs. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; suffice it to say, the quantity is enormous, and no single project alone would be expected to measurably contribute to a noticeable incremental change in the global average temperature, or to the global, local, or micro climates.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors (CEC 2006a). In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (CEC 2006a). Emissions of CO₂ are byproducts of fossil fuel combustion. CH₄, a highly potent GHG, results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) largely associated with agricultural practices and landfills. CO₂ sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through photosynthesis and dissolution, respectively, two of the most common processes of CO₂ sequestration.

California is the 12th to 16th largest emitter of CO₂ when compared to the nations of the world (CEC 2006a). California produced 484 million gross metric tons of CO₂ equivalent (CO₂e) in 2004. CO₂e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential (GWP) of a GHG, depends on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, as described in Appendix D, “Calculation References,” of the *California Climate Action Registry General Reporting Protocol* (CCAR 2008), 1 ton of CH₄ has the same contribution to the greenhouse effect as approximately 23 tons of CO₂. Therefore, CH₄ is a much more potent GHG than CO₂. Expressing emissions in CO₂e takes the contributions of

all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Combustion of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2004, accounting for 41% of total GHG emissions in the state (CEC 2006a). This sector was followed by the electric power sector (including both in-state and out-of-state sources) (22%) and the industrial sector (21%) (CEC 2006a).

Climate change has the potential to affect many resources, including through sea level rise. Sea level rose approximately 7 inches during the last century (CEC 2006b), and it is predicted to rise an additional 7–23 inches by 2100, depending on the future levels of GHG emissions (IPCC 2007). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion (especially a concern in the low-lying Delta, where pumps delivering potable water could be threatened), and disruption of wetlands (CEC 2006b). As the existing climate throughout California changes over time, the ranges of various plant and wildlife species could shift or be reduced, depending on the favored temperature and moisture regimes of each species. In the worst cases, some species would become extinct or be extirpated from the state if suitable conditions are no longer available. Additional concerns associated with climate change are a reduction in the snowpack, which would lead to less overall water storage in the mountains (the largest "reservoir" in the state), and increased risk of wildfire because of changes in rainfall and plant community makeup.

9.2 REGULATORY SETTING

Air quality in Placer County is regulated by EPA, ARB, PCAPCD, and the County. Each of these agencies develops rules, regulations, policies, and/or goals to comply with applicable legislation. Although EPA regulations may not be superseded, both state and local regulations may be more stringent.

9.2.1 CRITERIA AIR POLLUTANTS

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments made by Congress were in 1990.

The CAA required EPA to establish national ambient air quality standards (NAAQS). As shown in Table 9-2, EPA has established primary and secondary NAAQS for ozone, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead. The primary standards protect the public health and the secondary standards protect public welfare. The CAA also required each state to prepare an air quality control plan referred to as a state implementation plan (SIP). The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. EPA must review all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and to determine whether implementing them will achieve air quality goals. If EPA determines a SIP to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area. Failure to submit an approvable SIP or to implement the plan within the mandated time frame may cause sanctions to be applied to transportation funding and stationary air pollution sources in the air basin.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

ARB is responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, required

ARB to establish California ambient air quality standards (CAAQS) (Table 9-2). ARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. In most cases the CAAQS are more stringent than the NAAQS. Differences in the standards are generally explained by the health effects studies considered during the standard-setting process and the interpretation of the studies. In addition, the CAAQS incorporate a margin of safety to protect sensitive individuals.

The CCAA requires that all local air districts in the state endeavor to achieve and maintain the CAAQS by the earliest practical date. The act specifies that local air districts should focus particular attention on reducing the emissions from transportation and areawide emission sources, and provides districts with the authority to regulate indirect sources.

Among ARB's other responsibilities are overseeing local air districts' compliance with California and federal laws, approving local air quality plans, submitting SIPs to EPA, monitoring air quality, determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels. There are 15 nonattainment areas for the national ozone standard and two nonattainment areas for the PM_{2.5} standard. The Ozone SIP and PM_{2.5} SIP were due to EPA by June 2007 and April 2008, respectively. The SIP must show how each area will attain the federal standards. To do this, the SIP identifies the amount of pollution emissions that must be reduced in each area to meet the standard and the emission controls needed to reduce the necessary emissions.

ARB and local air pollution control districts are currently developing plans for meeting new national air quality standards for ozone and PM_{2.5}. The draft statewide air quality plan was released in April 2007 (ARB 2008g).

LOCAL PLANS, POLICIES, REGULATIONS, AND LAWS

Placer County Air Pollution Control District

PCAPCD attains and maintains air quality conditions in Placer County through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean-air strategy of PCAPCD includes the preparation of plans and programs for the attainment of ambient air-quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. PCAPCD also inspects stationary sources of air pollution, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the CAA, CAAA, and CCAA. Air quality plans applicable to the proposed project are discussed below.

Air Quality Plans

PCAPCD in coordination with the air quality management districts and air pollution control districts of El Dorado, Sacramento, Solano, Sutter, and Yolo Counties prepared and submitted the 1991 *Air Quality Attainment Plan* (AQAP) in compliance with the requirements set forth in the CCAA, which specifically addressed the nonattainment status for ozone and, to a lesser extent, CO and PM₁₀. The CCAA also requires a triennial assessment of the extent of air quality improvements and emission reductions achieved through the use of control measures. As part of the assessment, the attainment plan must be reviewed and, if necessary, revised to correct for deficiencies in progress and to incorporate new data or projections. The requirement of the CCAA for a first triennial progress report and revision of the 1991 AQAP was fulfilled with the preparation and adoption of the 1994 *Ozone Attainment Plan* (OAP). The OAP stresses attainment of ozone standards and focuses on strategies for reducing ROG and NO_x. It promotes active public involvement, enforcement of compliance with PCAPCD rules and regulations, public education in both the public and private sectors, development and promotion of transportation and land use programs designed to reduce vehicle miles traveled (VMT) within the region, and implementation of control measures for stationary and mobile sources. The OAP became part of the SIP in

accordance with the requirements of the CAAA and amended the 1991 AQAP. However, at that time the region could not show that the national ozone (1-hour) standard would be met by 1999. In exchange for moving the deadline to 2005, the region accepted a designation of “severe nonattainment” coupled with additional emissions requirements on stationary sources. Additional triennial reports were also prepared in 1997, 2000, and 2003 in compliance with the CCAA that act as incremental updates.

As a nonattainment area, the region is also required to submit rate-of-progress milestone evaluations in accordance with the CAAA. Milestone reports were prepared for 1996, 1999, 2002, and most recently in 2006 for the 8-hour ozone standard. These milestone reports include compliance demonstrations that the requirements have been met for the Sacramento nonattainment area. The AQAPs and reports present comprehensive strategies to reduce emissions of ROG, NO_x, and PM₁₀ from stationary, area, mobile, and indirect sources. Such strategies include the adoption of rules and regulations; enhancement of CEQA participation; implementation of a new and modified indirect-source review program; adoption of local air quality plans; and control measures for stationary, mobile, and indirect sources.

The Sacramento region was classified by EPA as a “serious” nonattainment area on June 15, 2004, for the national 8-hour ozone standard with an attainment deadline of June 15, 2013. Emission reduction needs to achieve the air quality standard were identified using an air quality modeling analysis. An evaluation of proposed new control measures and associated VOC and NO_x emission reductions concluded that no set of feasible controls were available to provide the needed emission reductions before the attainment deadline year. Given the magnitude of the shortfall in emission reductions, and the schedule for implementing new control measures, the earliest possible attainment demonstration year for the Sacramento region is determined to be the “severe” area deadline of 2019.

Section 181(b)(3) of the CAA permits a state to request that EPA reclassify a nonattainment area to a higher classification and extend the time allowed for attainment. This process is appropriate for areas that must rely on longer-term strategies to achieve the emission reductions needed for attainment.

The Board of Director’s for each of the five air districts (including PCAPCD) which comprises the Sacramento Federal Nonattainment Area (SFNA) requested that ARB submit a formal request for voluntary reclassification from a “serious” to a “severe” for the 8-hour ozone nonattainment area with an associated attainment deadline of June 15, 2019. ARB submitted that request on February 14, 2008.

On March 24, 2008, EPA published in the Federal Register a finding of Failure to Submit the 2011 Reasonable Further Progress Plan for the SFNA in the Federal Register. The Failure to Submit finding triggered sanctions clocks, which include:

1. **Offset sanctions:** More stringent emission mitigation requirements for new and modified businesses, “major stationary sources” if a complete plan is not submitted within 18 months after EPA findings of failure to submit the plan.
2. **Federal Highway funding sanctions:** Prohibiting transportation projects from receiving federal transportation funding if a complete plan is not submitted within 24 months after EPA findings.

The sanctions clocks will stop once the Air Districts (including PCAPCD) submit the 2011 Reasonable Further Progress Plan and the USEPA accepts the plan as complete. The *Sacramento Regional Nonattainment Area 8-Hour Attainment Demonstration Plan* is scheduled to be published at the end of September 2008 (SMAQMD 2008).

PCAPCD Rules

As mentioned above, PCAPCD adopts rules and regulations. All projects are subject to PCAPCD rules and regulations in effect at the time of construction. The following specific rules are applicable to construction of the proposed project:

Rule 202—Visible Emissions. A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour which is as dark or darker in shade as that designated as number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.

Rule 205—Nuisance. A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause to have a natural tendency to cause injury or damage to business or property. The provisions of Rule 205 do not apply to odors emanating from agriculture operations necessary for the growing of crops or raising of fowl or animals.

Rule 217—Cutback and Emulsified Asphalt Paving Materials. A person shall not manufacture for sale nor use for paving, road construction, or road maintenance any: rapid cure cutback asphalt; slow cure cutback asphalt containing organic compounds which evaporate at 500°F or lower as determined by current American Society for Testing and Materials (ASTM) Method D402; medium cure cutback asphalt except as provided in Section 1.2; or emulsified asphalt containing organic compounds which evaporate at 500°F or lower as determined by current ASTM Method D244, in excess of 3% by volume.

Rule 218—Application of Architectural Coatings. No person shall manufacture, blend, or repackage for sale within PCAPCD; supply, sell, or offer for sale within PCAPCD; or solicit for application or apply within the PCAPCD, any architectural coating with a volatile organic carbon (VOC) content in excess of the corresponding specified manufacturer's maximum recommendation.

Rule 228—Fugitive Dust.

Visible Emissions Not Allowed Beyond the Boundary Line: A person shall not cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area (including disturbance as a result of the raising and/or keeping of animals or by vehicle use), such that the presence of such dust remains visible in the atmosphere beyond the boundary line of the emission source.

Visible Emissions from Active Operations: In addition to the requirements of Rule 202, Visible Emissions, a person shall not cause or allow fugitive dust generated by active operations, an open storage pile, or a disturbed surface area, such that the fugitive dust is of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke as dark or darker in shade as that designated as number 2 on the Ringelmann Chart, as published by the United States Bureau of Mines.

Concentration Limit: A person shall not cause or allow PM₁₀ levels to exceed 50 micrograms per cubic meter (µg/m³) (24-hour average) when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other EPA-approved equivalent method for PM₁₀ monitoring.

Track-Out onto Paved Public Roadways: Visible roadway dust as a result of active operations, spillage from transport trucks, and the track-out of bulk material onto public paved roadways shall be minimized and removed.

The track-out of bulk material onto public paved roadways as a result of operations, or erosion, shall be minimized by the use of track-out and erosion control, minimization, and preventative measures, and removed

within 1 hour from adjacent streets such material any time track-out extends for a cumulative distance of greater than 50 feet onto any paved public road during active operations.

All visible roadway dust tracked out upon public paved roadways as a result of active operations shall be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. Wet sweeping or a High Efficiency Particulate Air (HEPA) filter-equipped vacuum device shall be used for roadway dust removal.

Any material tracked out, or carried by erosion, and clean-up water, shall be prevented from entering waterways or storm water inlets as required to comply water quality control requirements.

Minimum Dust Control Requirements: The following dust mitigation measures are to be initiated at the start and maintained throughout the duration of the construction or grading activity, including any construction or grading for road construction or maintenance.

- ▶ Unpaved areas subject to vehicle traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered.
- ▶ The speed of any vehicles and equipment traveling across unpaved areas must be no more than 15 miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust exceeding Ringelmann 2 or visible emissions from crossing the project boundary line.
- ▶ Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile.
- ▶ Prior to any ground disturbance, including grading, excavating, and land clearing, sufficient water must be applied to the area to be disturbed to prevent emitting dust exceeding Ringelmann 2 and to minimize visible emissions from crossing the boundary line.
- ▶ Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off-site.
- ▶ When wind speeds are high enough to result in dust emissions crossing the boundary line, despite the application of dust mitigation measures, grading and earthmoving operations shall be suspended.
- ▶ No trucks are allowed to transport excavated material off-site unless the trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments, and loads are either covered with tarps; or wetted and loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than 6 inches from the top and that no point of the load extends above the top of the cargo compartment.

Wind-Driven Fugitive Dust Control: A person shall take action(s), such as surface stabilization, establishment of a vegetative cover, or paving, to minimize wind-driven dust from inactive disturbed surface areas.

Rule 501—General Permit Requirement: Any person operating an article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants, shall first obtain a written permit from the Air Pollution Control Officer (APCO). Stationary sources subject to the requirements of Rule 507, Federal Operating Permit Program, must also obtain a Title V permit pursuant to the requirements and procedures of that rule.

PLACER COUNTY

The following are relevant goals and policies identified by the *Placer County General Plan* (Placer County 1994) for air quality.

GOAL 6.F: To protect and improve air quality in Placer County.

- ▶ **Policy 6.F.1.** The County shall cooperate with other agencies to develop a consistent and effective approach to air quality planning and management.
- ▶ **Policy 6.F.2.** The County shall develop mitigation measures to minimize stationary source and area source emissions.
- ▶ **Policy 6.F.3.** The County shall support the PCAPCD in its development of improved ambient air quality monitoring capabilities and the establishment of standards, thresholds, and rules to more adequately address the air quality impacts of new development.
- ▶ **Policy 6.F.4.** The County shall solicit and consider comments from local and regional agencies on proposed projects that may affect regional air quality.
- ▶ **Policy 6.F.5.** The County shall encourage project proponents to consult early in the planning process with the County regarding the applicability of Countywide indirect and areawide source programs and transportation control measure (TCM) programs. Project review shall address energy-efficient building and site designs and proper storage, use, and disposal of hazardous materials.
- ▶ **Policy 6.F.6.** The County shall require project-level environmental review to include identification of potential air quality impacts and designation of design and other appropriate mitigation measures or offset fees to reduce impacts. The County shall dedicate staff to work with project proponents and other agencies in identifying, ensuring the implementation of, and monitoring the success of mitigation measures.
- ▶ **Policy 6.F.7.** The County shall encourage development to be located and designed to minimize direct and indirect air pollutants.
- ▶ **Policy 6.F.8.** The County shall submit development proposals to the PCAPCD for review and comment in compliance with CEQA prior to consideration by the appropriate decision-making body.
- ▶ **Policy 6.F.9.** In reviewing project applications, consider alternatives or amendments that reduce emissions of air pollutants.
- ▶ **Policy 6.F.10.** The County may require new development projects to submit an air quality analysis for review and approval. Based on this analysis, the County shall require appropriate mitigation measures consistent with the PCAPCD's 1991 Air Quality Attainment Plan (or updated edition).

GOAL 6.G: To integrate air quality planning with the land use and transportation planning process.

- ▶ **Policy 6.G.1.** The County shall require new development to be planned to result in smooth flowing traffic conditions for major roadways. This includes traffic signals and traffic signal coordination, parallel roadways, and intra- and inter-neighborhood connections where significant reductions in overall emissions can be achieved.
- ▶ **Policy 6.G.2.** The County shall continue and, where appropriate, expand the use of synchronized traffic signals on roadways susceptible to emissions improvement through approach control.

- ▶ **Policy 6.G.3.** The County shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in County transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.
- ▶ **Policy 6.G.4.** The County shall consider instituting disincentives for single-occupant vehicle trips, including limitations in parking supply in areas where alternative transportation modes are available and other measures identified by PCAPCD and incorporated into regional plans.
- ▶ **Policy 6.G.5.** The County shall endeavor to secure adequate funding for transit services so that transit is a viable transportation alternative. New development shall pay its fair share of the cost of transit equipment and facilities required to serve new projects.
- ▶ **Policy 6.G.6.** The County shall require large new developments to dedicate land for and construct appropriate improvements for park-and-ride lots, if suitably located.
- ▶ **Policy 6.G.7.** The County shall require stationary-source projects that generate significant amounts of air pollutants to incorporate air quality mitigation in their design.

9.2.2 TOXIC AIR CONTAMINANTS

Air quality regulations also focus on TACs. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which adverse health impacts may not be expected to occur. This contrasts with the criteria air pollutants, for which acceptable levels of exposure can be determined and for which the ambient standards have been established (Table 9-2). Instead, EPA and ARB regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the maximum available control technology for toxics (MACT) or best available control technology for toxics (BACT) to limit emissions. These in conjunction with additional rules set forth by PCAPCD establish the regulatory framework for TACs.

FEDERAL HAZARDOUS AIR POLLUTANT PROGRAMS

EPA has programs for identifying and regulating HAPs. Title III of the CAAA directed EPA to promulgate national emissions standards for HAPs (NESHAP). The NESHAP for major sources of HAPs may differ from those for area sources. Major sources are defined as stationary sources with potential to emit more than 10 tons per year (tpy) of any HAP or more than 25 tpy of any combination of HAPs; all other sources are considered area sources.

The CAAA called on EPA to promulgate emissions standards in two phases. In the first phase (1992–2000), EPA developed technology-based emissions standards designed to reduce emissions as much as feasible. These standards are generally referred to as requiring MACT. For area sources, the standards may be different, based on generally available control technology. In the second phase (2001–2008), EPA is required to promulgate health risk-based emissions standards where deemed necessary to address risks remaining after implementation of the technology-based NESHAP standards.

The CAAA also required EPA to promulgate vehicle or fuel standards containing reasonable requirements that control toxic emissions of, at a minimum, benzene and formaldehyde. Performance criteria were established to limit mobile-source emissions of benzene, formaldehyde, and 1,3-butadiene. In addition, Section 219 of the CAAA required the use of reformulated gasoline in selected areas with the most severe ozone nonattainment conditions to further reduce mobile-source emissions.

STATE AND LOCAL PROGRAMS FOR TOXIC AIR CONTAMINANTS

TACs in California are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807 [Chapter 1047, Statutes of 1983]) and the Air Toxics Hot Spots Information and Assessment Act (AB 2588 [Chapter 1252, Statutes of 1987]). AB 1807 sets forth a formal procedure for ARB to designate substances as TACs. Research, public participation, and scientific peer review must occur before ARB can designate a substance as a TAC. To date, ARB has identified more than 21 TACs and adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the ARB list of TACs.

Once a TAC is identified, ARB then adopts an airborne toxics control measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate BACT to minimize emissions; for example, the ATCM limits truck idling to 5 minutes (Title 13, Section 2485 of the California Code of Regulations [i.e., 13 CCR Section 2485]).

The Hot Spots Act requires that existing facilities that emit toxic substances above a specified level prepare an inventory of toxic emissions, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

ARB has adopted control measures for diesel exhaust and more stringent emissions standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, ARB adopted a new rule for public-transit bus fleets and emissions standards for new urban buses. These new rules and standards include all of the following elements:

- ▶ more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines;
- ▶ zero-emission bus demonstration and purchase requirements applicable to transit agencies; and
- ▶ reporting requirements, under which transit agencies must demonstrate compliance with the public-transit bus fleet rule.

Recent and future milestones include the low-sulfur diesel fuel requirement and tighter emissions standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide. Over time, replacing older vehicles will result in a vehicle fleet that produces substantially lower levels of TACs than under current conditions. Mobile-source emissions of TACs (e.g., benzene, 1,3-butadiene, diesel PM) have been reduced significantly over the last decade, and will be reduced further in California through a progression of regulatory measures (e.g., Low Emission Vehicle/Clean Fuels and Phase II reformulated gasoline regulations) and control technologies. With implementation of ARB's Risk Reduction Plan, it is expected that diesel PM concentrations will be reduced by 75% in 2010 and 85% in 2020 from the estimated year-2000 level. Adopted regulations are also expected to continue to reduce formaldehyde emissions from cars and light-duty trucks. As emissions are reduced, it is expected that risks associated with exposure to the emissions will also be reduced.

Air Quality and Land Use Handbook: A Community Health Perspective, published by ARB, provides guidance on land use compatibility with sources of TACs (ARB 2005). The handbook is not a law or adopted policy but offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities, to help keep children and other sensitive populations out of harm's way.

State regulations on asbestos are related to demolition and renovations, and waste disposal of asbestos-containing materials. California also has a statewide regulation covering naturally occurring asbestos. The Asbestos ATCM for Asbestos-Containing Serpentine, adopted in 1990, prohibited the use of serpentine aggregate for surfacing if the asbestos content was 5% or more asbestos. The limit on asbestos content was lowered to 0.25% in 2000 and modified to include ultramafic rock.

In July 2001, ARB adopted an ATCM for construction, grading, quarrying, and surface mining operations that regulates grading and excavation activities in areas of serpentine or ultramafic rocks. In addition, the Governor's Office of Planning and Research issued a memorandum providing guidance to lead agencies in analyzing the impacts of naturally occurring asbestos during the CEQA review process.

At the local level, air pollution control or management districts may adopt and enforce ARB control measures. Under PCAPCD Rule 501 (General Permit Requirements), Rule 502 (New Source Review), and Rule 507 (Federal Operating Permit), all sources that possess the potential to emit TACs must obtain permits from the district. Permits may be granted to these operations if they are constructed and operated in accordance with applicable regulations, including new-source review standards and air toxics control measures. PCAPCD limits emissions and public exposure to TACs through a number of programs. The district prioritizes TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors.

Sources that require a permit are analyzed by PCAPCD (e.g., through a health risk assessment) based on their potential to emit toxics. A health risk assessment is a tool used to determine the exposure of sensitive receptors to TAC emissions based on a 70-year exposure period. If it is determined that the project will emit toxics in excess of PCAPCD's threshold of significance for TACs, as identified below, sources have to implement the best available control technology for TACs (T-BACT) to reduce emissions. If a source cannot reduce the risk below the threshold of significance even after T-BACT has been implemented, PCAPCD will deny the permit required by the source. This helps to prevent new problems and reduces emissions from existing older sources by requiring them to apply new technology when retrofitting with respect to TACs. It is important to note that the air quality permitting process applies only to stationary sources; properties that may be exposed to elevated levels of TACs from nonstationary sources (e.g., vehicles) and the nonstationary sources themselves are not subject to this process or to any requirements of T-BACT implementation. Rather, emissions controls on nonstationary sources are subject to regulations implemented on the state and federal level.

PCAPCD also enforces ARB's Asbestos ATCM to control dust emissions and human exposure to the asbestos fibers found in serpentine and ultramafic rock (and soil derived from those substrates). The ATCM can be summarized as follows (ARB 2004): Large construction projects are required to prepare a dust mitigation plan and receive approval from the district before the start of the project. The plan must specify measures that will be taken to ensure that no visible dust crosses the property line and must address specific topics. The dust mitigation plan must address control of emissions from track-out, disturbed surface areas, storage piles, on-site vehicle traffic, off-site transport of material, and earthmoving activities. The plan must also address postconstruction stabilization and air monitoring (if required by the district). Table 1 of the Asbestos ATCM (not shown in this EIR) shows control options for the topics to be addressed in the asbestos dust mitigation plan for large construction projects. Many of these requirements would already be carried out by such projects to minimize nuisance dust complaints and protect water quality.

In addition, PCAPCD adopted a local dust control regulation in 2003 that goes beyond the state's measures by providing standards for the control of sources of fugitive dust, including dust from construction activities, and is not limited in applicability to areas where naturally occurring asbestos is found. In the identified areas of higher probability for the presence of naturally occurring asbestos, and where it or rock potentially containing it is known to be located, PCAPCD enforces the implementation of ARB's Asbestos ATCM.

9.2.3 ODORS

PCAPCD has identified types of facilities that have been known to produce odors: wastewater treatment facilities, chemical manufacturing plants, painting/coating operations, feed lots/dairies, composting facilities, landfills, and transfer stations. Because offensive odors rarely cause any physical harm and no requirements for their control are included in federal or state air quality regulations, PCAPCD has no rules or standards related to odor emissions

other than Rule 205 (Nuisance). Any actions related to odors are based on citizen complaints to local governments and PCAPCD.

Two situations increase the potential for odor problems. The first occurs when a new odor source is located near existing sensitive receptors. The second occurs when new sensitive receptors are developed near existing sources of odors. In the first situation, PCAPCD recommends operational changes, add-on controls, process changes, or buffer zones where feasible to address odor complaints. In the second situation, the potential conflict is considered significant if the plan area is at least as close as any other site that has already experienced significant odor problems related to the odor source. For projects being developed near a source of odors where there is no nearby development that may have filed complaints, and for odor sources being developed near existing sensitive receptors, PCAPCD recommends that the determination of potential conflict be based on the distance and frequency at which odor complaints from the public have occurred in the vicinity of a similar facility.

PCAPCD Rule 205 (Nuisance) addresses odor exposure and prohibits discharging air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public; that endanger the public's comfort, repose, health, or safety; or that cause or have a natural tendency to cause injury or damage to business or property.

9.2.4 GREENHOUSE GAS EMISSIONS

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* that CO₂ is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of GHGs. However, there are no federal regulations or policies regarding GHG emissions applicable to the proposed project at the time of writing.

Various statewide and local initiatives to reduce the state's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term. Because every nation emits GHGs and therefore makes an incremental cumulative contribution to global climate change, cooperation on a global scale will be required to reduce the rate of GHG emissions to a level that can help to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

ASSEMBLY BILL 1493 (2002)

In 2002, then-Governor Gray Davis signed AB 1493 (Chapter 200, Statutes of 2002) (amending Section 42823 of the Health and Safety Code and adding Section 43018.5 to the code). AB 1493 requires that ARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by ARB to be vehicles whose primary use is noncommercial personal transportation in the state."

To meet the requirements of AB 1493, in 2004 ARB approved amendments to the California Code of Regulations adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to 13 CCR Sections 1900 and 1961 and adoption of Section 1961.1 (13 CCR Section 1961.1) require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds [lb] that is designed primarily for the transportation of persons), beginning with the 2009 model year. Emissions limits are reduced further in each model year through 2016. For passenger cars and light-duty trucks with a loaded vehicle weight of 3,750 lb or less, the GHG emission limits for the 2016 model year are approximately 37% lower than the limits for the first year of the regulations, the 2009 model year. For light-duty trucks with loaded vehicle weight of 3,751 lb to gross vehicle weight of 8,500 lb, as

well as medium-duty passenger vehicles, GHG emissions are reduced approximately 24% between 2009 and 2016.

In December 2004, a group of car dealerships, automobile manufacturers, and trade groups representing automobile manufacturers filed suit against ARB to prevent enforcement of 13 CCR Sections 1900 and 1961 as amended by AB 1493 and 13 CCR 1961.1 (*Central Valley Chrysler-Jeep et al. v. Catherine E. Witherspoon, in Her Official Capacity as Executive Director of the California Air Resources Board, et al.* [456 F. Supp. 2d 1150, 1172 (E.D. Cal. 2006)]). The suit in the U.S. District Court for the Eastern District of California contended that California's implementation of regulations that, in effect, regulate vehicle fuel economy violates various federal laws, regulations, and policies.

In January 2007, the judge hearing the case accepted a request from the California Attorney General's office that the trial be postponed until a decision is reached by the U.S. Supreme Court on a separate case addressing GHGs. In the Supreme Court case, *Massachusetts, et al., v. Environmental Protection Agency, et al.*, the primary issue in question was whether the CAA provides authority for EPA to regulate CO₂ emissions. EPA contended that the CAA does not authorize regulation of CO₂ emissions, whereas Massachusetts and 10 other states, including California, sued EPA to begin regulating CO₂. As mentioned above, the U.S. Supreme Court ruled on April 2, 2007, that GHGs are "air pollutants" as defined under the CAA and EPA is granted authority to regulate CO₂ (*Massachusetts v. U.S. Environmental Protection Agency* [2007] 549 U.S. 05-1120).

On December 12, 2007, the Court rejected the automakers' claim and ruled that if California receives appropriate authorization from EPA (the last remaining factor in enforcing the standard), these regulations would not be consistent with federal law. This authorization to implement more stringent standards in California was requested in the form of a CAA Section 209(b) waiver in 2005. Since that time, EPA failed to act in granting California authorization to implement the standards. Governor Arnold Schwarzenegger and Attorney General Edmund G. Brown Jr. filed suit against EPA for the delay. EPA denied California's request for the waiver to implement AB 1493 in late December 2007. The State of California has filed suit against EPA for its decision to deny the CAA waiver.

EXECUTIVE ORDER S-3-05 (2005)

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada's snowpack, exacerbate California's air quality problems, and potentially cause a rise in sea level. To combat those concerns, the executive order established targets for total GHG emissions. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80% below the 1990 level by 2050.

The executive order directed the secretary of the California Environmental Protection Agency to coordinate a multiagency effort to reduce GHG emissions to the target levels. The secretary will also submit biannual reports to the governor and legislature describing: progress made toward reaching the emissions targets; impacts of global warming on California's resources; and mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the secretary of the California Environmental Protection Agency created the California Climate Action Team, made up of members of various state agencies and commissions. The California Climate Action Team released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses and actions by local governments and communities, as well as through state incentive and regulatory programs.

ASSEMBLY BILL 32 (2006), CALIFORNIA CLIMATE SOLUTIONS ACT

In September 2006, Governor Arnold Schwarzenegger signed AB 32 (Chapter 488, Statutes of 2006), the California Global Warming Solutions Act, which enacted Sections 38500–38599 of the Health and Safety Code.

AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then ARB should develop new regulations to control GHG emissions from vehicles under the authorization of AB 32.

AB 32 requires that ARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves the reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

SENATE BILL 97 (2007)

Senate Bill (SB) 97, signed in August 2007 (Chapter 185, Statutes of 2007; Public Resources Code, Section 21083.05 and 21097), acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. This bill directs the Governor's Office of Planning and Research to prepare, develop, and transmit to the California Resources Agency by July 1, 2009, guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA. The California Resources Agency is required to certify and adopt those guidelines by January 1, 2010. This bill also removes, both retroactively and prospectively, as legitimate causes of action in litigation any claim of inadequate CEQA analysis of effects of GHG emissions associated with environmental review for projects funded by the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006 (Proposition 1B) or the Disaster Preparedness and Flood Protection Bond Act of 2006 (Proposition 1E). This provision will be repealed by operation of law on January 1, 2010; at that time such projects, if any remain unapproved, will no longer enjoy protection against litigation claims based on failure to adequately address issues related to climate change. This bill would only protect a handful of public agencies from CEQA challenges on certain types of projects for a few years time.

There are no local laws, regulations, or policies pertaining to GHG emissions.

9.3 IMPACTS

9.3.1 ANALYSIS METHODOLOGY

Methodologies recommended by PCAPCD were used to assess short-term (construction-related) and long-term regional and local (operational) impacts on air quality; impacts from TACs and odors; and short-term emissions of criteria air pollutants (e.g., particulate matter) and ozone precursors (e.g., ROG and NO_x) generated by project construction. Where quantification was required, emissions from project construction were modeled using the ARB-approved URBEMIS 2007 Version 9.2.4 computer program (Rimpo and Associates 2008) as recommended by PCAPCD. URBEMIS incorporates ARB's EMFAC2007 model for on-road vehicle emissions and the OFFROAD2007 model for off-road vehicle emissions. URBEMIS is designed to model construction emissions for land use development projects and allows for the input of project-specific information. Exact project-specific data (e.g., required types and numbers of construction equipment and maximum daily acreage disturbed) were not available at the time of this analysis. General information provided in the project description (see Chapter 3.0 of this EIR) and default URBEMIS settings were used to generate a reasonable worst-case estimate of project-generated emissions.

Regional emissions of criteria air pollutants and ozone precursors generated by area and mobile sources associated with the proposed project were also modeled using URBEMIS. URBEMIS allows land use selections

that include project location specifics and trip generation rates. URBEMIS accounts for mobile-source emissions associated with vehicle trip generation. Project-generated emissions were modeled based on general information provided in the project description and trip generation from the transportation analysis prepared for this project (see Chapter 3.0, "Project Description," and Chapter 8.0, "Transportation and Circulation," of this EIR).

Long-term (operational), local CO impacts were evaluated in accordance with PCAPCD guidance.

PCAPCD has not adopted a methodology for analyzing short-term construction-related emissions of TACs and/or the exposure thereof. Therefore, emissions of TACs associated with project construction were assessed in a qualitative manner.

Determinations of significance for construction-related and operational emissions were based on the comparison of project-generated emissions to applicable PCAPCD thresholds.

Other air quality impacts (e.g., odors) were assessed in accordance with methodologies recommended by ARB and/or PCAPCD.

Project-generated construction- and operation-related emissions of GHGs were calculated using URBEMIS.

9.3.2 THRESHOLDS OF SIGNIFICANCE

Based on the Placer County CEQA checklist and the State CEQA Guidelines, the proposed project would result in a potentially significant impact on air quality if it would:

- ▶ conflict with or obstruct implementation of the applicable air quality plan,
- ▶ violate any air quality standard or contribute substantially to an existing or projected air quality violation,
- ▶ result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable NAAQS or CAAQS (including releasing emissions that exceed quantitative thresholds for ozone precursors),
- ▶ expose sensitive receptors to substantial pollutant concentrations, or
- ▶ create objectionable odors affecting a substantial number of people.

As stated in the State CEQA Guidelines, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. Thus, the proposed project would result in a potentially significant impact on air quality if:

- ▶ short-term construction-related emissions of ROG, NO_x, or PM₁₀ would exceed the PCAPCD-recommended mass emissions threshold of 82 pounds per day (lb/day);
- ▶ long-term, operational (regional) emissions of ROG, NO_x, or PM₁₀ would exceed the PCAPCD-recommended mass emissions threshold of 82 lb/day;
- ▶ long-term, operational emissions of ROG and NO_x would exceed the PCAPCD-recommended cumulative mass emissions threshold of 10 lb/day; or
- ▶ sensitive receptors would be exposed to a substantial incremental increase in TAC emissions (e.g., stationary- or mobile-source) that result in excess cancer risk greater than 10 in 1 million, or a Hazard Index greater than 1 for noncancer risk, for the maximally exposed individual.

No air district or other regulatory agency in California, including PCAPCD, has identified a significance threshold for GHG emissions generated by a proposed project, or a methodology for analyzing impacts related to GHG emissions or global climate change. By adopting AB 32 and SB 97, however, the State of California has established GHG reduction targets and has determined that GHG emissions as they relate to global climate change are a source of adverse environmental impacts in California that should be addressed under CEQA. Although AB 32 did not amend CEQA, the legislation does include language identifying the various environmental problems in California caused by global warming (Health and Safety Code, Section 38501[a].) SB 97, in contrast, did amend CEQA to require the Governor's Office of Planning and Research to prepare revisions to the State CEQA Guidelines addressing the mitigation of GHGs or their consequences. By only giving certain limited projects protection against CEQA claims based on the alleged failure to properly assess climate change impacts in the environmental documents used to approve them, the legislature allowed that the environmental review for other projects would have to address the issue of global warming when impacts are potentially significant (project or cumulative). The proper context for addressing the issue in an EIR is the discussion of cumulative impacts, because although the emissions of one single project will not cause or alter global climate change, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change.

To meet GHG emissions targets of AB 32, California would need to generate in the future less GHG emissions than current levels. It is recognized, however, that for most projects no simple metric is available to determine whether a single project would substantially increase or decrease overall levels of GHG emissions or conflict with the goals of AB 32.

The text of AB 32 strongly suggests that, when ARB interprets and applies the definition of "greenhouse gas emission source," the regulations promulgated under the legislation will apply primarily, if not exclusively, to stationary sources of GHG emissions (see Section 38505[i] of the Health and Safety Code). Nevertheless, this mandate demonstrates California's commitment to reducing the rate of GHG emissions and the state's associated contribution to climate change, without intent to limit population or economic growth within the state. Thus, to achieve the goals of AB 32, which are tied to GHG emissions rates in specific benchmark years (i.e., 1990), California would have to achieve a lower rate of emissions per unit of population (per person) than it has now. Further, to accommodate future population and economic growth, the state would have to achieve an even lower rate of emissions per unit than was achieved in 1990. (The goal—to achieve 1990 quantities of GHG emissions by 2020—will need to be accomplished with 30 years of population and economic growth beyond 1990 in place.) Thus, future projects that would not encourage reductions in GHG emissions (or continue at "business as usual" emission rates) would conflict with the policy decisions contained in the spirit of AB 32, thus impeding California's ability to comply with the mandate. In addition, if a project would be affected by the reasonably foreseeable effects of climate change, the project should be designed to adapt to altered future conditions.

Although the text of AB 32 focuses on major stationary and area sources of GHG emissions, the primary objective of the legislation is to reduce California's contribution to global warming by reducing California's total annual production of GHG emissions. The impact that GHG emissions have on global climate change does not depend on whether they were generated by stationary, mobile, or area sources, or whether they were generated in one region or another. Thus, consistency with the state's requirements for GHG emissions reductions is the best metric for determining whether the proposed project would contribute to global warming. In the case of the proposed project, if the project does not conform with the state mandate to reduce GHG emissions to 1990 levels by the year 2020 and the associated increase in the amount of mass emissions is considered substantial, then the impact of the project would be cumulatively considerable (significant). Because the nature of global climate change impacts of GHG emissions are cumulative, this impact is discussed in Section 15.5, "Cumulative Impacts," in Chapter 15.0, "Other CEQA-Required Sections," of this EIR.

IMPACT ANALYSIS

IMPACT 9-1 **Air Quality—Short-Term Emission of Criteria Air Pollutants and Precursors during Construction.**
Modeled short-term emissions of ozone precursors and fugitive dust from construction of trails and other project facilities would not exceed PCAPCD's significance threshold of 82 lb/day. Thus, emissions of ROG, NO_x, and PM₁₀ associated with project construction would not violate or contribute substantially to an existing or projected air quality violation, nor would they expose sensitive receptors to substantial concentrations of pollutants.

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Construction-related emissions are described as short-term or temporary and have the potential to represent a significant impact with respect to air quality. Project construction activities would result in emissions of criteria air pollutants (PM₁₀ and PM_{2.5}) and ozone precursors (ROG and NO_x) from site preparation (e.g., excavation, grading, and clearing); exhaust from equipment, material transport vehicles, and worker commute vehicles; vehicle travel on unpaved roads; paving; application of architectural coatings; and other miscellaneous activities.

Emissions of fugitive PM dust (e.g., PM₁₀ and PM_{2.5}) are associated primarily with ground disturbance activities during site preparation, such as grading, and vary as a function of soil silt content, soil moisture, wind speed, acreage of the disturbance area, VMT on- and off-site, and other parameters. Exhaust emissions from diesel equipment and worker commute trips also contribute to short-term increases in total PM emissions, but to a much lesser extent. Emissions of ozone precursors are associated primarily with exhaust emitted by off-road (e.g., gas and diesel) construction equipment. Worker commute trips and other construction-related activities (e.g., application of architectural coatings) also contribute to short-term increases in such emissions.

The proposed project would be constructed in phases over several years as funding allows. Each phase would allow an additional level of public access to the Park. Phase 1 of the construction activities is expected to occur over the next 5 years. Construction of trails and Park facilities within the Spears Ranch portion of the Park, construction of bridge crossings, expansion of the Didion Ranch parking area (including relocating the adjacent helistop), and paving and widening of the access road from Garden Bar Road to the Park would be the largest construction-related sources of emissions during Phase 1. Park facilities would include two permanent restroom facilities, 10 bunkhouses, groundwater wells, fire suppression facilities, equestrian facilities, picnic areas, benches and rest areas, landscaping, and other improvements. Construction of the bunkhouses and restroom facilities would be the largest contributors to air pollutant emissions; minor emissions are expected from other Park improvements. Typical bunkhouse and restroom facilities are around 448 square feet and 400 square feet, respectively, in area. It is likely that trail construction would occur at the same time as the construction of these facilities. The simultaneous occurrence of these activities would represent the worst-case scenario for daily air emissions.

Vegetation along the trail corridor would be cleared by hand before construction, but removal of such vegetation would be minimized to the extent possible. Vegetation removed would be chipped or lopped and scattered near the trails. Topical exposed areas prone to erosion would be stabilized with certified weed free straw in accordance with the Storm Water Pollution Prevention Plan. The trail tread would be excavated using a Sweco trail dozer, a mini excavator, and other machinery capable of conforming to the dimensional requirements of the trails.

Construction of the trail system and the associated recreational facilities is expected to generate a maximum of 400 delivery truck trips.

Emissions of criteria air pollutants and precursors associated with project construction were modeled in accordance with methodologies recommended by PCAPCD. For Phase 1 of construction, truck traffic is expected to be approximately 10–20% of the total number of truck trips (i.e., 40–80 truck trips). However, exact project-specific data for each construction phase (e.g., required types and numbers of construction equipment and maximum daily acreage disturbed) were not available at the time of this analysis. Project-generated emissions were modeled based on general information provided in the project description (see Chapter 3.0 of this EIR) and default URBEMIS settings and parameters attributable to the construction period and site location.

Table 9-3 summarizes the modeled emissions for the construction phases. Construction-related effects on air quality were determined by comparing these modeling results with applicable PCAPCD significance thresholds. Refer to Appendix D of this EIR for detailed modeling input parameters and results.

As shown in Table 9-3, construction-related activities associated with the worst-case day would result in project-generated daily unmitigated emissions of approximately 43 lb/day of ROG, 67 lb/day of NO_x, and 48 lb/day of PM₁₀.

Table 9-3 Summary of Modeled Short-Term Daily Emissions of Criteria Air Pollutants and Precursors Associated with Project Construction (Unmitigated)				
Phase	Emissions (lb/day)			
	ROG	NO _x	PM ₁₀	PM _{2.5} ¹
Trail²				
Trail Construction	1.89	13.18	43.17	9.49
Facilities Construction³				
Site Grading	3.35	28.06	2.62	1.55
Building Construction	1.46	10.78	0.69	0.63
Architectural Coating	34.72	0.03	0.00	0.00
Road Improvements				
Paving	5.85	25.77	1.81	1.64
Worst-Case Total Daily Emissions (Unmitigated) ⁴	43	67	48	13
PCAPCD Significance Threshold	82	82	82	-
Notes: lb/day = pounds per day; NO _x = oxides of nitrogen; PCAPCD = Placer County Air Pollution Control District; PM _{2.5} = fine particulate matter; PM ₁₀ = respirable particulate matter; ROG = reactive organic gases ¹ PCAPCD has not adopted a significance threshold for PM _{2.5} ; however, the emissions are included for disclosure purposes. ² 14 miles of trail would be constructed. Emissions include on-road emissions resulting from truck trips. ³ Facilities construction phases are assumed to occur sequentially with no potential overlap between phases. ⁴ Worst-case daily emissions were estimated under the premise that trail construction, road improvements, and the facilities construction phase with the highest emissions for each pollutant could occur simultaneously. Note: Total daily emissions rounded to the nearest whole number. All emissions are for 2008. Refer to Appendix D for detailed assumptions and modeling output files. Source: Data modeled by EDAW in 2008				

Based on the modeling conducted, construction-related activities would result in ROG, NO_x, and PM₁₀ emissions that would not exceed PCAPCD's significance threshold of 82 lb/day. Thus, project-generated construction-related emissions of criteria air pollutants and precursor emissions would not violate or contribute substantially to an existing or projected air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations. As a result, this impact is considered less than significant.

IMPACT 9-2 **Air Quality—Long-Term, Regional Emissions of Criteria Air Pollutants and Ozone Precursors Associated with Project Operation.** *Operational activities associated with the proposed project would not result in emissions of ROG, NO_x, or PM₁₀ exceeding PCAPCD's significance threshold of 82 lb/day. Emissions of ROG and NO_x would also not exceed PCAPCD's cumulative threshold of 10 lb/day. Thus, emissions of criteria air pollutants and precursors associated with project operation would not violate or contribute substantially to an existing or projected air quality violation, expose sensitive receptors to substantial pollutant concentrations, or conflict with air quality planning effort.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Long-term operation of the proposed project (i.e., use and maintenance of the proposed trails and related recreational facilities) would not result in the use of any new stationary sources of emissions in the project area. Implementation of the proposed project may result in area-source emissions from trail landscape activities and use of heating fuels at the buildings. The trail system and recreational facilities would be designed to be as low maintenance as possible, and in most instances would not require use of mobilized or mechanical equipment. The use of the bunkhouses would be sporadic and would lead to minor emissions.

In addition, the proposed project would result in additional vehicle trips on local roadways because of an increase in visitors to the Park. Regional mobile-source emissions were modeled based on the trip generation data described in Chapter 8.0, "Transportation and Circulation." The project would generate as much as 255 one-way weekday and 460 one-way weekend daily trips during peak periods. Mobile-source emissions were modeled based on weekend trips because that would represent the worst case for daily emissions. Weekday daily emissions would be lower than the emissions caused by weekend traffic. It may be noted that peak usage periods for the Park would tend to coincide with times of higher air quality. Usage tends to drop during times of high heat and poor air quality.

Table 9-4 summarizes the modeled emissions of criteria air pollutants and precursors associated with project operation. Operational air quality impacts were determined by comparing these modeling results with applicable PCAPCD thresholds. Refer to Appendix D of this EIR for detailed modeling input parameters and results.

As shown in Table 9-4, operational activities would result in project-generated daily unmitigated emissions of approximately 4 lb/day of ROG, 7 lb/day of NO_x, and 6 lb/day of PM₁₀.

Based on the modeling conducted, operational activities would not result in project-generated emissions of ROG, NO_x, and PM₁₀ exceeding PCAPCD's applicable thresholds of 82 lb/day. Emissions of ROG and NO_x would also not exceed PCAPCD's cumulative significance threshold of 10 lb/day. In addition, PCAPCD relies, to a certain degree, on land use designations contained in general plan documents applicable to its jurisdiction. PCAPCD refers to the contents of approved general plans to forecast, inventory, and allocate regional emissions from land use and development-related sources. These emissions budgets are used in statewide air quality attainment

planning efforts. Because the proposed project would be consistent with the land use designations contained in the General Plan, emissions associated with the proposed land uses would have been accounted for in regional air quality planning efforts.

Source	Emissions (lb/day)			
	ROG	NO _x	PM ₁₀	PM _{2.5} ¹
Completion of Project Construction				
Mobile Source	4.43	7.23	5.93	1.16
Total Unmitigated	4.43	7.23	5.93	1.16
PCAPCD Significance Threshold	82	82	82	–
Notes: lb/day = pounds per day; NO _x = oxides of nitrogen; PCAPCD = Placer County Air Pollution Control District; PM _{2.5} = fine particulate matter; PM ₁₀ = respirable particulate matter; ROG = reactive organic gases ¹ PCAPCD has not adopted a significance threshold for PM _{2.5} ; however, the emissions are included for disclosure purposes. Refer to Appendix D for detailed assumptions and modeling output files. Source: Data modeled by EDAW in 2008				

In addition, long-term use and maintenance of the proposed trails and associated recreational facilities would not result in the operation of any new stationary sources of air emissions in the project area.

Thus, emissions of criteria air pollutants and precursors associated with project operation would not violate or contribute substantially to an existing or projected air quality violation, expose sensitive receptors to substantial pollutant concentrations and/or conflict with air quality planning effort. As a result, this impact would be less than significant.

IMPACT 9-3 **Air Quality—Exposure of Sensitive Receptors to Emissions of Toxic Air Contaminants.** *The proposed project would not expose sensitive receptors to substantial emissions of TACs during project construction because construction emissions would be temporary and would rapidly dissipate with distance from the source. However, construction workers and surrounding residents could be exposed to dust from asbestos rock and soils during project construction.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 9-1: Conduct On-Site Soil Testing and Prepare and Implement an Asbestos Dust Control Plan, If Needed*

Residual Significance *Less than Significant*

The potential for exposure of sensitive receptors to emissions of TACs from on-site sources during project construction and exposure to emissions from operational sources are discussed separately below.

On-Site Emissions Associated with Project Construction

Exhaust from off-road, heavy-duty diesel equipment used for site preparation (e.g., excavation, grading, and clearing), as well as paving, application of architectural coatings, and other miscellaneous project construction

activities would result in short-term emissions of diesel PM. Diesel PM was identified as a TAC by ARB in 1998. The potential cancer risk from the inhalation of diesel PM, as discussed below, outweighs the potential noncancer health impacts (ARB 2003). PCAPCD has not adopted a methodology for analyzing such impacts.

The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC to be compared to applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. Thus, the risks estimated for such an individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period and duration of activities associated with the proposed project (Salinas, pers. comm., 2004). The use of off-road heavy-duty diesel equipment would be temporary. For this reason, combined with the highly dispersive properties of diesel PM (Zhu et al. 2002) and further reductions in exhaust emissions, emissions of TACs associated with project construction would not expose sensitive receptors to substantial emissions of TACs.

Because the project area is located in an area that is moderately likely to contain naturally occurring asbestos, ground disturbance activities during construction could expose construction workers and surrounding residents to dust from rocks and soil containing naturally occurring asbestos. Some portions of the project area could contain serpentine or ultramafic rock that is common to foothill areas of the county. These types of rock contain thin veins of asbestos that can become airborne when disturbed by grading or mining. Overall, the amount of asbestos is relatively small and typically amounts to less than 1% of the total rock mass. Nevertheless, when material containing naturally occurring asbestos is disturbed, asbestos fibers may be released and become airborne, thereby creating a potential health hazard. Thus, this impact would be potentially significant.

Emissions from On-Site Stationary, Mobile, and Area Sources during Project Operation

There are no major existing stationary sources of TACs within 2 miles of the project area. Vehicles on Garden Bar Road, Mears Drive, Mt. Pleasant Road, Mt. Vernon Road, and other roads in the vicinity are sources of diesel PM and other TACs associated with vehicle exhaust. Project implementation would not lead to the operation of any stationary sources of TACs. Mobile sources of TACs include land uses that involve the long-term use of heavy-duty diesel trucks. Implementation of the proposed project would not lead to the development of any facilities that would require the long-term use of heavy-duty diesel trucks (e.g., loading docks).

The project would have a potentially significant health hazard related to asbestos fibers. Implementation of Mitigation Measure 9-1 would reduce this impact to a less-than-significant level.

IMPACT **Air Quality—Long-Term (Local) Mobile-Source Emissions of Carbon Monoxide during Project**
9-4 **Operation.** *Long-term operational (local) mobile-source emissions of CO would not violate or contribute substantially to a violation of the CAAQS or NAAQS, nor would they expose sensitive receptors to substantial pollutant concentrations.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

CO concentration is a direct function of motor vehicle activity (e.g., idling time and traffic flow conditions), particularly during peak commute hours, and of meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses such as residential areas, schools, and hospitals. As a result, PCAPCD recommends analysis of CO emissions at a local rather than a regional level.

An appropriate qualitative screening procedure is provided in the procedures and guidelines contained in *Transportation Project-Level Carbon Monoxide Protocol*, published by the University of California, Davis, Institute of Transportation Studies, to determine whether a project poses the potential for a CO hotspot (UCD ITS 1997). A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. According to the protocol, projects may worsen air quality if they would do any of the following:

- ▶ increase the percentage of vehicles in cold-start modes by 2% or more,
- ▶ significantly increase traffic volumes (by 5% or more) over existing volumes, or
- ▶ worsen traffic flow, defined for signalized intersections as increasing average delay at intersections operating at level of service (LOS) E or F or causing an intersection that would operate at LOS D or better without the project to operate at LOS E or F.

The project’s traffic analysis (see Chapter 8.0, “Transportation and Circulation”) indicates that all signalized intersections that were analyzed would operate at LOS E or LOS F under cumulative conditions without and with the project. Thus, long-term, local mobile-source emissions of CO associated with project operation would not violate or substantially contribute to a violation of the CAAQS or NAAQS, nor would they expose sensitive receptors to substantial pollutant concentrations. As a result, this impact is considered less than significant.

As noted previously, the project area is located in an area that is moderately likely to contain naturally occurring asbestos. Unlike during short-term construction activities, long-term operation of the project would not result in ground disturbance and associated potential for this material to become airborne. Thus, assuming average conditions, exposure of operational users of the proposed project to naturally occurring asbestos fibers would be minimal, and would not be expected to result in a health hazard. This impact would be less than significant.

IMPACT 9-5 **Air Quality—Exposure of Sensitive Receptors to Odors.** *Construction of the proposed trails and recreational facilities would result in diesel exhaust emissions from on-site construction equipment. However, these emissions would be intermittent and would dissipate rapidly with an increase in distance from the source. The proposed project would not be a major source of odors.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptor. Although offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

The proposed project would result in diesel exhaust emissions from on-site construction equipment during project construction. Such emissions would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance.

In addition, the proposed project would not include the long-term operation of any new sources of odor; therefore, the project would not create objectionable odors affecting a substantial number of people. This impact would be less than significant.

9.4 MITIGATION MEASURES

Mitigation Measure 9-1: Conduct On-Site Soil Testing and Prepare and Implement an Asbestos Dust Control Plan, If Needed.

Mitigation Measure 9-1 applies to Impact 9-3.

Prior to the start of construction activities, the County shall test the on-site soils for the presence of asbestos. If asbestos is not present in on-site soils, no further measured would be required. If asbestos is determined to be present on-site, the County shall prepare and implement an asbestos dust control plan as described below.

The project shall comply with PCAPCD Rule 228 for fugitive dust control. In addition, the County shall prepare an asbestos dust control plan for approval by PCAPCD as required in Section 93105 of the California Health and Safety Code, "Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations." The asbestos dust control plan shall specify measures, such as periodic watering to reduce airborne dust and ceasing construction during high winds to ensure that no visible dust crosses the property line. The County shall submit the plan to the County Planning Department for review and PCAPCD for review and approval before construction of the first project phase. Approval of the plan must be received from PCAPCD before any asbestos-containing rock (serpentine) can be disturbed. Upon approval of the asbestos dust control plan by PCAPCD, the County shall ensure that construction contractors implement the terms of the plan throughout the construction period.

Implementation of Mitigation Measure 9-1 would reduce the potentially significant impact related to asbestos exposure to a less-than-significant level.

10.0 NOISE

This chapter includes a description of ambient-noise conditions, a summary of applicable regulations related to noise and vibration, and an analysis of potential noise impacts of the proposed project. Mitigation measures are recommended as necessary to reduce significant noise impacts.

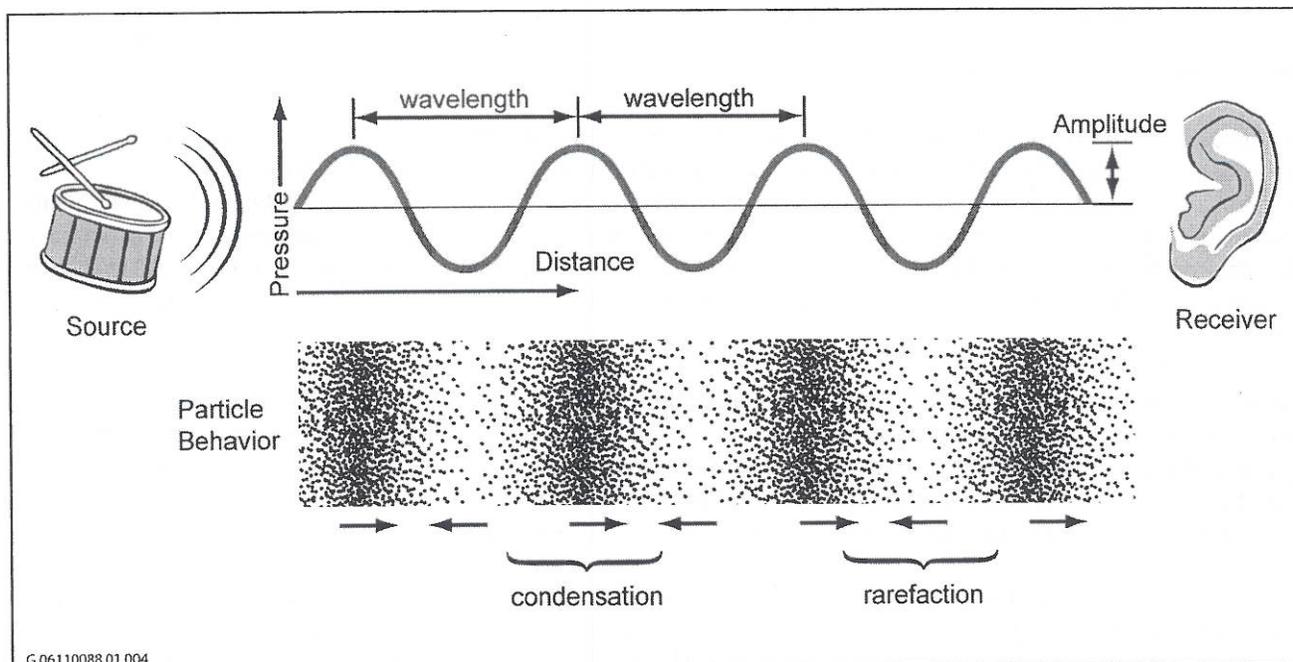
10.1 ENVIRONMENTAL SETTING

10.1.1 SOUND FUNDAMENTALS

Noise is generally defined as sound that is loud, disagreeable, unexpected, or unwanted. Sound, as described in more detail below, is mechanical energy transmitted in the form of a wave by a disturbance or vibration that causes pressure variation in air that the human ear can detect.

Sound Properties

A sound wave is introduced into a medium (air) by a vibrating object. The vibrating object (e.g., vocal cords, the string of a guitar or the diaphragm of a radio speaker) is the source of the disturbance that moves through the medium (Exhibit 10-1). Regardless of the type of source creating the sound wave, the particles of the medium through which the sound moves are vibrating in a back-and-forth motion at a given rate (frequency). The frequency of a wave refers to how often the particles vibrate when a wave passes through the medium. The frequency of a wave is measured as the number of complete back-and-forth vibrations of a particle per unit of time. One complete back-and-forth vibration is called a cycle. If a particle of air undergoes 1,000 cycles in 2 seconds, then the frequency of the wave would be 500 cycles per second. The common unit used for frequency is in cycles per second, called Hertz (Hz).



Source: Data provided by EDAW in 2007

Sound Wave Properties

Exhibit 10-1

Each particle vibrates as a result of the motion of its nearest neighbor. For example, the first particle of the medium begins vibrating at 500 Hz and sets the second particle of the medium into motion at the same frequency (500 Hz). The second particle begins vibrating at 500 Hz and thus sets the third particle into motion at 500 Hz. The process continues throughout the medium; hence each particle vibrates at the same frequency, which is the frequency of the original source. Subsequently, a guitar string vibrating at 500 Hz will set the air particles in the room vibrating at the same frequency (500 Hz), which carries a sound signal to the ear of a listener that is detected as a 500-Hz sound wave.

The back-and-forth vibration motion of the particles of the medium would not be the only observable phenomenon occurring at a given frequency. Because a sound wave is a pressure wave, a detector could be used to detect oscillations in pressure from high to low and back to high pressure. As the compression (high-pressure) and rarefaction (low-pressure) disturbances move through the medium, they would reach the detector at a given frequency. For example, a compression would reach the detector 500 times per second if the frequency of the wave were 500 Hz. Similarly, a rarefaction would reach the detector 500 times per second if the frequency of the wave were 500 Hz. Thus, the frequency of a sound wave refers not only to the number of back-and-forth vibrations of the particles per unit of time, but also to the number of compression or rarefaction disturbances that pass a given point per unit of time. A detector could be used to detect the frequency of these pressure oscillations over a given period of time. The period of the sound wave can be found by measuring the time between successive high-pressure points (corresponding to the compressions) or the time between successive low-pressure points (corresponding to the rarefactions). The frequency is simply the reciprocal of the period; thus an inverse relationship exists so that as frequency increases, the period decreases, and vice versa.

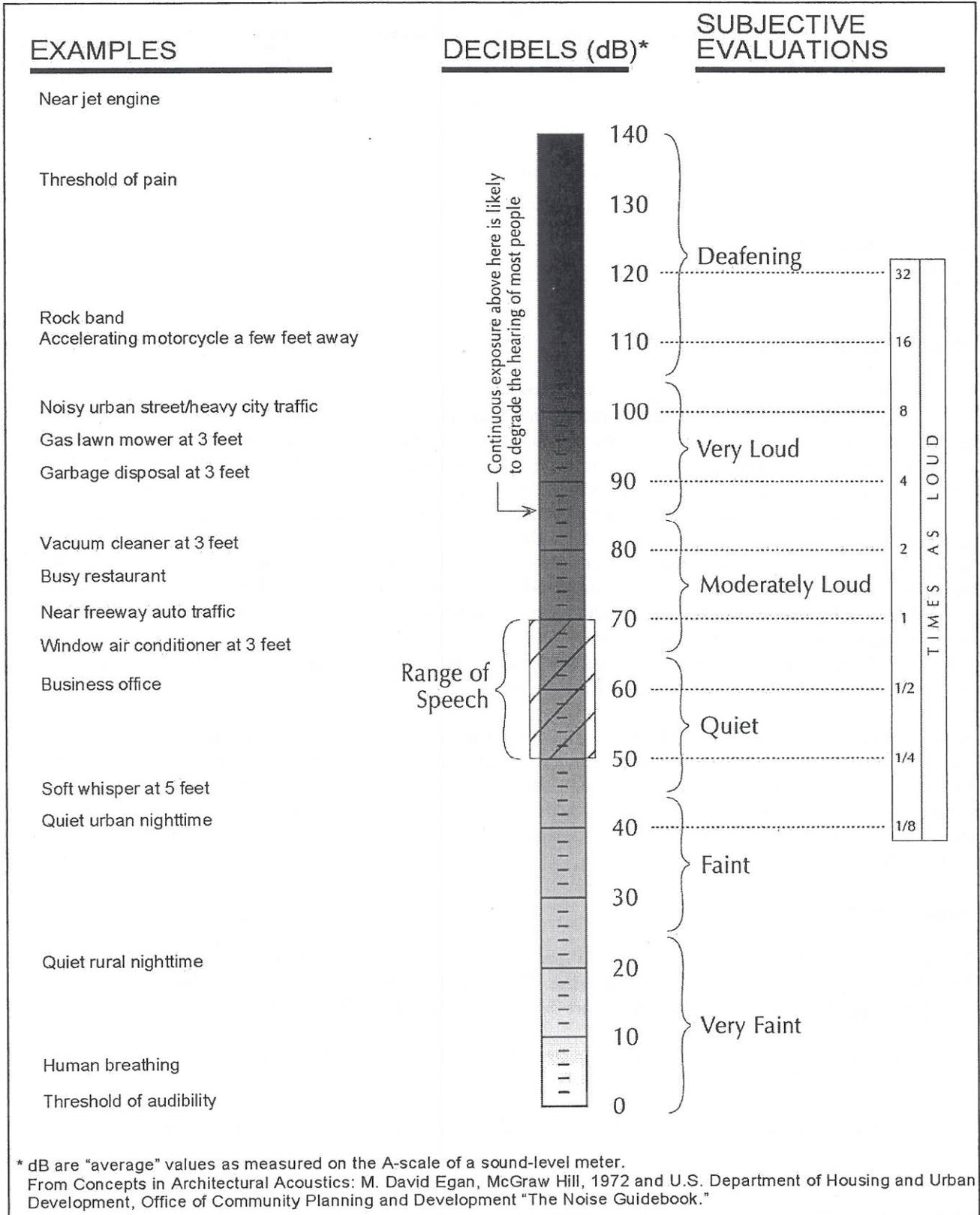
A wave is a phenomenon that transports energy along a medium. The amount of energy carried by a wave is related to the amplitude (loudness) of the wave. A high-energy wave is characterized by large amplitude; a low-energy wave is characterized by small amplitude. The amplitude of a wave refers to the maximum amount of displacement of a particle from its rest position. The energy transported by a wave is directly proportional to the square of the amplitude of the wave. This means that a doubling of the amplitude of a wave indicates a quadrupling of the energy transported by the wave.

Sound and the Human Ear

Because of the ability of the human ear to detect a wide range of sound-pressure fluctuations, sound-pressure levels are expressed in logarithmic units called decibels (dB) to avoid a very large and awkward range in numbers. The sound-pressure level in decibels is calculated by taking the log of the ratio between the actual sound pressure and the reference sound pressure and then multiplying by 20. The reference sound pressure is considered the absolute hearing threshold (Caltrans 1998). Use of this logarithmic scale reveals that the total sound from two individual 65-dB sources is 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB).

Because the human ear is not equally sensitive to all audible frequencies, a frequency-dependent rating scale was devised to relate noise to human sensitivity. An A-weighted dB (dBA) scale performs this compensation by discriminating against frequencies that are more sensitive to humans. The basis for compensation is the faintest sound audible to the average ear at the frequency of maximum sensitivity. This dBA scale has been chosen by most authorities for regulating environmental noise. Exhibit 10-2 presents typical indoor and outdoor noise levels.

With respect to how humans perceive and react to changes in noise levels, a 1-dBA increase is imperceptible, a 3-dBA increase is barely perceptible, a 6-dBA increase is clearly noticeable, and a 10-dBA increase is subjectively perceived as approximately twice as loud (Egan 1988), as presented in Table 10-1. Table 10-1 was developed on the basis of test subjects' reactions to changes in the levels of steady-state pure tones or broadband noise and to changes in levels of a given noise source. It is probably most applicable to noise levels in the range of 50–70 dBA because this is the usual range of voice and interior noise levels. For these reasons, a noise level increase of 3 dBA or more is typically considered a substantial degradation of the existing noise environment.



* dB are "average" values as measured on the A-scale of a sound-level meter.
 From Concepts in Architectural Acoustics: M. David Egan, McGraw Hill, 1972 and U.S. Department of Housing and Urban Development, Office of Community Planning and Development "The Noise Guidebook."

Source: Data compiled by EDAW in 2007

Typical Noise Levels

Exhibit 10-2

**Table 10-1
Subjective Reaction to Changes in Noise Levels of Similar Sources**

Change in Level (dBA)	Subjective Reaction	Factor Change in Acoustical Energy
1	Imperceptible (Except for Tones)	1.3
3	Just Barely Perceptible	2.0
6	Clearly Noticeable	4.0
10	About Twice (or Half) as Loud	10.0

Note: dBA = A-weighted decibels
Source: Egan 1988

Sound Propagation and Attenuation

As sound (noise) propagates from the source to the receptor, the attenuation, or manner of noise reduction in relation to distance, depends on surface characteristics, atmospheric conditions, and the presence of physical barriers. The inverse-square law describes the attenuation caused by the pattern in which sound travels from the source to receptor. Sound travels uniformly outward from a point source in a spherical pattern with an attenuation rate of 6 dBA per doubling of distance (dBA/DD). However, from a line source (e.g., a road), sound travels uniformly outward in a cylindrical pattern with an attenuation rate of 3 dBA/DD. The surface characteristics between the source and the receptor may result in additional sound absorption and/or reflection. Soft surfaces such as dirt cover or vegetation can provide an additional 1.5 dBA/DD. Hard surfaces such as parking lots, water, and other roadway surfaces would provide additional attenuation. Atmospheric conditions such as wind speed, temperature, and humidity also affect noise attenuation. Furthermore, the presence of a barrier between the source and the receptor may also attenuate noise levels. The actual amount of attenuation depends on the size of the barrier and the frequency of the noise. A noise barrier may consist of any natural or human-made feature such as a hill, grove of trees, building, wall, or berm (Caltrans 1998).

All buildings provide some exterior-to-interior noise reduction. A building constructed with a wood frame and a stucco or wood sheathing exterior typically provides a minimum exterior-to-interior noise reduction of 25 dBA with its windows closed; by contrast, a building constructed of a steel or concrete frame, a curtain wall or masonry exterior wall, and fixed plate-glass windows one-quarter inch thick typically provides an exterior-to-interior noise reduction of 30–40 dBA with its windows closed (Paul S. Veneklasen & Associates 1973, cited in Caltrans 2002).

Noise Descriptors

The selection of a proper noise descriptor for a specific source depends on the spatial and temporal distribution, duration, and amplitudinal fluctuation of the noise. The noise descriptors most often used when dealing with traffic, community, and environmental noise are defined below (Caltrans 1998, Lipscomb and Taylor 1978):

- ▶ L_{max} (*maximum noise level*): The maximum instantaneous noise level during a specific period of time. The L_{max} may also be referred to as the “peak (noise) level.”
- ▶ L_{min} (*minimum noise level*): The minimum instantaneous noise level during a specific period of time.
- ▶ L_X (*statistical descriptor*): The noise level exceeded X% of a specific period of time.
- ▶ L_{eq} (*equivalent noise level*): The energy mean (average) noise level. The instantaneous noise levels during a specific period of time in dBA are converted to relative energy values. From the sum of the relative energy values, an average energy value is calculated, which is then converted back to dBA to determine the L_{eq} .

In noise environments determined by major noise events, such as aircraft overflights, the L_{eq} value is heavily influenced by the magnitude and number of single events that produce the high noise levels.

- ▶ *L_{dn} (day-night noise level)*: The 24-hour L_{eq} with a 10-dBA “penalty” for noise events that occur during the noise-sensitive hours between 10 p.m. and 7 a.m. In other words, 10 dBA is “added” to noise events that occur in the nighttime hours, and this generates a higher reported noise level when determining compliance with noise standards. The L_{dn} attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.
- ▶ *CNEL (community noise equivalent level)*: A noise level similar to the L_{dn} described above, but with an additional 5-dBA “penalty” added to noise events that occur during the noise-sensitive hours between 7 p.m. and 10 p.m., which are typically reserved for relaxation, conversation, reading, and television. If the same 24-hour noise data are used, the reported CNEL is typically approximately 0.5 dBA higher than the L_{dn} .
- ▶ *SENL (single-event [impulsive] noise level)*: A receiver’s cumulative noise exposure level from a single impulsive noise event, which is an acoustical event of short duration that involves a change in sound pressure above some reference value. SENLs typically represent the noise events used to calculate the L_{eq} , L_{dn} , and CNEL.

Community noise is commonly described in terms of the ambient noise level, the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average (equivalent) sound level, L_{eq} , which corresponds to a steady-state sound level that contains the same total energy as a time-varying signal over a given time period (usually 1 hour). The L_{eq} is the foundation of the composite noise descriptors such as L_{dn} and CNEL, as defined above, and shows a positive correlation with community response to noise.

Negative Effects of Noise on Humans

Negative effects of noise exposure include physical damage to the human auditory system, interference, and disease. Physical damage to the auditory system can lead to gradual or traumatic hearing loss. Gradual hearing loss is caused by sustained exposure to moderately high noise levels over an extended period of time; traumatic hearing loss is caused by sudden exposure to extremely high noise levels over a brief period. Both gradual and traumatic hearing loss may result in permanent hearing damage. In addition, noise may interfere with or interrupt sleep, relaxation, recreation, and communication. Although most interference may be classified as annoying, the inability to hear a warning signal is considered dangerous. Noise may also contribute to diseases associated with stress, such as hypertension, anxiety, and heart disease. The degree to which noise contributes to such diseases depends on the frequency, bandwidth, noise level, and duration of exposure (Caltrans 1998).

Vibration

Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structureborne noise. Both natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment) can result in groundborne vibration. Some vibration sources, such as factory machinery, are continuous; others, such as explosions, are transient. As is the case with airborne sound, groundborne vibration may be described by amplitude and frequency.

Vibration amplitude is typically expressed in peak particle velocity (PPV) or root mean square (RMS), as in RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is the metric often used to describe blasting vibration and other vibration sources that result in structural stresses in buildings (FTA 2006, Caltrans 2002).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. In a sense, the human body responds to average vibration amplitude. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a period of 1 second. As with airborne sound, the RMS velocity is often expressed in decibel notation as velocity decibels (VdB), which serves to compress the range of numbers required to describe vibration (FTA 2006). This velocity decibel scale is based on a reference value of 1 microinch per second ($\mu\text{in}/\text{sec}$).

The background vibration-velocity level typical of residential areas is approximately 50 VdB. Groundborne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (FTA 2006).

Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration is rarely perceptible. The range of human perception of vibration is from approximately 50 VdB, the typical background vibration-velocity level, to 100 VdB, the general threshold where minor damage can occur in fragile buildings. Construction activities can generate groundborne vibrations, which can pose a risk to nearby structures. Constant or transient vibration can weaken structures, crack facades, and disturb occupants (FTA 2006).

Construction-generated vibration can be transient, random, or continuous. Transient construction vibration is generated by blasting, impact pile driving, and wrecking balls. Random vibration can result from jackhammers, pavement breakers, and heavy construction equipment. Continuous vibration results from vibratory pile drivers, large pumps, horizontal directional drilling, and compressors. Table 10-2 summarizes the general human response to different levels of groundborne vibration.

Table 10-2 Human Response to Different Levels of Groundborne Vibration	
Vibration-Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there is an infrequent number of events per day.

Note: VdB = velocity decibels referenced to 1 $\mu\text{in}/\text{sec}$ and based on the root mean square vibration velocity.
Source: FTA 2006

10.1.2 EXISTING NOISE ENVIRONMENT

EXISTING SENSITIVE LAND USES

Land uses that are sensitive to noise and vibration are those uses where exposure would result in adverse effects (i.e., annoyance and/or structural damage) and uses where quiet is an essential element of their intended purpose. Residences are of primary concern because of the potential for increased, prolonged exposure of individuals to both interior and exterior noise or vibration. Other noise-sensitive land uses are hospitals, convalescent facilities, hotels, churches, libraries, and other uses where low interior noise levels are essential.

Noise-sensitive land uses located near the project area are 12 rural homes to the south, off Miller Lane and Godley Road. The closest of these residences is approximately 800 feet from the southern boundary of the Park. The next

closest residential area is located along Garden Bar Road approximately 1,600 feet northwest of the Park’s west boundary.

EXISTING NOISE SOURCES

The project area is located in an unincorporated area of Placer County. It was used for cattle grazing in the recent past, and portions of the property continue to be used for this purpose. Adjacent land uses include rural residential home sites and agricultural activities, mostly cattle grazing and raising other livestock and recreational uses on the Didion Ranch portion of the Park. The local noise environment is rural. Agricultural activities, birds, aircraft flyovers, plants rustling, and minor vehicle traffic are the audible noise sources. Natural sounds from meteorological effects (e.g., wind rustling plants, running water) and wildlife are the predominant ambient noise source.

EXISTING-NOISE SURVEY

To quantify the existing noise environment in the project vicinity, three short-term noise measurements were collected on Thursday, June 21, 2007, using a Larson-Davis Model 824 sound meter. The sound meter was calibrated immediately before each measurement, and measurements were conducted in accordance with the acoustical standards of the American National Standards Institute. As presented in Table 10-3, noise levels in the project vicinity range from 35.2 dBA L_{eq} to 42.1 dBA L_{eq} , with L_{max} ranges from 47.7 dBA to 61.4 dBA (readings at the high end of the range were generated by aircraft flyovers). Noise sources noted during the measurements included buzzing insects, singing birds, and wind. Noise associated with agricultural uses—tractors, yelling voices, cows, and horses—was also reflected in the measurements. Exhibit 10-3 shows the measurement locations.

**Table 10-3
Existing Ambient Noise Levels**

Measurement Number ¹	Location	Monitoring Period	Sound Level (dBA) ²		
			L_{eq} ³	L_{min} ⁴	L_{max} ⁵
1	Northeast corner	11:00–11:15 a.m.	39.5	31.5	53.4
2	Southern border	10:00–10:15 a.m.	42.1	26.4	61.4
3	Northwest corner	8:40–9:05 a.m.	35.2	28.6	47.7

¹ Measurement locations are shown in Exhibit 10-3.

² dBA (A-weighted decibels): The weighted sound level measurement scale specifically adjusted to human hearing.

³ L_{eq} (equivalent noise level): The energy mean (average) noise level.

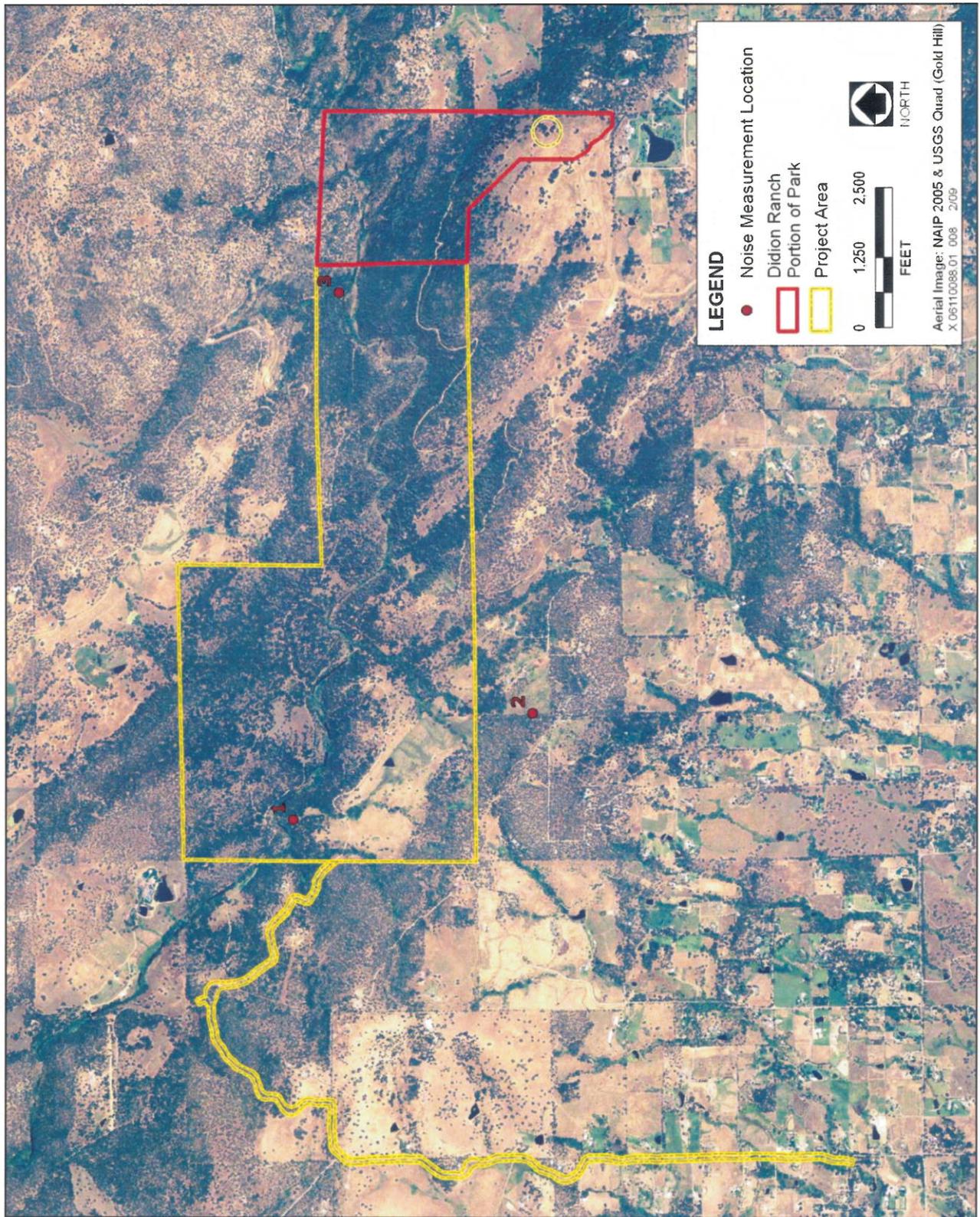
⁴ L_{min} (minimum noise level): The minimum instantaneous noise level during a specific period of time.

⁵ L_{max} (maximum noise level): The maximum instantaneous noise level during a specific period of time.

Source: Measurements collected by EDAW on Thursday, June 21, 2007

EXISTING TRAFFIC NOISE LEVELS

Existing traffic noise levels were estimated using the Federal Highway Administration’s (FHWA’s) traffic noise prediction model (FHWA-RD-77-108) and traffic data obtained from the traffic analysis prepared for this project (Chapter 8.0, “Transportation and Circulation”). Table 10-4 presents the predicted CNEL noise levels at 50 feet from the centerline of the near travel lane and distances from roadway centerline to the 55-, 60-, 65-, and 70-dBA CNEL contours for existing average daily traffic (ADT) volumes. Additional input data included day/night percentages of autos, medium and heavy trucks, vehicle speeds, ground attenuation factors, and roadway widths. Actual noise levels vary from day to day, depending on local traffic volumes, shielding from existing structures, variations in attenuation rates attributable to changes in surface parameters, and meteorological conditions.



Source: Data compiled by EDAW in 2007

Ambient Noise Measurement Locations

Exhibit 10-3

Table 10-4 Summary of Modeled Existing Vehicular Traffic Noise Levels					
Roadway Segment and Location	Distance (feet) from Roadway Centerline to CNEL				CNEL (dBA) 50 Feet from Centerline of Near Travel Lane
	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL	
Weekday					
Garden Bar Road, north of Mt. Pleasant Road	2	4	8	17	47.9
Garden Bar Road, south of Mt. Pleasant Road	5	10	23	49	54.8
Mt. Pleasant Road, west of Garden Bar Road	4	8	18	39	53.4
Mt. Pleasant Road, east of Garden Bar Road	7	15	33	70	57.2
Mears Drive, north of Mt. Vernon Road	2	4	9	20	49.1
Weekend					
Garden Bar Road, north of Mt. Pleasant Road	2	3	7	16	47.5
Garden Bar Road, south of Mt. Pleasant Road	4	9	20	42	53.9
Mt. Pleasant Road, west of Garden Bar Road	3	7	16	34	52.6
Mt. Pleasant Road, east of Garden Bar Road	6	13	28	60	56.2
Mears Drive, north of Mt. Vernon Road	2	4	8	18	48.3
Notes: CNEL = community noise equivalent level; dBA = A-weighted decibels. Calculated noise levels do not consider any shielding or reflection of noise by existing structures, vegetation, or terrain features; or noise contribution from other sources. See modeling results in Appendix E for further detail. Source: Modeling performed by EDAW in 2007					

10.2 REGULATORY SETTING

10.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws related to noise are applicable to the proposed project. However, the Federal Transit Administration (FTA) has set forth guidelines for maximum-acceptable vibration criteria for different types of land uses to address the human response to groundborne vibration (FTA 2006):

- ▶ 65 VdB (referenced to 1 μ in/sec and based on the RMS velocity amplitude) for land uses where low ambient vibration is essential for interior operations (e.g., hospitals, high-tech manufacturing, laboratory facilities);
- ▶ 80 VdB for residential uses and buildings where people normally sleep; and
- ▶ 83 VdB for institutional land uses with primarily daytime operations (e.g., schools, churches, clinics, offices).

Standards have also been established to address the potential for groundborne vibration to cause structural damage to buildings. These standards were developed by the Committee of Hearing, Bio Acoustics, and Bio Mechanics at the request of the U.S. Environmental Protection Agency (EPA) (FTA 2006). For fragile structures, the committee recommends a maximum limit of 0.25 in/sec PPV (FTA 2006).

10.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

The *State of California General Plan Guidelines*, published by the Governor's Office of Planning and Research (2003), provides guidance for the acceptability of projects within specific CNEL/L_{dn} contours. Table 10-5 presents acceptable and unacceptable community-noise-exposure limits for various land-use categories. Generally, residential uses are considered to be acceptable in areas where exterior noise levels do not exceed 60 dBA CNEL/L_{dn}. Residential uses are normally unacceptable in areas exceeding 70 dBA CNEL/L_{dn} and conditionally acceptable within 55–70 dBA CNEL/L_{dn}. Schools are normally acceptable in areas up to 70 dBA CNEL/L_{dn} and normally unacceptable in areas exceeding 70 dBA CNEL/L_{dn}. Recreation uses are normally acceptable in areas up to 75 dBA CNEL/L_{dn}. The guidelines also present adjustment factors that may be used to arrive at noise-acceptability standards that reflect the noise-control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise issues.

Land Use Category	Community Noise Exposure (CNEL/L _{dn} , dBA)			
	Normally Acceptable ¹	Conditionally Acceptable ²	Normally Unacceptable ³	Clearly Unacceptable ⁴
Residential—Low-Density Single-Family, Duplex, Mobile Home	<60	55–70	70–75	75+
Residential—Multiple-Family	<65	60–70	70–75	75+
Transient Lodging, Motel, Hotel	<65	60–70	70–80	80+
School, Library, Church, Hospital, Nursing Home	<70	60–70	70–80	80+
Auditorium, Concert Hall, Amphitheater		<70	65+	
Sports Arenas, Outdoor Spectator Sports		<75	70+	
Playground, Neighborhood Park	<70		67.5–75	72.5+
Golf Courses, Stable, Water Recreation, Cemetery	<75		70–80	80+
Office Building, Business Commercial and Professional	<70	67.5–77.5	75+	
Industrial, Manufacturing, Utilities, Agriculture	<75	70-80	75+	

Notes:

CNEL = community noise equivalent level; dBA = A-weighted decibels; L_{dn} = day-night noise level (the 24-hour energy mean [average] noise level with a 10-dBA "penalty" for noise events that occur during the noise-sensitive hours between 10 p.m. and 7 a.m.)

¹ Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

² New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

³ New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.

⁴ New construction or development should generally not be undertaken.

Source: Governor's Office of Planning and Research 2003

With respect to vibration, the California Department of Transportation (Caltrans) recommends a more conservative threshold of 0.2 in/sec PPV for normal residential buildings and 0.08 in/sec PPV for old or historically significant structures (Caltrans 2002) to protect fragile, historic, and residential structures. These standards are more stringent than the federal guidance established by the Committee of Hearing, Bio Acoustics, and Bio Mechanics, presented above.

10.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

PLACER COUNTY GENERAL PLAN

The following are the relevant policies identified by the *Placer County General Plan* (Placer County 1994) for noise.

- ▶ **Policy 9.A.2.** The County shall require that noise created by new nontransportation noise sources be mitigated so as not to exceed the noise level standards of Table 9-1 [Table 10-6 in this document] as measured immediately within the property line of lands designated for noise-sensitive uses.
- ▶ **Policy 9.A.9.** Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 9-3 [Table 10-7 in this document] at outdoor activity areas or interior spaces of existing noise-sensitive land uses.
- ▶ **Policy 9.A.12.** Where noise mitigation measures are required to achieve the standards of Tables 9-1 and 9-3 [Tables 10-6 and 10-7 of this document, respectively], the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

Table 10-6 Allowable L_{dn} Noise Levels Within Specified Zone Districts¹ Applicable to New Projects Affected by or Including Nontransportation Noise Sources		
Zone District of Receptor	CNEL/L _{dn} (dBA) at Property Line of Receiving Use	Interior Spaces (dBA) ²
Residential Adjacent to Industrial ³	60	45
Other Residential ⁴	50	45
Office/Professional	70	45
Transient Lodging	65	45
Neighborhood Commercial	70	45
General Commercial	70	45
Heavy Commercial	75	45
Limited Industrial	75	45
Highway Service	75	45
Shopping Center	70	45
Industrial	–	45
Industrial Park	75	45
Industrial Reserve	–	–
Airport	–	45
Unclassified	–	–
Farm	– ⁶	–
Agriculture Exclusive	– ⁶	–
Forestry	–	–
Timberland Preserve	–	–
Recreation & Forestry	70	–
Open Space	–	–
Mineral Reserve	–	–

PLACER COUNTY NOISE ORDINANCE

The Placer County Noise Ordinance (Article 9.36 of the Placer County Code), which was adopted in March 2004, defines sound-level performance standards for sensitive receptors. The ordinance forbids any person to create (or allow the creation of) sound on property he or she owns, leases, occupies, or otherwise controls that causes the exterior sound level—measured at the property line of any affected sensitive receptor—to exceed the ambient sound level by 5 dBA or exceed the standards shown in Table 10-8 below, whichever is greater.

Table 10-8 On-Site Sound Level Standards in the Placer County Noise Ordinance		
Sound Level Descriptor (dBA)	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq}	55	45
L_{max}	70	65

Notes: dBA = A-weighted decibels; L_{eq} = equivalent noise level (the 24-hour energy mean [average] noise level); L_{max} = maximum noise level (the maximum instantaneous noise level during a specific period of time)
Source: Placer County 2004

Each of the sound-level standards specified in Table 10-8 shall be reduced by 5 dBA for simple tone noises, consisting of speech and music. However, in no case shall the sound-level standard be lower than the ambient sound level plus 5 dBA.

According to Section 9.36.030, “Exemptions,” some noise-generating activities are exempt from the above noise ordinance standards. These activities include construction that is performed between 6 a.m. and 8 p.m., Monday through Friday, and between 8 a.m. and 8 p.m. Saturday and Sunday, provided that all construction equipment is fitted with factory-installed muffler devices and maintained in good working order.

10.3 IMPACTS

10.3.1 ANALYSIS METHODOLOGY

Land use types and major noise sources in the vicinity of the project area were identified based on existing documentation (e.g., the *Placer County General Plan*) and site reconnaissance data. To assess potential short-term impacts from construction noise, noise-sensitive receptors and their relative exposure (considering topographic barriers and distance) were identified. Noise levels of specific construction equipment were determined and resultant noise levels at those receptors were calculated.

FHWA’s traffic noise prediction model was used to model traffic noise levels along affected roadways, based on daily volumes and the distribution of traffic, from the traffic analysis prepared for the project (Kd Anderson & Associates 2008). The contribution of the proposed project to the existing traffic noise levels along area roadways was determined by comparing the modeled noise levels at 50 feet from the centerline of the near travel lane under no-project and plus-project conditions.

Groundborne vibration impacts were qualitatively assessed based on existing documentation (e.g., vibration levels produced by specific construction equipment) and the distance of sensitive receptors from the given source.

Predicted noise levels were compared with applicable standards to determine significance. Mitigation measures were developed for significant noise impacts.

10.3.3 THRESHOLDS OF SIGNIFICANCE

Based on applicable Placer County noise regulations, the Placer County CEQA checklist, and the State CEQA Guidelines, the proposed project would result in a significant noise impact if it would:

- ▶ result in short-term noise levels from construction exceeding the applicable County noise standards (Table 10-6 and Table 10-7), or increase substantially (by greater than 3 dBA) ambient noise at nearby existing noise-sensitive receptors during the more sensitive early morning, evening, and nighttime hours of the day (i.e., outside the hours considered exempt by the Placer County Noise Ordinance [6 a.m.–8 p.m., Monday–Friday and 8 a.m.–8 p.m. Saturday and Sunday]);
- ▶ result in short-term (construction) or long-term (operational) noise levels from traffic exceeding the applicable County noise standards for transportation noise sources (Table 10-7), or increase substantially (by greater than 3 dBA) ambient noise levels at nearby existing noise-sensitive receptors;
- ▶ result in long-term (operational) noise levels from nontransportation stationary or area sources exceeding applicable County noise standards (Table 10-6 and/or Table 10-8), or increase substantially (by greater than 3 dBA) ambient noise at nearby existing noise-sensitive receptors; or
- ▶ expose persons to or generate excessive groundborne vibration or noise levels exceeding Caltrans’s recommended standards for preventing structural building damage (0.2 in/sec PPV and 0.08 in/sec PPV, respectively, for normal and historical buildings) or FTA’s maximum-acceptable vibration standard with respect to human response (80 VdB for residential structures) at nearby existing or proposed vibration-sensitive land uses (e.g., residences).

10.3.2 IMPACT ANALYSIS

IMPACT 10-1 **Noise—Short-Term Construction-Generated Noise Levels Exceeding County Standards.** *Short-term exterior noise levels at the closest existing noise-sensitive receptor could exceed 68 dBA without feasible noise controls, which would exceed the applicable County nighttime standard of 45 dBA at existing nearby off-site sensitive land uses. However, construction would be limited to daytime hours.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Regional Park Facility and Infrastructure Construction

Construction activities in the project area would include site preparation (e.g., clearing, excavation, and grading), staging, trenching, paving, equipment installation, finishing, cleanup, and other miscellaneous activities. No pile driving or rock blasting would occur as part of project construction.

The trails would be constructed by hand and/or with a small Sweco trail dozer. Hand construction of the trails would require one or more crews (up to approximately 15 members) using hand tools and chain saws. Other equipment used for trail construction would include a mini excavator, haul trucks, and other types of machinery (e.g., graders) that would fit the size constraints of the 15- to 20-foot-wide trail corridors. Larger equipment such

as graders, excavators, pavers, pneumatic tools, dozers, and haul trucks would be used to construct the proposed roads, parking areas, restrooms, and other facilities.

According to EPA, and as indicated in Table 10-9, noise levels from individual construction equipment ranges from 79 dBA to 91 dBA at 50 feet. The simultaneous operation of on-site construction equipment associated with the project, as identified above, could result in combined intermittent noise levels up to approximately 93 dBA at 50 feet from the construction activity. Based on the equipment noise levels and a typical noise-attenuation rate of 6 dBA/DD, exterior noise levels at the closest existing noise-sensitive receptor (located approximately 800 feet south of the project boundary) could exceed 68 dBA without feasible noise controls. Thus, if construction activities were to occur during the more noise-sensitive hours of the day (i.e., hours not exempt under the Placer County Noise Ordinance) or if construction equipment were not properly equipped with noise control devices, construction-generated noise levels could exceed the applicable County nighttime standard of 45 dBA (Table 10-8) and substantially increase ambient noise at existing nearby sensitive receptors.

Table 10-9 Typical Construction-Equipment Noise Levels		
Type of Equipment	Noise Level (dBA) at 50 feet	
	Without Feasible Noise Control	With Feasible Noise Control ¹
Dozer or Tractor	80	75
Excavator	88	80
Scraper	88	80
Front-End Loader	79	75
Backhoe	85	75
Grader	85	75
Truck	91	75
Compactor	81	75
Paver	89	80
Pavement Scarifier	90	-
Drill	98	80
Generator	78	75

Notes: dBA = A-weighted decibels
¹ Feasible noise control includes the use of intake mufflers, exhaust mufflers, and engine shrouds in accordance with manufacturers' specifications.
Sources: EPA 1971, FTA 2006, FHWA 2006

However, as stated in Chapter 3.0, "Project Description," construction activities for the project would be limited to 6 a.m.–8 p.m., Monday–Friday, during daylight saving time and 7 a.m.–8 p.m. during standard time. Construction activities would be allowed between 8 a.m. and 6 p.m. on Saturdays, and construction activities that are inaudible in areas outside the Park may be permitted on Sundays. Construction equipment would be fitted with factory installed muffling devices. Construction activity that occurs during these hours by equipment fitted with factory installed muffling devices would be exempt from the provisions of the Placer County Noise Ordinance. This impact would be less than significant.

Construction of Garden Bar Road North Improvements

Construction activities along Garden Bar Road North would include road widening, striping, drainage improvements, curve realignment, and intersection improvements at Mt. Pleasant Road and Garden Bar Road North (see Chapter 8.0, “Transportation and Circulation,” for a complete description of proposed road improvements).

A complete list of equipment is not currently available; however, roadway improvements typically include a backhoe, compactor, dozer, excavator, pavement scarafier, paver, roller, pickup trucks, and haul trucks.

According to EPA, and as indicated in Table 10-9, noise levels from individual construction equipment range from 79 dBA to 91 dBA at 50 feet. The simultaneous operation of on-site construction equipment associated with the roadway improvements, as identified above, could result in combined intermittent noise levels up to approximately 90 dBA at 50 feet from the construction activity. Based on the equipment noise levels and a typical noise-attenuation rate of 6 dBA/DD, exterior noise levels at the closest existing noise-sensitive receptor (located approximately 50 feet from roadway improvement areas) could exceed 90 dBA without feasible noise controls. Thus, if construction activities were to occur during the more noise-sensitive hours of the day (i.e., hours not exempt under the Placer County Noise Ordinance), or if construction equipment were not properly equipped with noise control devices, construction-generated noise levels could exceed the applicable County nighttime standard of 45 dBA (Table 10-8) and substantially increase ambient noise levels at existing nearby sensitive receptors.

However, as stated in Chapter 3.0, “Project Description,” project construction activities would be limited to 6 a.m.–8 p.m., Monday–Friday during daylight saving time and 7 a.m.–8 p.m. during standard time. Construction activities would be allowed between 8 a.m.–6 p.m. on Saturdays. Construction activity that occurs during these hours would be exempt from the provisions of the Placer County Noise Ordinance. Therefore, this impact would be less than significant.

IMPACT **Noise—Increases in Long-Term (Operational) Noise Levels from Nontransportation Stationary and**
10-2 **Area Sources.** *Area-source noise may result from maintenance activities. However, exterior noise levels at the closest existing noise-sensitive receptor (800 feet) would not exceed 41 dBA. Such noise levels would not exceed any of the applicable County standards for daytime or nighttime noise, nor would they result in a substantial increase in ambient noise levels at nearby existing noise-sensitive receptors.*

Significance *Less than Significant*

Mitigation *None Warranted*
Proposed

Residual *Less than Significant*
Significance

Use of the proposed Park would not result in the use of any new stationary sources of noise in the project area. However, area-source noise may result from maintenance activities, such as lawn mowing and vegetation clearing (lawn mowers, edgers, trimmers). According to EPA, such activities could result in noise levels reaching approximately 83 dBA at 3 feet from the source (from lawn mowers and trimmers), depending on the exact equipment type and size (EPA 1971). Based on these equipment noise levels and a typical noise-attenuation rate of 6 dBA/DD, exterior noise levels at the closest existing noise-sensitive receptor (800 feet) would not exceed 41 dBA. Noise sources associated with property maintenance (e.g., lawn mowers, edgers, power tools) that occur between 7 a.m. and 9 p.m. are also exempt from the Placer County Noise Ordinance. Use of maintenance equipment would be limited to these hours.

In addition, increased recreation use and associated noise (e.g., people talking, children playing, and visitors riding bicycles) would occur with implementation of the proposed project. Typical noise levels for human speech

are approximately 60 dBA (see Exhibit 10-2). Therefore, based on a typical noise-attenuation rate of 6 dBA/DD, exterior noise levels at the closest existing noise-sensitive receptor (800 feet) would not exceed 35 dBA.

Reservation-based events (e.g. cross country races, family and group outings) would also occur with implementation of the Park. Noise from these reservation-based events would increase the ambient noise level at surrounding areas, however, events would be short in duration (less than 1 day), occur at infrequent intervals, and during the less sensitive (daylight) hours of the day (7 a.m. to 8 p.m.). In addition, amplified sound would be prohibited during all events and activities in the Park. As a result, these reservation-based events would not cause a long-term substantial noise increase to occur.

Some overnight camping is also proposed for the Park. Camping activities would be centralized around the bunkhouses and campfire pits. Noise sources resulting from camping would include people talking. As stated above, human speech would not exceed 35 dBA at the nearest sensitive receptor, and thus would not cause an increase in ambient noise levels or exceed a County threshold (45 dBA). In addition, campers would be restricted by Park quiet hours from 10 p.m. to 7 a.m. to further reduce noise levels during noise-sensitive hours.

Hunting is also being proposed for up to two 2-day seasons per year with 10 hunting permits being issued per season or through depredation permits. Typical noise levels resulting from gunfire are approximately 120-140 dBA at 6 inches (Kardous, et al. 2003). Accounting for intervening topography and vegetation as well as distance, noise resulting from gunshots within the Park would not exceed the Placer County Noise Ordinance maximum noise level standards within 0.5-mile of any sensitive receptor (See Table 10-8). As stated in Chapter 3.0, "Project Description," no hunting would be allowed within 0.5-mile of a residence. Thus, the Placer County maximum noise level standard would not be exceeded.

Use of the Park could also include occasional use of the helistops by helicopters within the project area for emergencies. The use of the helistops would be very infrequent and would be limited to emergency use only. Although there would be an increase in noise in the project area if one or both of the helistops are used by helicopters, this increase in noise would be temporary and very infrequent and would not result in a substantial long-term increase in the ambient noise levels of the project area.

For the reasons stated above, noise associated with Park maintenance or recreational use would not exceed the daytime or nighttime noise standards—50 dBA and 45 dBA, respectively—established by the Placer County Noise Ordinance (Table 10-8), nor would it substantially increase ambient noise at nearby existing noise-sensitive receptors. As a result, this impact would be less than significant.

IMPACT 10-3 **Noise—Increases in Transportation-Related Noise Levels.** *Short-term construction of the proposed Park would not result in a noticeable (i.e., 3 dBA or greater) increase in traffic noise levels along area roadways. Noise increases associated with construction traffic would be temporary and would occur during the less noise-sensitive daytime hours. Long-term traffic associated with project operation would not exceed Placer County standards but would result in a noticeable (i.e., 3 dBA or greater) increase in traffic noise levels along area roadways. Short- and long-term traffic-generated noise levels would not exceed applicable Placer County noise standards; however, long-term traffic would increase ambient noise at nearby existing noise-sensitive receptors.*

Significance *Significant*

Mitigation Proposed *Mitigation Measure 10-1: Restrict General Public Traffic to 6 a.m. to 30 Minutes after Sunset*

Residual Significance *Less than Significant*

Short-Term Construction-Related Traffic

As described in Chapter 8.0, “Transportation and Circulation,” construction of the proposed Park facilities would require approximately four 15-person crews and 10–15 other workers/delivery drivers on-site at any given time and 400 truck haul trips (distributed over several years) over the course of project construction. Assuming the crews would commute in four vans, one per 15-person crew, it is expected that the maximum number of vehicle trips generated in any one day would be four vans and 10–15 other worker/delivery vehicles. In addition, for Phase 1 of construction, truck traffic is expected to be approximately 10–20% of the total number of truck trips (i.e., 40–80 truck trips). Typically, roadway traffic volumes have to double to generate a noticeable increase in traffic noise levels. For this reason, adding these daily trips to the existing average daily traffic volumes (approximately 285 average daily trips on weekdays on Garden Bar Road North, 885 on Garden Bar Road South, 375 on Mt. Pleasant Road west of Garden Bar Road, 377 on Mears Drive north of Mt. Pleasant Road, and 910 on Mt. Pleasant Road east of Garden Bar Road) would not result in a noticeable traffic noise increase along these roadways or an exceedance of Placer County transportation noise source standards (see Table 10-7).

Traffic Increases from Long-Term Use

In the long term, the Park could generate up to 460 one-way daily weekend vehicle trips on local roadways (dispersed over all affected roadways). The majority of trips associated with daily Park operations would occur during the less noise-sensitive daytime hours and on weekends and holidays during the summer months. However, some Park traffic could occur during noise-sensitive evening hours. Adding these daily trips to the existing average daily traffic volume of approximately 285 weekday and 260 weekend average daily trips on Garden Bar Road North would result in a substantial 3.7-dBA increase in noise on Garden Bar Road North (see Table 10-10). Although the overall noise level would not exceed Placer County standards for new interior or exterior transportation noise sources (see Table 10-7), or increase interior noise levels by more than 3 dBA, it would increase exterior noise levels by a substantial amount (more than 3 dBA). All other affected roadways would not exceed Placer County standards (see Table 10-7) or increase substantially (more than 3 dBA).

Roadway Segment and Location	Average Daily Traffic		CNEL (dBA) 50 Feet from Centerline of Near Travel Lane		
	Existing	Existing Plus Project	Existing	Existing Plus Project	Net Change
Weekday					
Garden Bar Road ¹ , north of Mt. Pleasant Road	285	476	47.9	50.1	2.2
Garden Bar Road, south of Mt. Pleasant Road	885	969	54.8	55.2	0.4
Mt. Pleasant Road, west of Garden Bar Road	375	457	53.4	54.2	0.9
Mt. Pleasant Road, east of Garden Bar Road	910	1,000	57.2	57.6	0.4
Mears Drive ¹ , north of Mt. Vernon Road	377	441	49.1	49.8	0.7
Weekend					
Garden Bar Road ¹ , north of Mt. Pleasant Road	260	605	47.5	51.2	3.7
Garden Bar Road, south of Mt. Pleasant Road	715	867	53.9	54.7	0.8
Mt. Pleasant Road, west of Garden Bar Road	310	458	52.5	54.2	1.7
Mt. Pleasant Road, east of Garden Bar Road	710	872	56.1	57.0	0.9
Mears Drive ¹ , north of Mt. Vernon Road	314	429	48.3	49.7	1.4

**Table 10-10
Comparison of Modeled Existing and Existing Plus Project Vehicular Traffic Noise Levels**

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibels. Traffic noise levels were modeled using the Federal Highway Administration traffic noise model (FHWA 1988) based on traffic volumes obtained from the traffic report prepared for this project (Chapter 8.0, "Transportation and Circulation"). Calculated noise levels do not consider any shielding or reflection of noise by existing structures, vegetation, or terrain features, nor do they consider noise contribution from other sources. See modeling results in Appendix E further detail.

¹ Assumes that 75% of project-generated traffic would access the project site via North Garden Bar Rd and that 25% of project-generated traffic would access the project site via Mears Drive.

Source: Modeling performed by EDAW in 2008.

Short- and long-term traffic-generated noise levels would not exceed applicable County noise standards, but long-term exterior traffic noise levels would increase at nearby existing noise-sensitive receptors by more than 3 dBA on Garden Bar Road North. As a result, this impact would be significant. Implementation of Mitigation Measure 10-1 would reduce this impact to a less-than-significant level.

IMPACT 10-4 **Noise—Exposure of Persons to or Generation of Excessive Groundborne Vibration or Noise Levels.**
Ground vibration levels generated by on-site construction equipment would not exceed Caltrans's recommended standard of 0.2 in/sec PPV for the prevention of structural damage or FTA's maximum-acceptable vibration standard with respect to human annoyance for residential uses (80 VdB for residential structures). In addition, long-term use and maintenance of the project area would not include the operation of any sources of ground vibration. Thus, the proposed project would not result in the exposure of persons to or generate excessive groundborne vibration or groundborne noise levels.

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Construction activities have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. Table 10-11 displays typical vibration levels for construction equipment.

**Table 10-11
Typical Vibration Levels of Construction Equipment**

Equipment	PPV at 25 feet (in/sec) ¹	Approximate L _v at 25 feet ²
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Notes: in/sec = inches per second; L_v = velocity level in decibels referenced to 1 microinch per second and based on the root mean square velocity amplitude; PPV = peak particle velocity

Source: Federal Transit Administration 2006

As discussed above, on-site construction equipment would include a Sweco trail dozer, trucks, excavators, and graders. As shown in Table 10-11, construction haul trucks generate ground vibration levels up to 0.076 in/sec PPV and 86 VdB (referenced to 1 μ in/sec and based on the RMS velocity amplitude) at a distance of 25 feet. Using FTA's recommended procedure for applying a propagation adjustment, truck-generated vibration levels would attenuate to approximately 0.0005 in/sec PPV and 41.8 VdB at the closest existing noise-sensitive receptor located 800 feet south of the project area. These vibration levels would not exceed Caltrans's recommended standard of 0.2 in/sec PPV (Caltrans 2002) with respect to the prevention of structural damage for normal buildings or FTA's maximum-acceptable vibration standard of 80 VdB (FTA 2006) with respect to human annoyance. In addition, the long-term operation of the proposed project (i.e., use and maintenance of the proposed Park) would not include any vibration sources. Thus, short-term construction and long-term operation would not result in the exposure of persons to or generate excessive groundborne vibration or groundborne noise levels. As a result, this impact would be less than significant.

10.4 Mitigation Measures

Mitigation Measure 10-1: Restrict General Public Traffic to 6 a.m. to 30 Minutes after Sunset.

Mitigation Measure 10-1 applies to Impact 10-3.

The County shall restrict all long-term general public traffic to 6 a.m. to 30 minutes after sunset by ensuring that the Park gates are closed and locked at these times. With implementation of Mitigation Measure 10-1 traffic noise level increases on Garden Bar Road North would be reduced below a substantial amount (3 dBA or more), as shown in Table 10-12. This would reduce Impact 10-3 to a less-than-significant level.

Roadway Segment and Location	Average Daily Traffic		CNEL (dBA) 50 Feet from Centerline of Near Travel Lane		
	Existing	Existing plus Project	Existing	Existing plus Project plus Mitigation Measure 10-1	Net Change
Weekday					
Garden Bar Road ¹ , north of Mt. Pleasant Road	285	476	47.9	49.2	1.3
Garden Bar Road, south of Mt. Pleasant Road	885	969	54.8	55.2	0.2
Mt. Pleasant Road, west of Garden Bar Road	375	457	53.4	54.3	0.5
Mt. Pleasant Road, east of Garden Bar Road	910	1,000	57.2	57.7	0.2
Mears Drive ¹ , north of Mt. Vernon Road	377	441	49.1	49.8	0.4
Weekend					
Garden Bar Road ¹ , north of Mt. Pleasant Road	260	605	47.5	50.4	2.3
Garden Bar Road, south of Mt. Pleasant Road	715	867	53.9	54.8	0.5
Mt. Pleasant Road, west of Garden Bar Road	310	458	52.5	54.3	1.0
Mt. Pleasant Road, east of Garden Bar Road	710	872	56.1	57.1	0.5
Mears Drive ¹ , north of Mt. Vernon Road	314	429	48.3	49.7	0.8

Notes:

CNEL = community noise equivalent level; dBA = A-weighted decibels. Traffic noise levels were modeled using the Federal Highway Administration traffic noise model (FHWA 1988) based on traffic volumes obtained from the traffic report prepared for this project (Chapter 8.0, "Transportation and Circulation"). Calculated noise levels do not consider any shielding or reflection of noise by existing structures, vegetation, or terrain features, nor do they consider noise contribution from other sources. See modeling results in Appendix E further detail.

¹ Assumes that 75% of project-generated traffic would access the project site via North Garden Bar Rd and that 25% of project-generated traffic would access the project site via Mears Drive.

Source: Modeling performed by EDAW in 2008.

11.0 HYDROLOGY AND WATER QUALITY

This chapter evaluates the potential impacts of the proposed project on hydrology and water quality. It describes the existing hydrologic conditions in the project area; presents a summary of the federal, state, and local regulatory context; analyzes the impacts of the proposed project facilities on hydrology and water quality; and provides feasible mitigation measures needed to reduce those impacts.

11.1 ENVIRONMENTAL SETTING

11.1.1 REGIONAL HYDROLOGY

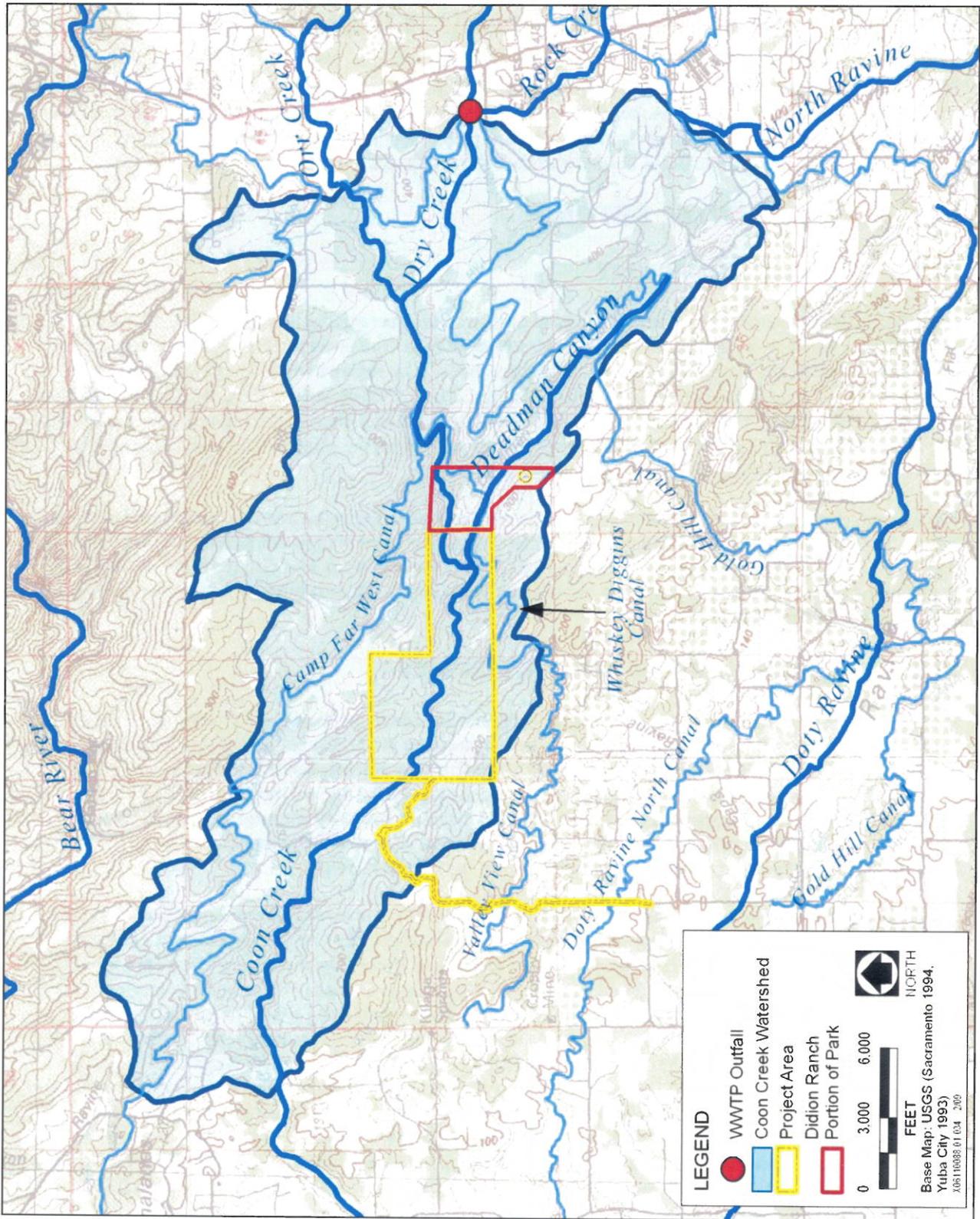
The project area is located within the south-central portion of the Sacramento River Hydrologic Region, as defined by the California Department of Water Resources (DWR). The Sacramento River Hydrologic Region covers approximately 17.4 million acres (27,200 square miles). The region includes all or large portions of Modoc, Siskiyou, Lassen, Shasta, Tehama, Glenn, Plumas, Butte, Colusa, Sutter, Yuba, Sierra, Nevada, Placer, Sacramento, El Dorado, Yolo, Solano, Lake, and Napa Counties. Small areas of Alpine and Amador Counties are also within the region. Geographically, the region extends south from the Modoc Plateau and Cascade Range, at the Oregon border, to the Sacramento–San Joaquin River Delta.

The Sacramento Valley, which forms the core of the region, is bounded to the east by the crest of the Sierra Nevada and southern Cascades and to the west by the crest of the Coast Range and Klamath Mountains. Other significant features include Mount Shasta and Lassen Peak in the southern Cascades; the Sutter Buttes in the south-central portion of the valley; and the Sacramento River and its major tributaries, the Pit, Feather, Yuba, Bear, and American Rivers (DWR 2003).

11.1.2 DESCRIPTION OF THE LOCAL WATERSHED

The project area is situated in the Coon Creek watershed. It includes a reach of Coon Creek that is in a steep canyon running east-west approximately 3 miles south of the Bear River. Coon Creek flows from the eastern portion of the Spears Ranch portion of the Park to the westernmost property boundary. Several intermittent tributaries flow into Coon Creek from both the north and the south, and one perennial tributary, Deadman Creek, intersects Coon Creek on the eastern end of the property. Adjacent land uses are rural residential home sites and agriculture, mostly in the form of cattle grazing and recreational uses on the Didion Ranch portion of the Park. Exhibit 11-1 shows the local watershed and hydrology in the project vicinity.

The Coon Creek watershed originates in the foothills northeast of the town of Auburn. The upper watershed (east of State Route 49) is composed mainly of two intermittent tributaries, Dry Creek and Orr Creek, which merge approximately 6 miles upstream of the project area to form Coon Creek. Downstream of this confluence, Coon Creek has continuous flow in the dry season and receives discharge of treated effluent into Rock Creek from the Placer County Department of Facility Services Wastewater Treatment Plant (WWTP) operated by Placer County Sewer Maintenance District 1 near State Route 49 (Waste Discharge Requirements [WDR] Order No. R5-2005-0074, NPDES No. CA0079502). Rock Creek is a tributary of Dry Creek (Bailey and Buell 2005) and the discharge results in approximately 1.65 million gallons per day (mgd) (2.56 cubic feet per second [cfs]) of daily inflow to Coon Creek. The WDR regulates the treatment of up to 2.18 mgd of design dry weather flow wastewater, and the discharge of the treated wastewater. In addition, 5 cfs of dilution water purchased from Nevada Irrigation District is added to the Rock Creek flow and proceeds into Coon Creek during the summer and fall months. Coon Creek then flows west through a rural residential area and into the project area. Exhibit 11-1 shows the existing WWTP outfall location.



Source: CalWaters 1999, Placer County 2006

Watershed Hydrology Topo Map

Exhibit 11-1

The WWTP currently provides tertiary treatment when influent flows are 3.5 mgd or less, and when flows are above 3.5 mgd a combination of secondary and tertiary treated wastewater is released as stipulated in the WDR. The WDR assumes that the worst-case dilution in Rock Creek and Dry Creek (which drains to Coon Creek) is zero in order to provide protection for the beneficial uses. This means that discharge limitations based on acute and chronic toxicity are end-of-pipe limits, with no dilution credit provided by the receiving water.

The adjacent land is used for grazing and minimal infrastructure has been developed in this area. Vegetation associated with this reach of Coon Creek consists of a combination of oak and riparian woodlands and some open wetland floodplain terraces. The stream channel is dominated by basalt and granite bedrock and large cobble. West (downstream) of the Spears Ranch portion of the Park, for approximately 5 miles, the channel and riparian corridor are heavily affected by cattle grazing, which can result in consumption of new vegetation, trampling of vegetation, compaction of soils, acceleration of bank erosion, and contribution of nutrients to streams via excretion. As a result, water quality within these downstream reaches of the stream deteriorates precipitously. The remainder of the stream channel (down to its confluence with the East Side Canal) is narrow and generally shallowly incised as it meanders through intensively farmed floodplains (Placer County 2002). The East Side Canal ultimately drains into the Natomas Cross Canal, which enters the Sacramento River just below the confluence with the Feather River.

Nutrients in the effluent from Placer County Sewer Maintenance District 1's WWTP contribute significantly to the nutrient load of Coon Creek and may cause accelerated growth of algae, as well as depressed nighttime concentrations of dissolved oxygen. Cattle grazing along lower Coon Creek downstream of the Park also contributes to the nutrient load and biological oxygen demand of the creek (Placer County 2002).

Approximately 1 mile east of the eastern border of the Spears Ranch portion of the Park, a diversion dam operated by the Nevada Irrigation District diverts water for irrigation from Coon Creek into Camp Far West Canal. Most of the water flows to the Bear River (approximately 2.5 miles north of the project area), just upstream of the confluence with the Feather River. A small portion flows into Camp Far West Reservoir approximately 4 miles northwest of the project area. The distance from Coon Creek to the Sacramento River is approximately 30 miles.

Deadman Creek, Whiskey Diggins Canal, and associated tributaries also transect the Spears Ranch portion of the Park. The Whiskey Diggins Canal passes through the southern portion of the Spears Ranch property and crosses Deadman Creek within the Didion Ranch portion of the Park. The canal was constructed in the 1850s by the Gold Hill and Bear River Water Company to divert water from Deadman Creek. The canal is now maintained and utilized by the Nevada Irrigation District, and flows to the canal are seasonal depending upon water diversion practices. The water is used for irrigation. A maintenance road parallels the canal on the downslope side. Deadman Creek flows into Coon Creek near the eastern boundary of the Spears Ranch portion of the Park.

11.1.3 GROUNDWATER

The Sacramento River Hydrologic Region receives between 20% and 40% of its supply from groundwater. Groundwater quality in the region is generally considered to be excellent; however, there are small localized problems (DWR 2003). The project area does not lie within an area defined by DWR as a discrete groundwater basin. Local groundwater conditions consist of fractured rock substrate and recharge from Coon Creek, and regional groundwater levels are expected to be greater than 50 feet in depth. Groundwater supplies from fractured rock sources are highly variable in terms of water quantity, as well as water quality because of historic mining practices in the region. Current water development in the project vicinity is in the form of individual private wells that provide drinking water for residences and irrigation. Based on Placer County well reports in the area, wells range in depth from 250 to 900 feet. Where static water levels were noted, they ranged between 50 and 240 feet and well yields ranged from 1.3 to 7 gallons per minute (gpm). The nearest private well is approximately 0.2-mile from the facility development zone.

The existing groundwater well on-site is capable of producing 2.1 gallons per minute and was constructed to serve the existing ranch house within the Spears Ranch portion of the Park. A groundwater well is also located within the Didion Ranch portion of the Park that provides water for the drinking fountains, restroom, and irrigation within that portion of the Park. The water demand calculation prepared for the proposed project requires a minimum maximum day demand (MDD) of 4.7 gpm and a peak hour demand (PHD) of 7.1 gpm; that includes a 20% contingency for the entire project (Appendix F). The water demand calculation needs were based on wastewater usage and proposed project facilities, including existing facilities being supported by the existing well. The proposed facility needs include:

- ▶ one parking area of similar size to the Didion Ranch parking area,
- ▶ existing house to provide service for 60 overnight campers, five staff members and one commercial kitchen. No shower or laundry facilities,
- ▶ one maintenance yard,
- ▶ one caretaker residence.

11.2 REGULATORY SETTING

11.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

FEDERAL EMERGENCY MANAGEMENT AGENCY

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues Flood Insurance Rate Maps that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection is established by FEMA; the minimum level of flood protection for new development has been determined to be protection against the flood with a 1-in-100 chance of occurring in a given year (i.e., the 100-year flood event). The proposed project is not located within a FEMA 100-year flood zone; however, portions of the project area are within the 100-year floodplain of Coon Creek.

FEDERAL CLEAN WATER ACT OF 1972

The U.S. Environmental Protection Agency (EPA) is the lead federal agency responsible for water quality management. The Clean Water Act (CWA) is the primary federal law that governs and authorizes water quality control activities by EPA and the states. Various elements of the CWA, discussed below, address water quality. Wetland protection elements administered by the U.S. Army Corps of Engineers under Section 404 of the CWA, including permits to dredge or fill wetlands, are discussed in Chapter 12.0, "Biological Resources."

WATER QUALITY CRITERIA AND STANDARDS

Under federal law, EPA has published water quality regulations under Title 40 of the Code of Federal Regulations (40 CFR). Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the CWA, water quality standards consist of two elements: identified designated beneficial uses of the water body in question and criteria that protect the designated uses. Section 304(a) requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. In California, EPA has granted the State Water Resources Control Board (SWRCB) and its nine regional water quality control boards (RWQCBs) the authority to identify beneficial uses and adopt applicable water quality objectives.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT PROGRAM

The National Pollutant Discharge Elimination System (NPDES) permit program was established to regulate municipal and industrial discharges to surface waters of the United States. The discharge of wastewater to surface waters is prohibited unless an NPDES permit issued by the applicable RWQCB allows that discharge. NPDES permit regulations have been established for broad categories of discharges—point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify allowable concentrations of effluent in receiving waters or limits on pollutant emissions contained in discharges, or both; prohibit discharges not specifically allowed under the permit; and describe required actions by the discharger, including industrial pretreatment, pollution prevention, and self-monitoring.

In November 1990, EPA published regulations establishing NPDES permit requirements for municipal and industrial stormwater discharges. Phase 1 of the permitting program applies to municipal discharges of stormwater in urban areas where the population exceeds 100,000 persons. Phase 1 also applies to stormwater discharges from a large variety of industrial activities, including general construction activities if the project would disturb more than 5 acres. Phase 2 of the NPDES stormwater permit regulations, which became effective in March 2003, require that NPDES permits be issued for construction activities for projects that disturb between 1 and 5 acres. The RWQCBs in California are responsible for implementing the NPDES permit system (see additional information under “NPDES Permit System and Waste Discharge Requirements” below).

SECTION 401 WATER QUALITY CERTIFICATION OR WAIVER

Under Section 401 of the CWA, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must first obtain a certificate from the appropriate state agency stating that the fill is consistent with the state’s water quality standards and criteria. In California, the authority to either grant water quality certification or waive the requirement is delegated by the SWRCB to the nine RWQCBs.

SECTION 303(D) IMPAIRED WATERS LIST

Under Section 303(d) of the CWA, states are required to develop lists of water bodies that would not attain water quality objectives for specific pollutants after point-source dischargers (municipalities and industries) implement required levels of treatment. Coon Creek is not listed as a Section 303(d) impaired water body. The Central Valley Basin Plan states at page II-2.00 that the “...beneficial uses of any specifically identified water body generally apply to its tributary streams.” The beneficial uses of Coon Creek are not individually identified in the Basin Plan, but Coon Creek is a tributary to Natomas East Main Drainage Canal, which flows into the Sacramento River immediately north of the confluence with the American River. Existing beneficial uses for these receiving waters, and therefore Coon Creek, are municipal and domestic supply, agricultural irrigation, water contact recreation, canoeing and rafting recreation, other non-contact water recreation, warm freshwater aquatic habitat, cold freshwater aquatic habitat, warm fish migration habitat, cold fish migration habitat, warm and cold spawning habitat, wildlife habitat, and navigation. In addition, pursuant to SWRCB Resolution No. 88-63 described below, the beneficial uses of Coon Creek (and Rock and Dry Creeks) are municipal and domestic supply.

11.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

In California, the SWRCB has broad authority over water quality control issues for the state. The SWRCB is responsible for developing statewide water quality policy and exercises the powers delegated to the state by the federal government under the CWA. Other state agencies with jurisdiction over water quality regulation in California include the California Department of Health Services (DHS) (for drinking-water regulations), the California Department of Pesticide Regulation, the California Department of Fish and Game, and the Office of Environmental Health Hazard Assessment.

Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The regional boards are required to formulate and adopt water quality control plans (Basin Plans) for all areas in the region and establish water quality objectives in the plans. The Central Valley RWQCB is responsible for the water bodies in the project vicinity.

PORTER-COLOGNE WATER QUALITY CONTROL ACT OF 1969

Both surface and groundwater in the Spears Ranch portion of the Park could potentially be affected by implementation of the project. The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is California's statutory authority for the protection of water quality. Under the act, the state must adopt water quality policies, plans, and objectives that protect the state's waters for the use and enjoyment of the people. The act sets forth the obligations of the SWRCB and RWQCBs to adopt and periodically update Basin Plans. Basin Plans are the regional water quality control plans required by both the CWA and Porter-Cologne Act in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The act also requires waste dischargers to notify the RWQCBs of their activities through the filing of reports of waste discharge (RWDs) and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements (WDRs), NPDES permits, Section 401 water quality certifications, or other approvals. The RWQCBs also have authority to issue waivers to RWD/WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects when implemented according to prescribed terms and conditions.

STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 88-63

Resolution No. 88-63, Sources of Drinking Water Policy, adopted on 19 May 1988, specifies that, except under specifically defined exceptions, all surface and ground waters of the state are to be protected as existing or potential sources of municipal and domestic supply, including those within the proposed Project. Because Coon Creek is not identified in Table II-1 of the Basin Plan, this resolution applies. The specific exceptions include waters with:

- ▶ existing high total dissolved solids concentrations (greater than 3000 mg/l),
- ▶ low sustainable yield (less than 200 gpd for a single well),
- ▶ contamination that cannot be treated for domestic use using best management practices or best economically achievable treatment practices,
- ▶ waters within particular municipal, industrial and agricultural wastewater conveyance and holding facilities, and
- ▶ regulated geothermal ground waters.

Where the SWRCB or RWQCBs determines that one of the exceptions applies for a particular waterbody, it may remove the municipal and domestic supply beneficial use designation through a formal Basin Plan amendment and a public hearing, followed by approval of the amendment by the SWRCB and the Office of Administrative Law.

NPDES PERMIT SYSTEM AND WASTE DISCHARGE REQUIREMENTS

The SWRCB and Central Valley RWQCB have adopted specific NPDES permits or WDRs, or both, for a variety of activities that have the potential to discharge wastes to waters of the state or to land. Dischargers are required to eliminate or reduce nonstormwater discharges to storm sewer systems and other waters. The SWRCB's statewide stormwater permit for general construction activity (Order 99-08-DWQ, as amended) is applicable to all land-

disturbing construction activities that would disturb more than 1 acre, including the proposed project. Construction activities such as clearing, grading, stockpiling, and excavation are subject to the statewide general construction activity NPDES permit. The proposed project would expose more than 1 acre of area to stormwater runoff and thus would require an NPDES stormwater permit for general construction activity.

The NPDES permit requires that a notice of intent be filed with the RWQCB to discharge stormwater and that a storm water pollution prevention plan be prepared and implemented to control contaminated runoff from temporary construction activities. The plan provides specifications for erosion and sediment best management practices (BMPs), means of waste disposal, methods for implementing approved local plans, postconstruction sediment and erosion control BMPs and maintenance responsibilities, nonstormwater management BMPs, and requirements for inspecting the performance of BMPs.

NPDES permits require that design and operational BMPs be implemented to reduce the level of contaminant runoff during construction. The permit also requires dischargers to consider the use of permanent postconstruction BMPs that will remain in service to protect water quality throughout the life of the project. Types of BMPs include source controls, treatment controls, and site planning measures.

The NPDES regulations also require that appropriate hazardous materials management practices be implemented to reduce the possibility of chemical spills or release of contaminants, including any nonstormwater discharge to drainage channels.

In the event that water discharges occur in Coon Creek crossing areas during construction, construction dewatering activities that discharge to surface waters require NPDES authorization under the RWQCB's General Order for Dewatering and Other Low-Threat Discharges to Surface Waters (Order No. 5-00-175). This permit requires the applicant to submit a notice of intent before the activity verifying that the dewatering will occur in compliance with applicable water quality objectives. It contains terms and conditions for discharge prohibitions, specific effluent and receiving-water-quality limits, solids disposal activities, and water quality monitoring protocols. The permit authorizes direct discharges to surface waters of up to 250,000 gpd for no more than a 4-month period each year.

The Central Valley RWQCB may also issue site-specific WDRs, or waivers to WDRs, for certain waste discharges to land or waters of the state. In particular, RWQCB Resolution R5-2003-0008 identifies activities subject to waivers of RWDs or WDRs, or both, for a variety of activities, including minor dredging activities and construction dewatering activities that discharge to land.

All NPDES permits have inspection, monitoring, and reporting requirements. In Resolution 2001-046, the Central Valley RWQCB responded to a court decision by implementing mandatory water-quality sampling requirements for visible and nonvisible contaminants in discharges from construction activities. Water-quality sampling is now required if the activity could result in the discharge of turbid water or sediment to a water body that is listed as impaired under Section 303(d) because of sediment or siltation, or if a release of a nonvisible contaminant occurs. Where such pollutants are known or should be known to be present and have the potential to contact runoff, sampling and analysis are required.

SAFE DRINKING WATER ACT

Proposed project features include groundwater wells for domestic supplies and landscape irrigation. Under the Safe Drinking Water Act (Public Law 93-523), passed in 1974, EPA regulates contaminants of concern to domestic water supplies. Contaminants of concern that are relevant to domestic water supplies are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA national primary and national secondary drinking water regulations. Maximum contaminant levels (MCLs) are set for all contaminants of concern. MCLs and the process for setting

these standards are reviewed triennially. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting drinking-water MCLs.

EPA has delegated to DHS the responsibility for administering California's drinking-water program. DHS is accountable to EPA for program implementation and for adopting standards and regulations that are at least as stringent as those developed by EPA.

Title 22 of the California Code of Regulations (Article 16, Section 64449) defines secondary drinking-water standards that are established primarily for reasons of consumer acceptance (i.e., taste), rather than because of health issues. For mineralization (i.e., total dissolved solids and chloride), the secondary standards are expressed in the form of recommended, upper, and short-term MCLs. The recommended, upper, and short-term MCLs for total dissolved solids are 500, 1,000, and 1,500 milligrams per liter, respectively.

GROUNDWATER WELLS

Proposed project features include new groundwater wells for domestic supplies and landscape irrigation. Section 13801 of the California Water Code requires the SWRCB to adopt a model ordinance and each county, city, or water agency to adopt ordinances for well placement, construction, and abandonment that meet or exceed DWR standards (California Water Code Section 231). Standards for wells in California are found in DWR Bulletins No. 74-81 and No. 74-90, entitled "Water Well Standards, State of California."

11.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

PLACER COUNTY GENERAL PLAN

The following are the relevant goals and policies identified by the *Placer County General Plan* (General Plan) (Placer County 1994) for hydrology and water quality.

Goal 6.A: To protect and enhance the natural qualities of Placer County's streams, creeks and groundwater.

- ▶ **Policy 6.A.4.e.** Where creek protection is required or proposed, the County should require public and private development to: use design, construction, and maintenance techniques that ensure development near a creek will not cause or worsen natural hazards (such as erosion, sedimentation, flooding, or water pollution) and will include erosion and sediment control practices such as: 1) turbidity screens and other management practices, which shall be used as necessary to minimize siltation, sedimentation, and erosion, and shall be left in place until disturbed areas; and/or are stabilized with permanent vegetation that will prevent the transport of sediment off site; and 2) temporary vegetation sufficient to stabilize disturbed areas.
- ▶ **Policy 6.A.7.** The County shall discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat.

11.3 IMPACTS

11.3.1 ANALYSIS METHODOLOGY

The environmental analysis for hydrology and water quality was based largely on background information included in the General Plan and California's Groundwater Bulletin 118 (DWR 2003), as well as a review of existing conditions of the project vicinity. The effects of the proposed project were compared to environmental baseline conditions (i.e., existing setting at the time of the NOP) to determine impacts.

11.3.2 THRESHOLDS OF SIGNIFICANCE

Based on the Placer County CEQA checklist and the State CEQA Guidelines, the proposed project would result in a potentially significant impact on hydrology or water quality if it would:

- ▶ violate any water quality standards or waste discharge requirements;
- ▶ 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;
- ▶ substantially alter the existing drainage pattern of the site or area;
- ▶ 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;
- ▶ otherwise substantially degrade water quality;
- ▶ 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;
- ▶ expose people to unsafe water quality from contact recreation;
- ▶ expose people or structures to a significant risk of loss, injury, or death involving flooding; or
- ▶ expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow.

11.3.3 IMPACT ANALYSIS

IMPACT 11-1 **Hydrology and Water Quality—Potential for Short-Term, Construction-Related Soil Erosion and Impairment of Water Quality.** *Project construction could cause short-term degradation of water quality. Areas where vegetation would be removed and topography altered could be subject to erosion from rain and wind. In addition, accidental spills of construction-related contaminants could occur during construction in the project area. Both of these mechanisms could carry soil and construction-related contaminants to on-site drainages before they are ultimately discharged to Coon Creek.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 11-1: Prepare and Implement a Grading and Drainage Plan; and Mitigation Measure 5-1 in Chapter 5.0, "Soils, Geology, and Seismicity": Obtain Authorization for Construction and Operation Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required*

Residual Significance *Less than Significant*

Construction of the proposed project would remove vegetation and disturb soil at some locations within the project area, including along Garden Bar Road. Grading of the access road, parking areas, and bridge footings would disturb a total estimated area of approximately 4.5 acres. Grading of the trail system would disturb approximately 10 acres of land in linear construction corridors distributed around the Park along the proposed trail alignments. Vegetation removed during construction would be chipped or lopped and broadcast in the

immediate area. Vegetation removed at parking areas would be stockpiled and following construction, used as mulch on exposed areas.

Removal of duff and vegetation would expose bare soil and could cause unstable conditions, resulting in soils that are easily disturbed by equipment and eroded by rain and wind. This could affect surface water quality in Coon and Deadman Creeks and other drainages because of erosion and sedimentation from project construction. Although the majority of gradients in the project area never exceed 20%, the gradients of some areas of the canyon straddling Coon Creek approach 50%. In addition, some soils in the project area have moderate to high erosion potential, which could result in erosion of surface soils during construction.

Accidental spills of construction-related contaminants such as fuels, oils, solvents, and cleaners could also occur during construction activities in the project area, resulting in degradation of water quality. Runoff from the areas disturbed by construction of the proposed Park facilities could also result in sedimentation effects on intermittent drainages and Coon Creek. This impact would be potentially significant, because the construction areas are close enough to the creeks, that spills or eroded sediment could reach the waterways. Implementation of Mitigation Measures 11-1 and 5-1 would reduce this impact to a less-than-significant level.

IMPACT 11-2 **Hydrology and Water Quality—Potential for Long-Term Soil Erosion and Impairment of Water Quality.** *Use of the proposed trail system and extreme weather events could cause long-term degradation of water quality from soil erosion and creek sedimentation. The introduction of impervious surfaces on-site such as the access road and parking areas has the potential to alter existing absorption rates and increase runoff of surface water into Coon Creek and other drainages on-site.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 11-1: Prepare and Implement a Grading and Drainage Plan; and Mitigation Measure 5-1 in Chapter 5.0, "Soils, Geology, and Seismicity": Obtain Authorization for Construction and Operation Activities from the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required*

Residual Significance *Less than Significant*

Portions of the proposed project would be constructed in areas with some steep slopes that have the potential for erosion. Approximately 14 miles of new natural-surface trails for hikers, bikers, and equestrians—including bridge crossings over Coon Creek, Deadman Creek, and other streams—would be in place. Areas from which vegetation has been removed could be subject to erosion from rain and wind. These mechanisms could carry soil into intermittent drainages before they are ultimately discharged to Coon Creek. The proposed trails would be maintained as an exposed dirt surface that would increase the amount of soil exposed to wind and water erosion. Extreme weather events in combination with the disturbed areas could increase erosion and decrease water quality. This impact is considered potentially significant.

The proposed trail alignments would generally follow contours to minimize grades, discourage erosion from water velocity on steep profiles, and protect natural resources. Long-term and ongoing maintenance activities, as described in Chapter 3.0, "Project Description," would also be performed on the trails and trail crossings to reduce erosion to the extent possible and to repair weather-related damage that could contribute to erosion. Implementation of Mitigation Measures 5-1 and 11-1 would further reduce this impact to a less-than-significant level.

IMPACT 11-3 **Hydrology and Water Quality—Change in the Quality of Groundwater related to Installation of a Septic System.** *Operation of two septic systems is proposed as part of the project. There is the potential that installing an on-site septic system could change the quality of the groundwater in the Spears Ranch portion of the Park, if the septic system is not sited properly. Although suitable soils have been identified on-site, the potential still exists for changes in groundwater quality to occur.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 11-2: Implement Groundwater Protection through a Transient Non-community Water System Permit*

Residual Significance *Less than Significant*

The project proposes to construct and operate two septic systems (use and/or upgrade of the existing septic system at ranch house and a new septic system to serve the western parking area) to dispose of effluent generated by on-site restroom facilities and group-use facilities (e.g., conference center, nature center, caretaker facilities). The new septic system(s) would be located in the southwest portion of the Park within the facility development zone. The existing septic system would remain operational without changes, if the ranch house is used as a one dwelling unit or equivalent. If the ranch house is used for other more extensive purposes, the existing septic system would be upgraded to meet sewage treatment demand.

As discussed in Chapter 5.0 “Soils, Geology, and Seismicity,” soil data provided by the U.S. Geological Survey indicate limitations on the ability of project area soils to support the use of septic tank absorption fields (i.e., leachfields), in which effluent from a septic tank is distributed into the soil through subsurface or perforated pipe. There is the potential that installing an on-site septic system could change the quality of the groundwater in the Spears Ranch portion of the Park if the septic system is not sited properly. On-site soil testing completed as part of the project indicated soils in the southwest portion of the Park are capable of supporting a conventional septic system that would be sized to accommodate maximum daily use. In addition, the septic system would be designed to have a 5-foot separation to groundwater or impermeable layer from leach lines, 150-foot setback from public wells, and 100-foot setback from any creeks (Placer County 2006).

Although on-site soils are capable of supporting a septic system, there is still the potential for the new or existing septic systems to change groundwater quality. This impact would be potentially significant. Implementation of Mitigation Measure 11-2 would reduce this impact to a less-than-significant level.

IMPACT 11-4 **Hydrology and Water Quality—Change in the Supply and Availability of Groundwater through Withdrawals, Interception, or Loss of Recharge Capacity.** *While soil compaction from constructed facilities could slightly impede recharge in localized areas, less than 5 acres of the project area would be developed with impervious surfaces. Installation of groundwater wells for uses related to the proposed facilities could increase the demand for groundwater; however, project-related groundwater demand would not be substantial and is similar to yield rates found in private wells in the project vicinity. However, the proposed project-related water needs include water necessary for fire suppression and the 2009 water demand calculation report did not evaluate project requirements related to fire suppression. This impact would be potentially significant.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 11-2: Implement Groundwater Protection through a Transient Non-community Water System Permit; and Mitigation Measure 11- 3: Calculate Water Demands for Fire Suppression.*

Residual Significance *Less than Significant*

Constructing access roads, parking areas, and the trail system would result in soil compaction, which has the potential to affect groundwater recharge. In addition, parking areas and access roads would ultimately be paved with an impervious surface, which can also affect the potential for groundwater recharge. The total estimated acreage of impervious surface would be 4.5 acres within the project area. Because the amount of impervious surfaces would be a very small percentage of the total recharge area, this would not have a significant impact on groundwater recharge and supply.

The proposed project would include installation of up to two groundwater wells to support proposed facilities. If all of the proposed facilities are to be installed, the proposed project requires a MMD of 4.7 gpm and a PHD of 7.1 gpm (including 20% contingency). A new well would be constructed in the western portion of the Park to serve the western parking area, drinking fountains, and restrooms. Project-related needs in this area is an estimated MDD of 0.25 gpm and a PHD of 0.37 gpm, much lower than well yields found in project vicinity wells (between 1.3 and 7 gpm). Project-related water needs in the area of the existing ranch house are estimated to be a MDD of 3.61 gpm and a PHD of 5.41 gpm. An existing groundwater well in this location produces approximately 2.1 gpm; therefore, it is expected that an additional well would be needed to support all proposed project-related water needs in this area. The expected water demand for large events (i.e., 200 or more individuals) would vary depending on the number of users; however, the County would require large event groups that would exceed the on-site water supplies to supply (i.e., carry in) potable water to serve the group as a term of the Temporary Event Permits and undergo separate environmental review. Water for irrigation would continue to be supplied by the Nevada Irrigation District canal on the property, and irrigation needs are expected to be similar to or less than past irrigation patterns.

The project does not propose extensive water development. Except for reservation-based events, water supplies to meet project facility needs are expected to be small because the most common uses of the Park would reflect typical patterns of passive recreation (i.e., infrequent use of the Park by large groups, with most use by individuals visiting the Park for dispersed recreation, mostly on weekends). Although, the exact location of the new well is not known, it would be sited within the facility development zone (see Exhibit 3-4 in Chapter 3.0, "Project Description), and the nearest private well is approximately 0.2-mile from the facility development zone. A new well in this area would not be expected to have any water supply or drawdown effects on nearby private wells based on the calculations in the water demand report being consistent with private well yields in the area (Appendix F). The 2009 water demand calculation report did not evaluate project requirements related to fire suppression. Although it is expected that raw surface irrigation water would be the primary source of emergency fire suppression water storage and that any combination of surface irrigation water, water from stock ponds, and/or groundwater could be used to accommodate water demands for fire suppression, if groundwater is needed for fire suppression, this impact could be potentially significant. If public well(s) would be used to supply emergency storage tanks, appropriate backflow prevention devices would be used to prevent cross contamination of public potable water sources. Implementation of Mitigation Measures 11-2 and 11-3 would reduce this impact to a less-than-significant level.

IMPACT 11-5 **Hydrology and Water Quality—Exposure of People or Structures to Flooding.** *Constructing Park facilities adjacent to or across Coon Creek could expose people and structures to flooding. Park facilities potentially exposed to flooding would be constructed to weather the flows. No housing would be constructed in the floodplain, and access to the floodplain would be restricted in the event of a flood.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Park visitors would have access to the Coon Creek floodplain in the Spears Ranch portion of the Park. Portions of the trail system would run parallel to and cross over the creek. Three bridges with architectural features potentially including suspension and/or covered bridge that would provide access for pedestrians, equestrians, and emergency vehicles—would be constructed across Coon Creek. Bridges would be constructed of weathered steel, fiberglass, or other materials with concrete abutments, and potentially (if a suspension bridge is constructed) steel cables, and they would be constructed to span the 100-year floodplain, be removable during flood periods, or withstand 100-year flood events. Existing low-flow crossings along existing roads would also be maintained across Coon Creek. No housing or other structures would be constructed within the floodplain.

Park users could be exposed to flooding if they were near Coon Creek during a major (i.e., >100-year) flood event. However, the Coon Creek bridge crossings would be temporarily closed during such an event to reduce potential hazards. If extensive flooding were to occur, the County may close all or portions of the Park if it is deemed unsafe for Park users.

Because no housing or other facilities would be constructed within the floodplain, bridges would be constructed to withstand flood events, and access would be restricted to Coon Creek in the event of a flood, this impact would be less than significant.

IMPACT 11-6 **Hydrology and Water Quality—Exposure of People or Structures to WWTP Effluent.** *Proposed Park facilities would allow people to come into contact with Coon Creek and Whiskey Diggins Canal, which receive effluent (indirectly) from the Placer County SMD 1 WWTP. However, the WWTP operates under an NPDES Permit requiring tertiary treatment protective of beneficial uses including contact and noncontact recreation. Therefore, this impact is less than significant.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Park visitors would have access to Coon Creek and Whiskey Diggins Canal via the trails and crossings described in Impact 11-5. The flow of these watercourses contains effluent from the Placer County SMD 1 WWTP upstream of the Park. Pursuant to the WWTP discharge requirements (NPDES No. CA0079316), the RWQCB requires a level of treatment protective of all receiving and groundwater beneficial uses, including domestic, agricultural, and contact and non-contact recreation, equivalent to the California Department of Health Services

(DHS) reclamation criteria. In assessing the discharge standards necessary to protect the site-specific beneficial uses of Rock Creek and Dry Creek, the direct receiving waters of the WWTP effluent, and Coon Creek and Whiskey Diggins Canal, the indirect receiving waterbodies, the RWQCB compared Title 22 (Division 4, Chapter 3) standards to the level of treatment required to protect public health when in contact with treated wastewater or when directly using undiluted effluent for food crop irrigation, and requires this level of treatment for the WWTP effluent.

Title 22 requires that wastewater be adequately disinfected, oxidized, coagulated, clarified, and filtered for uses of wastewater including spray irrigation of food crops, parks, playgrounds, schoolyards, other areas of similar public access, and unrestricted contact recreation. Total coliform organism levels in the effluent must not exceed 2.2 Most Probable Number per 100 milliliters as a 7-Day Median. The 30-Day Average biochemical oxygen demand (BOD) and total suspended solids (TSS) effluent limits for secondary treatment have been revised in the permit to 10 mg/l, which is technically based on the capability of a tertiary system. Because the WWTP effluent must meet the standards of the WWTP NPDES permit protective of the receiving and groundwater beneficial uses including contact and non-contact recreation, this impact would be less than significant.

11.4 MITIGATION MEASURES

Mitigation Measure 11-1: Prepare and Implement a Grading and Drainage Plan.

Mitigation Measure 11-1 applies to Impacts 11-1 and 11-2.

The County shall prepare and submit Grading and Drainage Plans (Plans) and specifications (per the requirements of Section II of the Land Development Manual that are in effect at the time of submittal) for review and approval of work associated with structural design, hydrology associated with the bridges, and grading/drainage associated with the facility development zone. The Plans shall show all conditions affecting those facilities as well as pertinent topographical features. All existing and proposed utilities and easements, on-site and adjacent to those facilities, which may be affected by planned construction, shall be shown on the plans. The County shall pay plan check and inspection fees as applicable.

All proposed grading, drainage improvements, vegetation, tree impacts, and tree removal associated with the Park access road, parking areas, and bridges shall be shown on the Plans and all work shall conform to provisions of the County Grading Ordinance (Section 15.48, formerly Chapter 29, Placer County Code) and the Placer County Flood Control District's Stormwater Management Manual. No grading, clearing, or tree disturbance shall occur until the Plans are approved and any required temporary construction fencing has been installed and inspected by a member of the Design Review Committee. All cut/fill slopes included in the Plans shall be at 2:1 (horizontal:vertical) maximum unless a soils report supports a steeper slope and Design Review Committee concurs with said recommendation.

In addition, a drainage report in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual that are in effect at the time of submittal shall be prepared and submitted with the Plans. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: written text addressing existing conditions, the effects of the improvements, all appropriate calculations, a watershed map, increases in downstream flows, proposed on- and off-site improvements and drainage easements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used both during construction and for long-term post-construction water quality protection. Best Management Practice (BMP) measures shall be provided to reduce erosion, water quality degradation, and prevent the discharge of pollutants to stormwater to the maximum extent practicable.

Although the facility development zone is generally in the southwestern portion of the Park, including the previously disturbed area surrounding the existing ranch house and the proposed parking areas, the exact location of individual facilities could vary within this zone. Therefore, it is not practical to prepare the drainage plan prior

to project approval. In addition, routine maintenance shall be performed on Park facilities to reduce erosion to the extent possible and to repair weather-related damage that could contribute to erosion.

Implementation of Mitigation Measure 11-1 would reduce the potentially significant impact related to short-term and long-term soil erosion and water quality impairment to a less-than-significant level.

Mitigation Measure 11-2: Implement Groundwater Protection through a Transient Non-community Water System Permit.

Mitigation Measure 11-2 applies to Impacts 11-3.

A Hidden Falls Regional Park Groundwater Systems Operation Procedure is in place for the existing well serving the restroom and facilities at the Didion Ranch parking area. Pump performance and system leakage inspections are part of the regular maintenance routine under this procedure. One Park staff member is trained and tasked with water sampling at monthly intervals. The County employs qualified plumbers and electricians to correct any system failures. The Placer County Parks Division, which is a division of the Department of Facility Services, operates the well and distribution system serving the public facilities at the existing Didion Ranch parking area under a Transient Non-community Water System Permit administered by the Placer County Environmental Health Division.

A separate permit would be obtained to include any additional wells that serve public facilities within Spears Ranch portion of the Park, and the conditions of the permit would be implemented to protect groundwater. The siting of any additional wells shall comply with the Placer County Water Well Construction Ordinance (Placer County Code Subchapter 8, effective July 19, 1990), and California Well Standards, Department of Water Resources Bulletin 74-90, June 1991.

A Groundwater Systems Operation Procedure or applicable equivalent would be prepared for any additional wells and adhered to as part of the permit conditions and ongoing operation. The objectives of the procedure shall be to ensure that:

- ▶ Water sources are not at risk of contamination from either tampering, pollutant discharge into the well head area, or latent groundwater contaminants.
- ▶ The responsible management agency has the technical capacity to operate the system to public health standards.

The procedure would include the following elements:

- ▶ The minimum horizontal distance between any additional wells and any sewer line or storm drain main or lateral shall be 50 feet. The minimum horizontal distance between any additional wells and septic tanks or leach fields shall be 100 feet.
- ▶ A Bacteriological and Chemical Monitoring and Reporting Program, approved by the Placer County Environmental Health Division.
- ▶ An operations and maintenance program including inspection of the distribution system and well head assembly.
- ▶ An emergency operations and repair program.

If well-monitoring samples show that groundwater quality is deteriorating, prompt actions shall be initiated to remedy problems, as specified by the Placer County Environmental Health Division and/or Central Valley RWQCB. These actions could include but would not be limited to the use of injection wells or other recharge

methods, closing the well and chlorinating the water, decommissioning the well and re-siting, or other water treatment alternatives such as construction of an on- or off-site water treatment plant. Some of these actions may be subject to additional CEQA analysis and other regulatory compliance. Implementation of Mitigation Measure 11-2 would reduce the potentially significant impact related to groundwater quality impairment to a less-than-significant level, because the Groundwater Systems Operation Procedure would enable the project applicant(s) to acquire the data and information necessary to manage the groundwater resource such that adverse impacts do not occur. This would enable detection of any negative changes to groundwater quality or quantity. If necessary, additional strategies to maintain the quality of groundwater at the project site and downgradient would be implemented following additional CEQA review.

Mitigation Measure 11-3: Calculate Water Demands for Fire Suppression.

Mitigation Measure 11-3 applies to Impact 11-4.

If groundwater is to be used for emergency fire suppression water, the County shall amend the April 7, 2009, Water Demand Calculation Report (Placer County 2009) to include fire suppression water requirements. If it is found that fire suppression requirements combined with water demands for other proposed uses is consistent with yields found in nearby private wells (1.3 to 7 gpm) then no further mitigation is required. If fire suppression requirement surpasses yields found in nearby private wells, one of the following shall be done:

- ▶ modify proposed uses at each well location to be consistent with available water that would not surpass similar yields of nearby wells;
- ▶ utilize Nevada Irrigation District raw irrigation water sources including but not limited to existing canals and ponds, new ponds, and/or irrigation fed underground storage tanks;
- ▶ fill storage tanks during off-peak periods when use is limited (i.e. winter and nighttime periods);
- ▶ import water needed to meet fire suppression requirements for emergency storage tanks via water trucks so that this water is not being pulled from the wells.

Implementation of Mitigation Measures 11-2 and 11-3 would reduce this impact to a less-than-significant level because proposed water demands would not be developed beyond the available groundwater capacity.

12.0 BIOLOGICAL RESOURCES

This chapter describes biological resources that could be affected by the proposed project and federal, state, and local regulations pertaining to biological resources. This chapter also addresses impacts of the proposed project on biological resources and recommends mitigation measures to address potentially significant impacts.

12.1 ENVIRONMENTAL SETTING

This section describes vegetation communities, common wildlife, sensitive biological resources, and special-status species that have the potential to occur in the project area. Databases and literature reviewed for preparation of this section included reviews of the California Natural Diversity Database (CNDDDB) (2007), the California Native Plant Society's (CNPS's) online inventory (CNPS 2006), and the Placer County Fish and Game Commission's deer habitat map (Placer County Fish and Game Commission 1992). Field surveys conducted to support this section include reconnaissance surveys (DFG 2005, 2006, 2007), vegetation mapping (Placer County 2007), rare plant surveys (Placer County 2007) and wetland mapping (Placer County 2008) within the Spears Ranch portion of the Park.

12.1.1 VEGETATION COMMUNITIES

Most of the project area consists of gently rolling to steep hills covered by a patchwork of annual grassland and oak woodlands. Upland oak woodland can be divided into three types of woodland communities based on the dominant oak species: interior live oak woodland, blue oak woodland, and black oak woodland. Foothill pine (*Pinus sabiniana*) occurs throughout the property in all woodland types. Valley foothill riparian woodland and freshwater marsh have also been identified along the drainages. Vegetation communities present in the Spears Ranch portion of the Park and along Garden Bar Road were mapped onto aerial photographs (1 inch = 400 feet scale) during field surveys. The vegetation community polygons were later digitized onto a geographic information system (GIS) overlay and used to create a map showing the location and extent of each vegetation community present in the Spears Ranch portion of the Park and along Garden Bar Road (Exhibits 12-1a and 12-1b). Vegetation classifications are based on the California Department of Fish and Game's (DFG's) *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (DFG 2003). Vegetation communities present in the Spears Ranch portion of the Park and along Garden Bar Road are described in more detail below. Biological surveys for the Didion Ranch portion of the Park were conducted as part of the 2004 Initial Study/Mitigated Negative Declaration (IS/MND) for the Didion property (Placer County 2004).

ANNUAL GRASSLAND

Annual grassland is mapped on approximately 89 acres of the project area, occurring in a few large grazed clearings. Annual grassland is an herbaceous plant community characterized by dense cover of nonnative annual grasses with numerous species of nonnative annual forbs, as well as some native wildflowers. Typical grass species include bromes (*Bromus diandrus*, *B. hordeaceus*), wild oat (*Avena fatua*), foxtail barley (*Hordeum murinum* ssp. *murinum*), medusahead (*Taeniatherum caput-medusae*), and Italian ryegrass (*Lolium multiflorum*). Common nonnative forbs observed include cut-leaved geranium (*Geranium dissectum*), filaree (*Erodium botrys*), blessed milk thistle (*Silybum marianum*), lesser hawkbit (*Leontodon taraxacoides*), and rose clover (*Trifolium hirtum*). Native wildflowers such as rusty popcorn flower (*Plagiobothrys nothofulvus*), Ithuriel's spear (*Triteleia laxa*), harvest brodiaea (*Brodiaea elegans*), blow-wives (*Achyrachaena mollis*), caterpillar phacelia (*Phacelia cicutaria*), and native clovers (*Trifolium* spp.) are also present.

INTERIOR LIVE OAK WOODLAND

Interior live oak woodland is the dominant vegetation type in the project area, occupying approximately 683 acres. This oak woodland type is found on steep to moderate slopes of all aspects throughout the project area. Approximately one third of the Garden Bar Road corridor passes through interior live oak woodland. The vegetation is characterized by a dense to open canopy of interior live oak (*Quercus wislizeni*) with varying amounts of foothill pine. Blue oak (*Quercus douglasii*) may also be present. The understory shrub layer is mostly open and is characterized by species such as poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), and hairy honeysuckle (*Lonicera hispidula*). The herb layer is variable depending on openings in the tree canopy and is characterized by species such as hedgehog dogtail (*Cynosurus echinatus*), field hedge parsley (*Torilis arvensis*), and climbing bedstraw (*Galium porrigens*). Native grass species such as blue wild rye (*Elymus glaucus*), woodland brome (*Bromus laevipes*), and California melicgrass (*Melica californica*) are also present in the understory in portions of the project area where this woodland occurs.

BLUE OAK WOODLAND

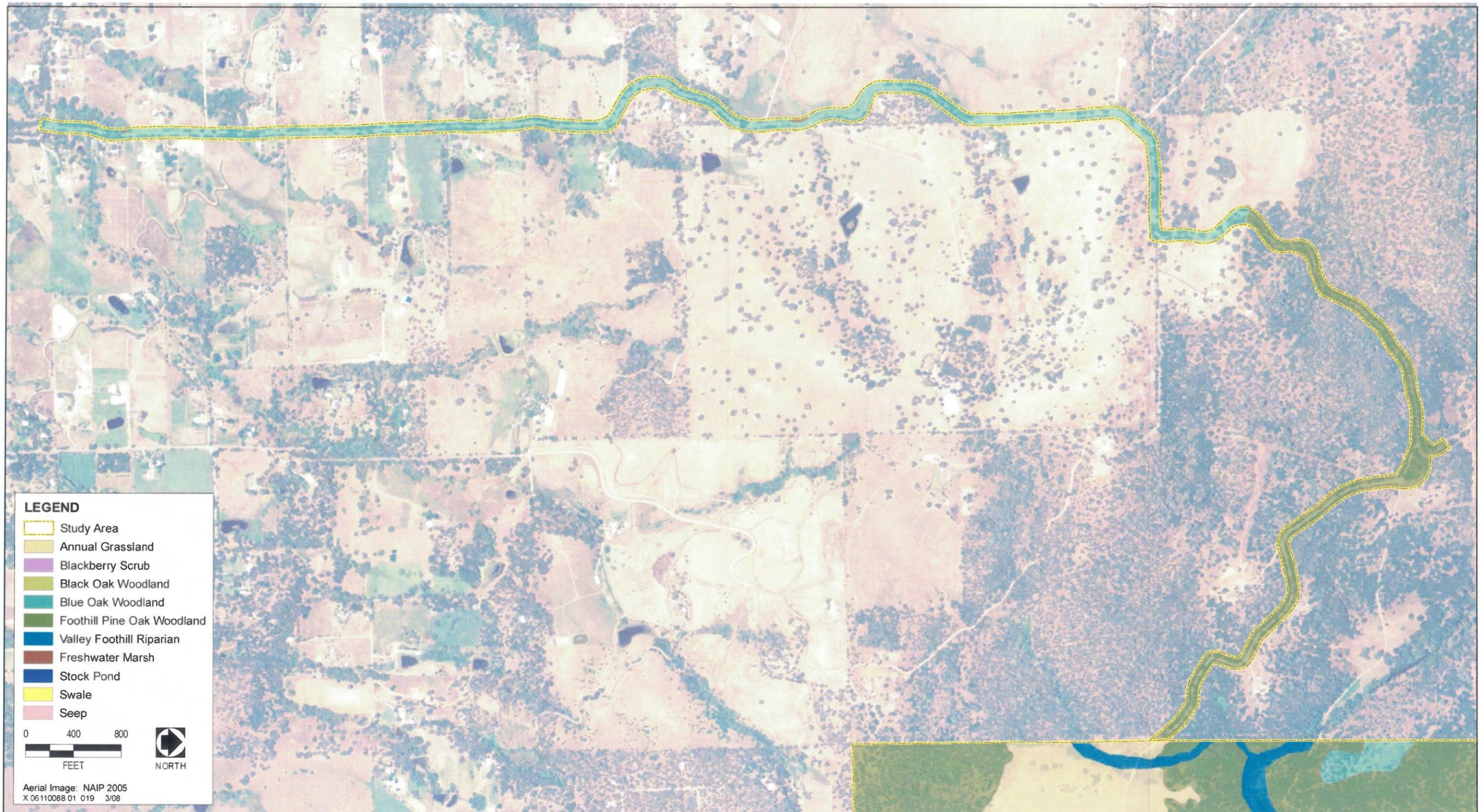
Blue oak woodland occurs on approximately 105 acres in the project area on moderate slopes near the tops of ridges. The southern two-thirds of the Garden Bar Road corridor is characterized by blue oak woodland and many of the large trees along the road in this portion of the project area are blue oaks. This oak woodland type is more open and savanna-like than other woodlands in the project area and is characterized by fairly evenly spaced and larger individual blue oaks. Interior live oak and foothill pine may also be present. A shrub layer is essentially absent and the understory is characterized by a dense cover of nonnative grasses and forbs, such as bromes, wild oat, foxtail barley, medusahead, cut-leaved geranium, and Italian thistle (*Carduus pycnocephalus*).

BLACK OAK WOODLAND

Black oak woodland covers approximately 53 acres of the project area and is found on steep north-facing slopes in the southeast portion of the Park. This woodland type is characterized by a dense canopy that is at least 50% relative cover of black oak (*Quercus kelloggii*), with interior live oak and blue oak also present. Scattered ponderosa pine (*Pinus ponderosa*) is also present. The shrub layer is usually dense and is characterized by species such as toyon, hoary coffeeberry (*Rhamnus tomentella*), and poison oak. The herb layer is usually sparse and contains a mix of native and nonnative grasses and forbs. Native grasses and forbs found in the understory of the black oak woodland include blue wild rye, woodland brome, California melicgrass, yarrow (*Achillea millefolium*), and twining brodiaea (*Dichelostemma volubile*).

VALLEY FOOTHILL RIPARIAN WOODLAND

Valley foothill riparian woodland covers 46 acres of the project area on the banks of Coon Creek, Deadman Creek, and intermittent drainages that have surface water for most of the year. These deciduous woodlands have a tree canopy dominated by Fremont cottonwood (*Populus fremontii*), valley oak (*Quercus lobata*), and white alder (*Alnus rhombifolia*). Shining willow (*Salix lucida* var. *lasiandra*), red willow (*S. laevigata*), and Oregon ash (*Fraxinus latifolia*) may also occur in the tree layer. Shrubs and lianas (i.e., woody climbing species) such as California grape (*Vitis californica*), arroyo willow (*Salix lasiolepis*), and Himalayan blackberry (*Rubus discolor*) form a dense understory layer, along with wetland herbaceous species such as torrent sedge (*Carex nudata*), mugwort (*Artemisia douglasiana*), and horsetail (*Equisetum arvense*) occurring along the water's edge.



Source: Data provided by EDAW in 2007 and 2008

Vegetation Communities Along Garden Bar Road and Access Road

Exhibit 12-1b

FRESHWATER MARSH

Freshwater marsh occurs on approximately 6 acres of the project area. This emergent herbaceous vegetation type is found in saturated soils on the fringes of the stock ponds and along intermittent drainages. The vegetation is characterized by obligate wetland herbaceous species such as spikerushes (*Eleocharis acicularis*, *E. macrostachya*), rushes (*Juncus effusus*, *J. bufonius*), cattails (*Typha angustifolia*), and smartweed (*Polygonum lapathifolium*). Often this vegetation is surrounded by woody riparian shrubs such as arroyo willow, Himalayan blackberry, and western dogwood (*Cornus sericea*).

12.1.2 WILDLIFE

The project area supports suitable habitat for a wide variety of resident and migratory wildlife species. Common bird species in upland oak woodland habitats include turkey vulture (*Cathartes aura*), acorn woodpecker (*Melanerpes formicivorus*), oak titmouse (*Baeolophus inornatus*), wild turkey (*Meleagris gallopavo*), Anna's hummingbird (*Calypte anna*), and migratory birds such as ash-throated flycatcher (*Myiarchus cinerascens*) and violet-green swallow (*Tachycineta thalassina*). Mammals and reptiles that are commonly found in these woodlands include mule deer (*Odocoileus hemionus*), western rattlesnake (*Crotalus viridis*), western harvest mouse (*Reithrodontomys megalotis*), southern alligator lizard (*Elgaria multicarinata*), western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis melanoleucus*), gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*). These woodlands also support nonnative wild pigs (*Sus scrofa*), which are considered a nuisance wildlife species and are discussed further in Chapter 14.0, "Hazards and Hazardous Materials."

Open annual grassland and oak savanna habitats support species such as red-tailed hawk (*Buteo jamaicensis*), black-tailed jackrabbit (*Lepus californicus*), western meadowlark (*Sturnella neglecta*), California ground squirrel (*Spermophilus beecheyii*), and loggerhead shrike (*Lanius ludovicianus*).

Valley foothill riparian woodlands provide resources, migration and dispersal corridors, and cover for diverse species. Bird species associated with this habitat include brown-headed cowbird (*Molothrus ater*), Hutton's vireo (*Vireo huttoni*), red-shouldered hawk (*Buteo lineatus*), Bewick's wren (*Thryomanes bewickii*), orange-crowned warbler (*Vermivora celata*), yellow-breasted chat (*Icteria virens*), spotted towhee (*Pipilo maculatus*), and lesser goldfinch (*Carduelis psaltria*). Several amphibians and reptiles—western toad (*Bufo boreas halophilus*), northwestern pond turtle (*Emys marmorata*), green racer (*Coluber constrictor*), and Gilbert's skink (*Eumeces gilbertii*)—use riparian woodlands in the project area. Mammals that use this habitat include mule deer, opossum (*Didelphus virginiana*), and cougar (*Felis concolor*). Bats, such as Yuma myotis (*Myotis yumanensis*), may forage for insects over riparian areas and roost in riparian trees.

Freshwater marsh in the project area provides habitat for Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), common muskrat (*Ondatra zibethicus*), Virginia rail (*Rallus limicola*), sora (*Porzana carolina*), American wigeon (*Anas americana*), American beaver (*Castor canadensis*), California newt (*Taricha torosa*), Pacific treefrog (*Hyla regilla*), northwestern pond turtle, common garter snake (*Thamnophis sirtalis*), and bullfrog (*Rana catesbeiana*).

12.1.3 FISHERIES AND AQUATIC RESOURCES

This section addresses common and sensitive fisheries and aquatic resources found in Coon Creek and Deadman Creek in Placer County. The analysis focuses on Coon Creek, as only the mouth of Deadman Creek at Coon Creek is within the project area. Hydrology and water quality are addressed in Chapter 11.0, "Hydrology and Water Quality."

COON CREEK AND DEADMAN CREEK

Coon Creek, its tributaries (e.g., Deadman Creek), and other foothill streams that flow into the Sacramento River provide spawning, rearing, and/or migratory habitat for a diverse assemblage of native and nonnative species (Table 12-1). Coon Creek is connected to the Sacramento River through the East Side Canal (ESC)/Natomas Cross Canal (NCC), a channelized water conveyance canal in Sutter County that drains the area between the Bear River and American River drainages. Native species potentially present in Coon and Deadman Creeks can be separated into anadromous species (i.e., species that spawn in freshwater after migrating as adults from marine habitat) and resident species. Native anadromous species are Central Valley fall-/late fall-run chinook salmon evolutionary significant unit (ESU) (*Oncorhynchus tshawytscha*), Central Valley steelhead distinct population segment (DPS; formerly ESU) (*O. mykiss*), and Pacific lamprey (*Lampetra tridentata*). Native resident species are Sacramento pikeminnow (*Ptychocheilus grandis*), Sacramento splittail (*Pogonichthys macrolepidotus*), Sacramento sucker (*Catostomus occidentalis*), hardhead (*Mylopharodon conocephalus*), California roach (*Lavinia symmetricus*), and rainbow trout (*O. mykiss*). Nonnative resident species are largemouth bass (*Micropterus salmoides*), smallmouth bass (*M. dolomieu*), white and black crappie (*Pomoxis annularis*, *P. nigromaculatus*), channel catfish (*Ictalurus punctatus*), white catfish (*Ameiurus catus*), brown bullhead (*I. nebulosus*), bluegill (*Lepomis macrochirus*), green sunfish (*L. cyanellus*), and golden shiner (*Notemigonus crysaleucas*).

Table 12-1
Fish Present in Coon Creek and the ESC/NCC

Common Name	Scientific Name	Native (N) or Introduced (I)
Central Valley fall-/late fall-run chinook salmon ESU	<i>Oncorhynchus tshawytscha</i>	N
Central Valley steelhead/rainbow trout DPS	<i>Oncorhynchus mykiss</i>	N
Pacific lamprey	<i>Lampetra tridentata</i>	N
Sacramento pikeminnow	<i>Ptychocheilus grandis</i>	N
Sacramento splittail	<i>Pogonichthys macrolepidotus</i>	N
Sacramento sucker	<i>Catostomus occidentalis</i>	N
Hardhead	<i>Mylopharodon conocephalus</i>	N
California roach	<i>Lavinia symmetricus</i>	N
Rainbow trout	<i>Oncorhynchus mykiss</i>	N
Largemouth bass	<i>Micropterus salmoides</i>	I
Smallmouth bass	<i>Micropterus dolomieu</i>	I
White crappie	<i>Pomoxis annularis</i>	I
Black crappie	<i>Pomoxis nigromaculatus</i>	I
Channel catfish	<i>Ictalurus punctatus</i>	I
White catfish	<i>Ameiurus catus</i>	I
Brown bullhead	<i>Ictalurus nebulosus</i>	I
Bluegill	<i>Lepomis macrochirus</i>	I
Green sunfish	<i>Lepomis cyanellus</i>	I
Golden shiner	<i>Notemigonus crysaleucas</i>	I

Source: Navicky, pers. comm., 2007; Moyle 2002; compiled by EDAW 2008

The use of different areas of Coon and Deadman Creeks by different fish species is influenced by variations in habitat conditions, each species' habitat requirements, life-history timing, and daily/seasonal movements and behavior. Habitat conditions are influenced by urbanization in the upper watershed and agricultural activities along the lower reaches. Flows within Coon Creek are extremely variable because of natural hydrologic variability, upstream wastewater treatment plant effluent discharge, urban stormwater inputs, and diversions along different reaches of the creek (see Chapter 11.0, "Hydrology and Water Quality"). The variation in flows through Coon Creek may substantially influence the presence and/or timing of anadromous fishes in the system because of associated variations in water quality and barriers and obstacles to passage.

Shaded riverine aquatic (SRA) vegetation and instream tree and shrub debris provide important components of fish habitat in Coon Creek. SRA habitat is defined as the nearshore aquatic habitat occurring at the interface between a river and adjacent woody riparian habitat. The principal attributes of this cover type are an adjacent bank composed of natural, eroding substrates supporting riparian vegetation that either overhang or protrude into the water; and water that contains variable amounts of woody debris (leaves, logs, branches, and roots) and has variable depths, velocities, and currents. Riparian habitat provides structure (through SRA habitat) and food for fish species. Shade decreases water temperatures and low overhanging branches can provide sources of food by attracting terrestrial insects. As riparian areas mature, the vegetation sloughs off into the rivers, creating structurally complex habitat consisting of large woody debris that furnishes refugia from predators, creates higher water velocities, and provides habitat for aquatic invertebrates. For these reasons, many fish species are attracted to SRA habitat.

Upper Coon Creek provides coldwater spawning and rearing habitat for chinook salmon and steelhead trout. Electrofishing surveys conducted by DFG in 2004 and 2005 as part of the Coon Creek System Resource Assessment Project confirmed the presence of steelhead/rainbow trout in the project area and juvenile chinook salmon downstream of the project area (Table 12-2). The channelized lower Coon Creek and ESC/NCC function primarily as a migration corridor and do not provide high-quality rearing and spawning habitat for splittail, salmon, or steelhead.

**Table 12-2
Fish Sampling Results From Coon Creek (Spring 2005)**

Survey Date	Site	Fish Species					
		CS (Juvenile)	SH/RBT	SKR	PM	GSF	SMB
4/15/05	Spears Ranch, below falls	0	11	8	13	2	39
4/25/05	Foggy Ranch, ~1 mile downstream of Spears Ranch	25	1	12	10	18	9
4/26/05	Spears Ranch, above falls	0	0	61	0	7	0

Notes: CS = chinook salmon; GSF = green sunfish; PM = Sacramento pikeminnow; SH/RBT = steelhead/rainbow trout; SKR = Sacramento sucker; SMB = smallmouth bass
Source: Navicky, pers. comm., 2007

12.1.4 SENSITIVE HABITATS

For the purposes of this EIR, sensitive habitats are defined as habitats with particularly high ecological values or functions, of limited distribution, or of concern otherwise to federal, state, and/or local resource agencies. This includes those that are of special concern to DFG (e.g., those identified as having high priority for inventory by the CNDDDB, or those that are afforded specific consideration through CEQA, Section 1602 of the California Fish and Game Code, Section 404 of the Clean Water Act (CWA), or the Sustainable Fisheries Act, as amended). Sensitive habitats are of special concern because they have high potential to support special-status plant and

animal species. Sensitive habitats can also provide other important ecological functions, such as enhancing flood and erosion control and maintaining water quality.

Drainages, wetlands, and other areas identified in the wetland delineation as jurisdictional waters of the United States are protected under the CWA as regulated by the U.S. Army Corps of Engineers (USACE). Streams and adjacent riparian forest are also protected under the California Fish and Game Code. In addition, the Sacramento River, ESC/NCC, and Coon Creek have also been designated as essential fish habitat (EFH) by the Pacific Fishery Management Council to protect and enhance habitat for coastal marine fish and macroinvertebrate species that support commercial fisheries. EFH is defined as waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity. Under the *Pacific Coast Salmon Fisheries Management Plan* (Pacific Fishery Management Council 2003), the Sacramento River has been designated as EFH for spring-, fall-, late fall- and winter-run chinook salmon, and the ESC/NCC and Coon Creek have been designated as EFH for fall-run chinook salmon.

Sensitive habitats in the project area include the riparian habitat along Coon Creek, Deadman Creek, and intermittent drainages (described above as valley foothill riparian and freshwater marsh habitats).

JURISDICTIONAL WETLANDS AND OTHER WATERS OF THE UNITED STATES

A preliminary delineation of waters of the United States, including wetlands, was prepared for the Spears Ranch portion of the Park and Garden Bar Road. Fieldwork for the delineation report was conducted by EDAW wetland ecologists in April, May, June, and December 2007. The delineation identified the location of 31.5 acres of potentially jurisdictional waters of the United States on the Spears Ranch property and along Garden Bar Road, including 24.8 acres of perennial, intermittent, and ephemeral drainages, 1.2 acres of stock ponds, and 5.6 acres of freshwater marsh and seeps. All of these features qualify as sensitive habitats.

12.1.5 SPECIAL-STATUS SPECIES

Special-status species are plants and animals that are legally protected or otherwise considered sensitive by federal, state, or local resource conservation agencies and organizations. These species are federally listed and/or state listed as rare, threatened, or endangered; candidates or proposed for listing; identified by DFG or the U.S. Fish and Wildlife Service (USFWS) as species of concern; and plants considered by CNPS to be rare, threatened, or endangered.

The CNDDDB (2007) was reviewed for sensitive biological resources, including sensitive habitats and special-status species that are known to occur in the project vicinity. The occurrences within the Gold Hill, Auburn, Lincoln, Pilot Hill, Rocklin, Roseville, Lake Combie, Wolf, and Camp Far West U.S. Geological Survey 7.5-minute quadrangles were reviewed. The CNDDDB includes site-specific information on all reported occurrences of sensitive biological resources in California and is a “positive sighting” database. It provides only a record of occurrences as reported to the CNDDDB; therefore, a lack of data for species in specific areas does not necessarily indicate absence of the species from that area. A database search of CNPS’s *Inventory of Rare and Endangered Plants* (CNPS 2006) was conducted as well.

SPECIAL-STATUS PLANTS

This section summarizes the results of a special-status plant survey report that was conducted for the Spears Ranch property and Garden Bar Road (Appendix G).

Special-status plants are defined as plants that are legally protected or otherwise considered sensitive by federal, state, or local resource conservation agencies and organizations. Special-status plants are species, subspecies, or varieties that fall into one or more of the following categories, regardless of their legal or protection status:

- ▶ officially listed by the federal government or the state of California as endangered, threatened, or rare;

- ▶ a candidate for state or federal listing as endangered, threatened, or rare;
- ▶ taxa that meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the State CEQA Guidelines;
- ▶ taxa designated as a special-status, sensitive, or declining species by other federal or state agencies or nongovernmental organizations; and
- ▶ taxa considered by CNPS to be “rare, threatened or endangered in California” (Lists 1B and 2).

The CNPS Inventory includes five lists for categorizing plant species of concern. Plants on CNPS Lists 1A, 1B, and 2 meet the definitions in Section 1901 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act [CESA]) of the California Fish and Game Code and may qualify for state listing. Therefore, they are considered rare plants pursuant to Section 15380 of CEQA. DFG recommends, and local government agencies may require, that they be fully considered during preparation of environmental documents pursuant to CEQA. Some of the plants constituting CNPS Lists 3 and 4 meet the definitions included in Section 1901 et seq. or Sections 2062 and 2067 of the California Fish and Game Code and are eligible for state listing. DFG recommends, and local governments may require, that CNPS List 3 and List 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA (DFG 2000). The CNPS lists are categorized as follows:

- ▶ List 1A—plants presumed extinct in California;
- ▶ List 1B—plants rare, threatened, or endangered in California and elsewhere;
- ▶ List 2—plants rare, threatened, or endangered in California but more common elsewhere;
- ▶ List 3—plants about which we need more information (a review list); and
- ▶ List 4—plants of limited distribution (a watch list).

Searches of the CNPS and CNDDDB databases identified 19 special-status plant species as occurring in the project vicinity, and one special-status plant species not reported in the database queries was documented in the project area. Seventeen of these species, which are listed below, were identified as having no potential to occur in the project area and thus are excluded from further analysis:

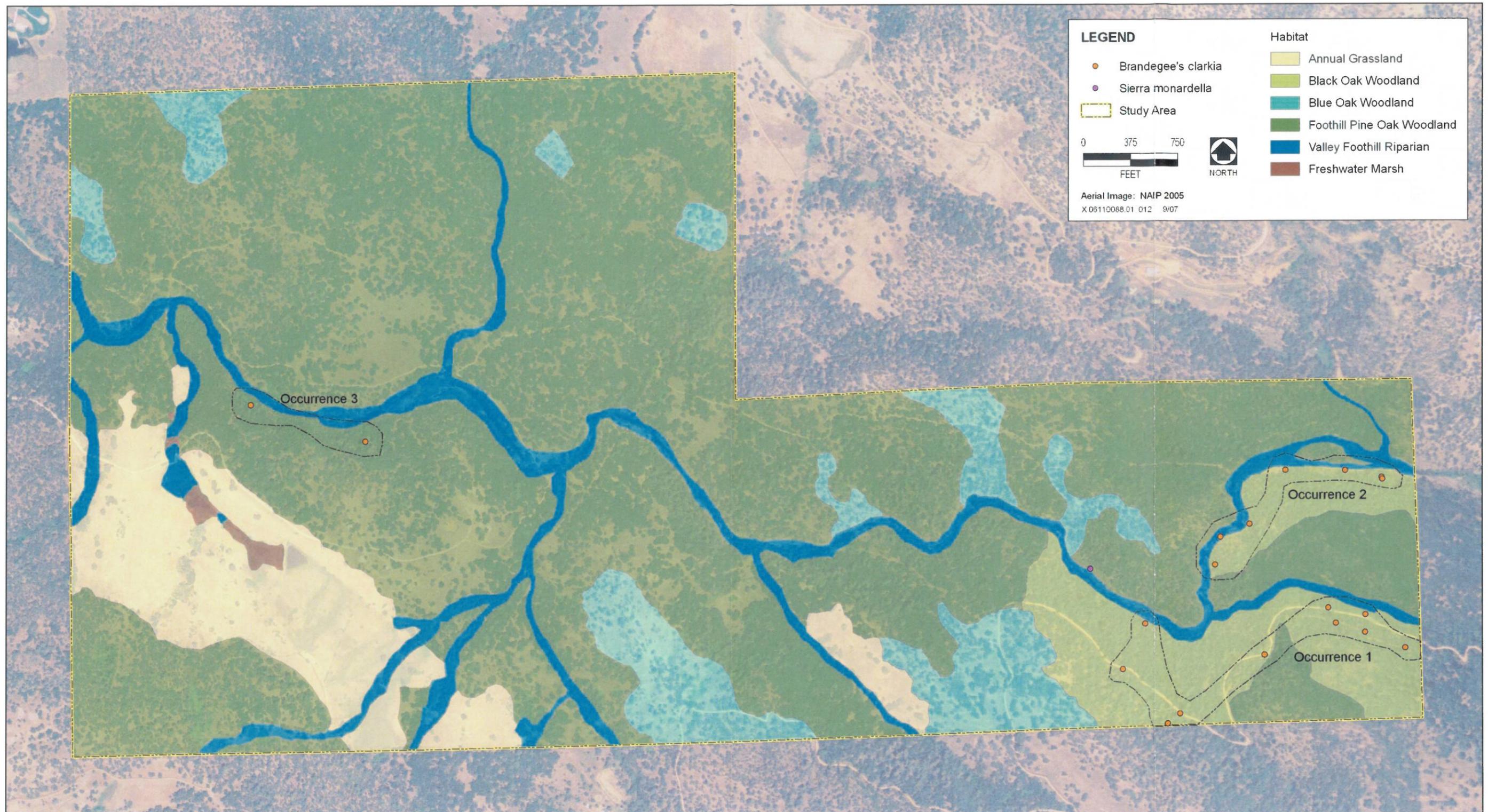
- ▶ Stebbin’s morning glory (*Calystegia stebbinsii*), Pine Hill ceanothus (*Ceanothus roderickii*), El Dorado bedstraw (*Galium californicum* ssp. *sierrae*), Red Hills soap root (*Chlorogalum grandiflorum*), and El Dorado County mule ears (*Wyethia reticulata*) are restricted to gabbro soils in El Dorado and Nevada Counties.
- ▶ Jepson’s onion (*Allium jepsonii*) and big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*) are found on serpentine soils, which do not occur in the project area.
- ▶ Dwarf downingia (*Downingia pusilla*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), Ahart’s dwarf rush (*Juncus leiospermus* var. *ahartii*), Red Bluff dwarf rush (*J. leiospermus* var. *leiospermus*), legenere (*Legenere limosa*), and pincushion navarretia (*Navarretia myersii* spp. *myersii*) occur in vernal pool habitats, which do not occur in the project area.
- ▶ Hispid bird’s-beak (*Cordylanthus mollis* ssp. *hispidus*), where it is known to occur in Placer County, is found in damp alkaline meadows at about 150 feet elevation. These conditions are not present within the project area.
- ▶ Butte County fritillary (*Fritillaria eastwoodiae*) occurs primarily in the northern foothills of the Sierra Nevada and Cascade Range. The southernmost known occurrences are found north of the project area in Yuba County, where they occur at higher elevations in Ponderosa Pine forest.

Three special-status plant species have the potential to occur in the vicinity of the project: Brandegee’s clarkia (*Clarkia biloba* ssp. *brandegeae*), oval-leaved viburnum (*Viburnum ellipticum*), and Sierra monardella (*Monardella*

candicans). Sierra monardella was not identified as a potential target special-status plant species from the database searches because no records currently exist in the CNDDDB for this species. However, one population of Sierra monardella was encountered during 2007 rare plant surveys of the Spears Ranch property (EDAW 2007). Table 12-3 summarizes the regulatory status, habitat, and blooming period of Brandegee's clarkia, oval-leaved viburnum, and Sierra monardella. Habitat and elevation range information for these species was obtained from the CNPS Electronic Inventory (2006) and *The Jepson Manual: Higher Plants of California* (Hickman 1993).

Table 12-3 Special-Status Plants Known or Potentially Occurring in the Project Area					
Species	Status ¹			Habitat and Blooming Period	Potential for Occurrence
	USFWS	DFG	CNPS		
Plants					
Brandegee's clarkia <i>Clarkia biloba</i> ssp. <i>brandegeae</i>	–	–	1B	Chaparral, cismontane woodland; often in roadcuts; 700–3,000 feet elevation; blooms May–July	Known to occur; identified in the project area during 2007 surveys.
Sierra monardella <i>Monardella candicans</i>	–	–	4	Sandy or gravelly soils in chaparral, cismontane woodland, or lower montane coniferous forest; blooms April–July	Known to occur; identified in the project area during 2007 surveys.
Oval-leaved viburnum <i>Viburnum ellipticum</i>	–	–	2	Chaparral, cismontane woodland, or lower montane coniferous forest; 600–4,000 feet elevation; blooms May–June	Unlikely to occur; suitable habitat in the project area was surveyed in 2007 and the species was not found. Most of the project area is below the elevation range of this species where it occurs in the central foothills.
Notes: CNPS = California Native Plant Society; DFG = California Department of Fish and Game; USFWS = U.S. Fish and Wildlife Service					
¹ Legal Status Definitions			CNPS Listing Categories:		
USFWS:			1B Plants rare, threatened, or endangered in California and elsewhere		
T Federal Threatened			2 Plants rare, threatened, or endangered in California but more common elsewhere		
E Federal Endangered			3 Plants for which more information is needed (a review list)		
DFG:			4 Plants of limited distribution (a watch list)		
R Rare					
T Threatened					
E Endangered					
Sources: CNDDDB 2007, CNPS 2006, Hickman 1993					

As part of special-status plant surveys conducted for the project (EDAW 2007), two special-status plant species—Brandegee's clarkia and Sierra monardella—were documented in the Spears Ranch portion of the Park. All areas of suitable habitat for oval-leaved viburnum were surveyed, but the species was not found. Locations of Brandegee's clarkia and Sierra monardella were mapped and are displayed in Exhibit 12-2. Descriptions of these two species, including their habitat and distribution in the project area, are provided below.



Source: Data provided by EDAW in 2007

Location of Brandegee's Clarkia and Sierra Monardella in the Spears Ranch Property

Exhibit 12-2

Brandegee's Clarkia

Brandegee's clarkia, a member of the evening primrose family, is a CNPS List 1B plant. Brandegee's clarkia is found in the central Sierra Nevada foothills between 800 and 2,900 feet above sea level in chaparral and woodland habitats, often along roadcuts. It is an annual herb with rose-pink flowers that blooms from May to July.

Brandegee's clarkia was encountered during surveys conducted in 2007 throughout the Park on steep north-facing slopes in openings in black oak woodlands. Populations of Brandegee's clarkia are abundantly distributed throughout the southeastern corner of the Spears Ranch portion of the Park and continue into the Didion Ranch portion of the Park, where they are found flourishing along the new hiking trails created within that portion of the Park. This species is commonly associated species include hedgehog dogtail, field hedge parsley, poison oak, blue wild rye, and white globe lily (*Calochortus albus*). Many of the populations are found on the roadcuts along the Whiskey Diggins Canal and associated maintenance road where individual plants number in the thousands. Scattered populations are also found along Garden Bar Road from where the access road begins to about 0.5 mile north along the road.

Sierra Monardella

Sierra monardella, a member of the mint family, is a CNPS List 4 plant. It is a small, annual plant with 0.5-inch heads of white flowers that bloom from April to July. Sierra monardella grows on sandy or gravelly soils in oak woodland, chaparral, and ponderosa pine forest throughout the Sierra Nevada foothills.

A single population of Sierra monardella was located in the Spears Ranch property during the 2007 surveys (Exhibit 12-2). Sierra monardella occurs in the openings of the interior live oak woodland on the north side of Coon Creek. The surrounding plant community is moderately dense annual grassland on a low gradient southwest-facing terrace above the creek. Associated species include bromes, lupines (*Lupinus* sp.), smooth cat's ears (*Hypochaeris glabra*), four spot (*Clarkia purpurea*), Ithuriel's spear, needleleaf navarretia (*Navarretia intertexta*), and brodiaea (*Brodiaea elegans*).

SPECIAL-STATUS FISH AND WILDLIFE

Four special-status fish species have the potential to occur in Coon and Deadman Creeks (Table 12-4). Of these species, the Central Valley steelhead DPS is the only species federally listed as threatened. USFWS delisted Sacramento splittail from its threatened status on September 22, 2003. The National Marine Fisheries Service (NMFS) determined that listing is not warranted for Central Valley fall-/late fall-run chinook salmon. However, this species is still designated a species of concern by NMFS and a species of special concern by DFG because of concerns about specific risk factors. The remaining species (hardhead) is considered a species of special concern by DFG.

Twenty-two special-status wildlife species have the potential to occur in the project vicinity, based on records in the CNDDDB and the regional presence of potentially suitable habitat. A table consisting of these species and an assessment of their potential for occurrence in the project area is included in Appendix H. Fifteen species that could occur or are known to occur in the project area are presented in Table 12-4, which describes the level of protection, habitat, and potential to occur within the project area. Each of these species is discussed briefly after Table 12-4.

FISH

Central Valley Fall-/Late Fall-Run Chinook Salmon ESU

Adult Central Valley fall-/late fall-run chinook salmon ESU enter the Sacramento and San Joaquin River systems from July through April and spawn from October through February. This species is a federal species of concern and state species of special concern (Table 12-4). During spawning, the female digs a redd (gravel nest) where she deposits her eggs, which are then fertilized by the male and undergo an incubation period. Newly emerged

chinook salmon fry remain in shallow, lower-velocity edgewater, particularly where debris congregates and makes the fish less visible to predators (DFG 1998). Juveniles typically rear in freshwater (in their natal streams, the Sacramento River system, and the Sacramento–San Joaquin Delta [Delta]) for up to 5 months before entering the ocean. Juveniles migrate downstream between January and June.

Cover structure, space, and food are necessary components of chinook salmon rearing habitat. Suitable habitat includes areas with instream and overhead cover—undercut banks, downed trees, and large overhanging tree branches. The organic materials that form fish cover also help provide food sources in the form of both aquatic and terrestrial insects. Juvenile chinook salmon that grow faster are likely to migrate downstream sooner, which helps to reduce the risks of predation and competition in freshwater systems. DFG fish sampling in Coon Creek downstream of Garden Bar Road on Foggy Ranch confirmed the presence of juvenile chinook salmon in 2005 (Navicky, pers. comm., 2007).

Central Valley Steelhead DPS

Historically, Central valley steelhead DPS spawned and reared in most of the accessible upstream reaches of the Sacramento and American Rivers and many of their tributaries. The Central Valley steelhead DPS generally migrated farther than chinook salmon into tributaries and headwater streams where cool, well-oxygenated water is available year round. This species is federally listed as threatened (Table 12-4). Central Valley steelhead spawn mainly from January through March, but spawning has been reported from late December through April (McEwan and Jackson 1996). During spawning, the female digs a redd in which she deposits her eggs, which are then fertilized by the male and undergo an incubation period. Newly emerged steelhead fry move to shallow, protected areas along streambanks but move to faster, deeper areas of the river as they grow.

Juvenile steelhead feed on a variety of aquatic and terrestrial insects and other small invertebrates. They rear throughout the year and may spend 1–3 years in freshwater before emigrating to the ocean. Smoltification, the physiological adaptation that juvenile salmonids undergo to tolerate saline waters, occurs in juveniles as they begin their downstream migration. DFG fish sampling efforts that took place on April 15, 2005, on the Spears Ranch portion of Coon Creek captured numerous rainbow trout individuals (Navicky, pers. comm., 2007).

Sacramento Splittail

Sacramento splittail was recently delisted from federally threatened status but remains a state species of special concern (Table 12-4). A large freshwater cyprinid that is tolerant of moderate salinities, this species is a bottom forager that feeds on small invertebrates and detritus. Sacramento splittail migrate from brackish water to freshwater to spawn over flooded terrestrial (preferred) or aquatic vegetation (Moyle 2002, Wang 1986). Larval splittail are commonly found in shallow, vegetated areas where spawning occurs and eventually move into deeper, open-water habitats as they grow and become juvenile. Splittail were historically present in Coon Creek, but they are unable to access the creek within the Spears Ranch portion of the Park because of downstream natural barriers (i.e., waterfalls) in the channel.

Hardhead

Hardhead is a federal species of concern and a state species of special concern (Table 12-4). This species is widely distributed in streams at low to middle elevations throughout the main Sacramento–San Joaquin drainage, including the Sacramento River system, and prefers undisturbed portions of larger streams. Hardhead are able to withstand summer water temperatures above 20°C; however, they will select areas with lower water temperatures when they are available. Pools with sand-gravel substrates and slow water velocities are the preferred habitat; adult fish inhabit the lower half of the water column, while the juvenile fish remain in the shallow water closer to the stream edges. Hardhead typically feed on small invertebrates and aquatic plants at the bottom of quiet water (Moyle 2002).

**Table 12-4
Special-Status Fish and Wildlife Species with Potential to Occur
in the Project Area**

Species	Status ¹		Habitat	Potential for Occurrence
	USFWS/NMFS	DFG		
Fish				
Central Valley fall-/late fall-run chinook salmon ESU <i>Oncorhynchus tshawytscha</i>	SC	SSC	EFH designated; requires cold, freshwater streams with suitable gravel for spawning; rears in seasonally inundated floodplains, rivers, and tributaries, and in the Delta	Occurs downstream in the lower Sacramento River, the ESC/NCC, and Coon Creek. Unlikely to pass waterfalls and access segment of Coon Creek within the Park boundaries under most flow conditions.
Central Valley steelhead DPS <i>Oncorhynchus mykiss</i>	T	–	Critical Habitat designated; requires cold, freshwater streams with suitable gravel for spawning; rears in seasonally inundated floodplains, rivers, and tributaries, and in the Delta	Occurs downstream in the lower Sacramento River, the ESC/NCC, and Coon Creek on the Spears Ranch property.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	DT	SSC	Spawning and juvenile rearing from winter to early summer in shallow weedy areas inundated during seasonal flooding in the lower reaches and flood bypasses of the Sacramento River	Occurs downstream in the lower Sacramento River; may also occur in the ESC/NCC and Coon Creek. Unlikely to pass waterfalls and access the segment of Coon Creek on the Spears Ranch property under most flow conditions.
Hardhead <i>Mylopharodon conocephalus</i>	–	SSC	Spawning occurs in pools and side pools of rivers and creeks; juveniles rear in pools of rivers and creeks, and in shallow to deeper water of lakes and reservoirs	Occurs downstream in the lower Sacramento River; may also occur in the ESC/NCC and Coon Creek on the Spears Ranch property.
Amphibians				
California red-legged frog <i>Rana aurora draytonii</i>	T	SSC	Riparian and slow-water rivers and lakes with emergent aquatic vegetation	Could occur; several cattle stock ponds and freshwater marshes in the southwest section of the Spears Ranch property provide suitable habitat.
Foothill yellow-legged frog <i>Rana boylei</i>	–	SSC	Perennial rocky streams in a wide range of deciduous and coniferous habitats; rarely found far from permanent water	Could occur; Coon Creek and other shallow, perennial drainages with cobble provide suitable habitat.
Reptiles				
Northwestern pond turtle <i>Emys marmorata</i>	–	SSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation	Known to occur; surveys conducted in 2005 confirmed presence along Coon Creek.

**Table 12-4
Special-Status Fish and Wildlife Species with Potential to Occur
in the Project Area**

Species	Status ¹		Habitat	Potential for Occurrence
	USFWS/NMFS	DFG		
Birds				
Cooper's hawk <i>Accipiter cooperii</i>	–	SSC	Typically inhabits oak savannah, woodlands, and open grassland habitats	Likely to occur; suitable foraging and nesting habitat present on the Spears Ranch property in oak woodlands.
Sharp-shinned hawk <i>Accipiter striatus</i>	–	SSC	Nests and forages in woodlands but may occur in the more open savannah woodland type habitats such as blue oak woodland and blue oak–foothill pine	Could occur; suitable foraging and nesting habitat present on the Spears Ranch property in oak woodlands.
Golden eagle <i>Aquila chrysaetos</i>	–	SSC; FP	Forages over open shrub and grasslands; nests on cliffs or large rock outcrops	Known to occur; suitable foraging and nesting habitat present on the Spears Ranch property in annual grasslands and oak woodlands.
Yellow-breasted chat <i>Icteria virens</i>	–	SSC	Forages and nests in riparian thickets of willow, blackberry, wild grape, and other brushy tangles near watercourses	Known to occur; foraging and nesting habitat present on the Spears Ranch property in patches of blackberry thickets along Coon Creek and surrounding freshwater marshes and stock ponds.
Yellow warbler <i>Dendroica petechia</i>	–	SSC	Nests in mesic, deciduous thickets, especially riparian; preferred habitat includes moist areas with dense insect prey populations	Could occur; no suitable breeding habitat present in the project area; possible occurrence as a migrant.
White-tailed kite <i>Elanus leucurus</i>	–	FP	Forages in grasslands and agricultural fields; nests in isolated trees or small woodland patches	Could occur; marginally suitable foraging habitat present in the project area in grasslands with scattered oak trees.
California black rail <i>Laterallus jamaicensis cotorniculus</i>	–	T	Forages and nests in freshwater marshes with shallow water and little to no fluctuation that are composed of dense stands of bulrushes and/or cattails	Known to occur; suitable foraging and nesting habitat present in marshes along Coon Creek.
Loggerhead shrike <i>Lanius ludovicianus</i>	–	SSC	Forages in grasslands and nests in shrubs and small trees	Could occur; suitable foraging habitat present in the project area in grasslands with scattered oak trees.

**Table 12-4
Special-Status Fish and Wildlife Species with Potential to Occur
in the Project Area**

Species	Status ¹		Habitat	Potential for Occurrence
	USFWS/NMFS	DFG		
Mammals				
Ringtail <i>Bassariscus astutus</i>	–	FP	Finds optimum habitat in low- to mid-elevation riparian deciduous areas; seldom found more than 0.6-mile from water; requires rock crevices, hollow trees, or snags for breeding or resting	Known to occur; suitable foraging habitat and denning habitat present in large (> 6 inches dbh) trees along Coon Creek.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	–	SSC	Lives in a wide variety of habitats but most common in mesic sites; typically roosts in caves, mines, and similar structures	Could occur; suitable habitat present in the project area in rock crevices within foothill pine-oak woodlands.
Notes: dbh = diameter at breast height; DFG = California Department of Fish and Game; EFH = essential fish habitat; ESC = East Side Canal; NCC = Natomas Cross Canal; NMFS = National Marine Fisheries Service; USFWS = U.S. Fish and Wildlife Service				
¹ Legal Status Definitions				
USFWS/NMFS:		DFG:		
T	Federal Threatened	R	Rare	
E	Federal Endangered	T	Threatened	
DT	Recently delisted from threatened status	E	Endangered	
SC	Species of Concern	SSC	Species of Special Concern	
		FP	Fully Protected	
Sources: CNDDDB 2007; USFWS 2007; Placer County 2006; DFG 2004, 2005, 2006, 2007				

AMPHIBIANS AND REPTILES

California Red-Legged Frog

California red-legged frog is federally listed as threatened and is a state species of special concern (Table 12-4). This species is commonly found in lowlands or foothills adjacent to streams; it also inhabits humid forests, woodlands, grasslands, and streambanks with plant cover. Adults will use mammal burrows or other refuges, such as moist leaf litter, in upland habitats for estivation (Jennings and Hayes 1994). A buffer of 200 feet (60 meters) from aquatic habitat is sufficient to provide upland foraging and dispersal habitat for most California red-legged frogs inhabiting the project area (USFWS 2006). California red-legged frogs are usually associated with aquatic habitats such as creeks, streams, and ponds, occurring primarily in areas that have pools approximately 3 feet deep with adjacent dense emergent or riparian vegetation (Jennings and Hayes 1988). Adult frogs rarely move large distances from their aquatic habitat.

California red-legged frogs historically occupied portions of the western slope of the Sierra Nevada from Shasta County south to Tulare County, but these populations have been fragmented and nearly eliminated. Currently, only a few drainages in the foothills of the Sierra Nevada are known to support California red-legged frogs (USFWS 2002).

Although there are no CNDDDB records of California red-legged frog within 10 miles of the project area (CNDDDB 2007), suitable habitat in the Sierra Nevada foothills is often located on private land where surveys are infrequently conducted. Within the Spears Ranch property, Coon Creek, Deadman Creek, intermittent creeks, freshwater marshes, and cattle stock ponds provide suitable habitat for California red-legged frog. The presence of bullfrogs in stock ponds and marshes may make these habitats less suitable to unsuitable as spawning and rearing

habitat for this species, but for the purpose of this EIR California red-legged frog are presumed to potentially occur.

Foothill Yellow-Legged Frog

Foothill yellow-legged frog is a state species of special concern (Table 12-4). This species is characteristically found close to water in association with perennial streams and ephemeral creeks that retain perennial pools through the end of summer. In rivers, breeding areas are often associated with confluences of tributary streams that are predominantly perennial (Seltenrich and Pool 2002). These frogs require shallow, flowing streams with some cobble-sized substrate on which they deposit large masses of eggs. Egg laying normally follows the period of high-flow discharge associated with winter rainfall, usually between late March and early June. Eggs hatch in about 15–30 days depending on water temperature, and tadpoles metamorphose into juvenile frogs in 3–4 months.

There are no CNDDDB records of foothill yellow-legged frog within 10 miles of the project area (CNDDDB 2007). However, several of the drainages that cross the Spears Ranch property, especially Coon Creek, may provide suitable breeding pools for foothill yellow-legged frogs. For the purpose of this EIR foothill yellow-legged frog are presumed to potentially occur.

Northwestern Pond Turtle

Northwestern pond turtle is a state species of special concern (Table 12-4). This species generally occurs in streams, ponds, freshwater marshes, and lakes from sea level to about 6,000 feet above sea level. Northwestern pond turtles require still or slow-moving water with instream emergent woody debris, rocks, or other similar features for basking sites. Their nests are typically located on unshaded upland slopes in dry substrates with clay or silt soils. Hatchlings and juveniles require shallow water with abundant emergent vegetation.

Surveys conducted by DFG along Coon Creek in fall 2005 revealed that northwestern pond turtles are present within the Spears Ranch property. A total of 25 individuals were captured at three locations along Coon Creek. In addition, there are two CNDDDB records of northwestern pond turtle within 10 miles of the project area (CNDDDB 2007). These records occur 7.25 miles northeast of the project area along Wolf Creek and 5.25 miles from the project area close to Rock Creek near Camp Far West Reservoir. Suitable aquatic habitat is present in freshwater marshes along Coon Creek and other drainages and stock ponds in the southwestern section of the Spears Ranch property.

PROTECTED RAPTORS

Several raptor species that are considered state species of special concern or state fully protected species—Cooper’s hawk, sharp-shinned hawk, golden eagle, and white-tailed kite—may forage and/or nest in the project area (Table 12-4). Other raptors, including red-shouldered hawk, red-tailed hawk, western screech owl, and great-horned owl (*Bubo virginianus*) also may nest in the project area.

Cooper’s hawks and sharp-shinned hawks typically nest within high crotches or cavities of deciduous trees in oak woodlands and riparian corridors and forage in openings in these woodlands. Golden eagles and white-tailed kites favor open terrain for foraging, such as grasslands, shrublands with tree saplings, and open-canopy blue oak woodlands. The golden eagle prefers cliffs and large trees with large horizontal branches and for roosting and perching.

The nearest record of white-tailed kite is approximately 9 miles south of the project area (CNDDDB 2007). Two golden eagles were observed on the Spears Ranch property during point count surveys (DFG 2007), and three Cooper’s hawks were observed on the Spears Ranch property during playback surveys (DFG 2005). In addition, a golden eagle nest was found within the Park in the southeast corner, within about 100 feet of Whiskey Diggins Canal Road, in 2007. Within the Spears Ranch property, grasslands with scattered oaks in the southwest section of the Spears Ranch property may provide suitable foraging and nesting habitat for white-tailed kite and foraging

habitat for golden eagles. Cliffs with overhanging ledges and large trees (Zeiner et al. 1990) within the Spears Ranch property could also be utilized by golden eagles for nesting habitat. Foothill pine-oak woodland habitats with scattered openings may provide Cooper's hawks and sharp-shinned hawks with suitable foraging and nesting habitat.

OTHER SPECIAL-STATUS BIRDS

California Black Rail

The California black rail is state listed as threatened and is a fully protected species (Table 12-4). This species typically inhabits coastal tidal and Delta marshes but has been known to utilize freshwater marshes on hardwood rangelands. The black rail typically makes its concealed nest under a mat of dead marsh vegetation. Habitat loss and degradation for this species has resulted primarily from water and flood-control projects, land-use changes, agriculture, and livestock grazing.

One black rail was detected at a freshwater marsh on the Spears Ranch property during a DFG survey in spring 2005 (DFG 2005), but there are no other records of California black rail within 10 miles of the project area (CNDDDB 2007). Freshwater marshes, seeps, blackberry patches, and stock ponds on the Spears Ranch property provide suitable habitat for California black rail.

Yellow-Breasted Chat

Yellow-breasted chat is a state species of special concern (Table 12-4). Yellow-breasted chats typically nest in riparian habitats with a dense shrub layer. They tend to prefer willow, wild grape, and blackberry thickets (Ricketts et al. 2000). They prefer areas of scattered trees, dense shrubbery, and any other moist, shady areas such as willow thickets for nesting.

One yellow-breasted chat was detected on the Spears Ranch property during a DFG survey in spring 2005 (DFG 2005). There are no CNDDDB records of yellow-breasted chats within 10 miles of the project area; however, blackberry thickets surrounding ponds and freshwater marshes on the Spears Ranch property may provide suitable habitat for this species.

Loggerhead Shrike

Loggerhead shrike is a state species of special concern (Table 12-4). Loggerhead shrikes are most commonly found in grasslands, agricultural lands, open shrublands, and open woodlands. Special habitat features that improve shrike abundance, survival, and reproductive success are hunting perches, low nesting trees and shrubs, thorny vegetation, and/or barbed wire on which to impale their prey.

There are no CNDDDB records of this species within 10 miles of the project area; however, grassland habitat interspersed with scattered shrubs and trees in the southwest section of the Spears Ranch property may provide suitable foraging and nesting habitat for the loggerhead shrike.

MAMMALS

Ringtail

Ringtail is a state fully protected species (Table 12-4). This species occurs in mixed riparian and other forest and shrubby habitats, in close association with permanent water and rocky areas (Belluomini 1980). Ringtail use rock crevices, hollow trees, logs, snags, abandoned burrows, or woodrat nests for dens. Ringtail young are typically born in May and June (Belluomini 1980).

Riparian vegetation on the Spears Ranch property provides suitable habitat for ringtail. Surveys conducted by DFG in 2005 along Coon Creek revealed that ringtail is present within the Spears Ranch property (DFG 2005).

Townsend's Big-Eared Bat

Townsend's big-eared bat is a state species of special concern (Table 12-4). This species lives in a variety of communities: coastal conifer and broad-leaf forests, oak and conifer woodlands, arid grasslands and deserts, and high-elevation forests and meadows. Throughout most of its geographic range, it is most common in mesic sites (Kunz and Martin 1982). Known roosting sites in California include limestone caves, lava tubes, mine tunnels, buildings, and other human-made structures (Dalquest 1947; Graham 1966; Pearson, Koford, and Pearson 1952). Habitat for Townsend's big-eared bats must include appropriate roosting, maternity, and hibernacula sites free from disturbances by humans. Females typically roost in large maternity colonies that are highly susceptible to disturbances by humans (Barbour and Davis 1969). Males usually roost singly or in small groups and are probably not affected as much as females by disturbances. Both sexes hibernate in buildings, caves, and mine tunnels, either singly (males) or in small groups (Pearson, Koford, and Pearson 1952).

Townsend's big-eared bats may use rock crevices within foothill pine-oak woodlands and riparian habitat present on the Spears Ranch property.

12.2 REGULATORY SETTING

12.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

FEDERAL ENDANGERED SPECIES ACT

Pursuant to the federal Endangered Species Act of 1973 (ESA), as amended (Title 16, Section 1531 et seq. of the U.S. Code [i.e., 16 USC 1531 et seq.]), USFWS has regulatory authority over federally listed species. Under ESA, a permit to "take" a listed species is required for any federal action that may harm an individual of that species. "Take" is defined under Section 9 of ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Under federal regulation, take is defined further to include habitat modification or degradation where it would be expected to result in death of or injury to listed wildlife by significantly impairing essential behavioral patterns (breeding, feeding, or sheltering). In addition to listed species, USFWS publishes a list of candidate species for which it has sufficient biological information to support a proposal to list as endangered or threatened. Species on this list are not protected under ESA, but they receive special attention during environmental review.

Section 7 of the ESA requires all federal agencies to consult with USFWS and NMFS to ensure that their actions are not likely to "jeopardize the continued existence" of any listed species or "result in the destruction or adverse modification" of designated critical habitat. Because implementation of the proposed project could result in the fill of waters of the United States, consultation between USACE, USFWS, and NMFS under Section 7 of ESA would be required for California red-legged frog and Central Valley steelhead. Section 7 of ESA allows USFWS and NMFS to issue a biological opinion authorizing the incidental take of listed species if such take is accompanied by measures to minimize and mitigate impacts associated with the take.

MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act, first enacted in 1918, domestically implements a series of treaties between the United States and Great Britain (on behalf of Canada), Mexico, Japan, and Russia that provide for international protection of migratory birds. The act authorizes the U.S. Secretary of the Interior to regulate the taking of migratory birds, providing that it shall be unlawful, except as permitted by regulations, "to pursue, take, or kill...any migratory bird, or any part, nest or egg of any such bird, included in the terms of conventions" with certain other countries (16 USC 703). This includes direct and indirect acts, although harassment and habitat

modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the Migratory Bird Treaty Act includes several hundred species and essentially includes all native birds. Migratory birds are found in the project area.

SECTION 404 OF THE CLEAN WATER ACT

Pursuant to Section 404 of the CWA, USACE regulates discharge of dredged or fill material into waters of the United States. Waters of the United States and their lateral limits are defined in Title 33, Part 328.3(a) of the Code of Federal Regulations (i.e., 33 CFR Part 328.3[a]) and include navigable waters of the United States, interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. For purposes of describing habitat values and characteristics, waters of the United States are often categorized as “jurisdictional wetlands” (i.e., wetlands over which USACE exercises jurisdiction pursuant to Section 404) and “other waters of the United States.” Fill is defined as any material that replaces any portion of a water of the United States with dry land or changes the bottom elevation of any portion of a water of the United States. Activities resulting in the placement of dredged or fill material within waters of the United States usually require a permit from USACE, even if the area would be dry at the time the activity would take place.

Many surface waters and wetlands in California, including intermittent streams and seasonal lakes and wetlands, meet the criteria for waters of the United States. Jurisdictional waters of the United States in the project area include Coon Creek, intermittent and ephemeral drainages flowing into Coon Creek (e.g., Deadman Creek), stock pond impoundments on those drainages, adjacent freshwater marshes and seeps, and some ditches and canals.

12.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

CALIFORNIA ENDANGERED SPECIES ACT

Pursuant to Section 2081 of CESA, a permit from DFG is required for projects that would result in the take of a state-listed rare, threatened, or endangered plant or animal species. Under CESA, “take” is defined as an activity that would directly or indirectly kill an individual of a species; however, the CESA definition of take does not include “harming” or “harassing,” as the definition under the federal ESA does. As a result, the threshold for take is higher under CESA than under ESA (i.e., habitat modification is not necessarily considered take under CESA).

SECTIONS 3503 AND 3513 OF THE CALIFORNIA FISH AND GAME CODE—PROTECTION OF BIRDS

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., eagles, hawks, owls, and falcons), including their nests or eggs. Section 3513 provides for adoption of the provisions of the Migratory Bird Treaty Act.

FULLY PROTECTED SPECIES UNDER THE CALIFORNIA FISH AND GAME CODE

Protection of fully protected species is described in four sections of the California Fish and Game Code that list 37 fully protected species (Sections 3511, 4700, 5050, and 5515). These statutes prohibit take or possession of fully protected species. DFG is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species. DFG has informed nonfederal agencies and private parties that they must avoid take of any fully protected species in carrying out projects. Fully protected species known or expected to occur in the project area are golden eagle, white-tailed kite, and ringtail.

SECTION 1602 OF THE CALIFORNIA FISH AND GAME CODE—STREAMBED ALTERATION

Under Section 1602, it is unlawful for any person, governmental agency, or public utility to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, or to deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, without first notifying DFG of such activity. A stream is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks that supports fish or other aquatic life. This definition includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. DFG's jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A DFG streambed alteration agreement must be obtained for any project that would result in an impact on a river, stream, or lake.

PORTER-COLOGNE ACT CERTIFICATION

Each of the nine regional water quality control boards (RWQCBs) must prepare and periodically update water quality control plans (basin plans) pursuant to the Porter-Cologne Water Quality Control Act. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to achieve wetland protection based on water quality objectives. Another opportunity for wetland protection is the Section 401 certification process. Under Section 401 of the CWA, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must obtain a certificate from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board to the nine RWQCBs.

SENATE BILL 1334

Although oak trees and oak woodland habitats are not afforded special protection under federal law, the California Legislature enacted Senate Bill (SB) 1334 (Chapter 732, Statutes of 2004), which added oak woodland conservation regulations to the Public Resources Code. This law requires each county to determine whether a project within its jurisdiction may result in a conversion of oak woodlands resulting in a significant effect on the environment. If a county determines that there may be a significant effect to oak woodland resources, the county must consider alternative approaches to mitigate the effect. Such mitigation alternatives include conservation easements; planting and maintaining an appropriate number of replacement trees; contributing funds to the Oak Woodlands Conservation Fund to purchase oak woodlands conservation easements; and/or other mitigation measures developed by the county.

12.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

PLACER COUNTY GENERAL PLAN

The following are relevant goals and policies identified by the *Placer County General Plan* (Placer County 1994) for biological resources.

- ▶ **Policy 6.A.7.** [Placer] County shall discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat.

GOAL 6.B: Protect wetland communities and related riparian areas throughout Placer County as valuable resources.

- ▶ **Policy 6.B.1.** The County shall support the “no net loss” policy for wetland areas regulated by USACE, USFWS, and DFG. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.

- ▶ **Policy 6.B.4.** The County shall strive to identify and conserve remaining upland habitat areas adjacent to wetlands and riparian areas that are critical to the survival and nesting of wetland and riparian species.

GOAL 6.C: To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

- ▶ **Policy 6.C.1.** The County shall identify and protect significant ecological resource areas and other unique wildlife habitats critical to protecting and sustaining wildlife populations. Significant ecological resource areas include the following:
 - a. wetland areas including vernal pools;
 - b. stream environment zones;
 - c. any habitat for rare, threatened, or endangered animals or plants;
 - d. critical deer winter ranges (winter and summer), migratory routes, and fawning habitat;
 - e. large areas of nonfragment natural habitat, including blue oak woodlands, valley foothill riparian, and vernal pool habitat;
 - f. identifiable wildlife movement zones, including but not limited to nonfragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway; and
 - g. important spawning areas for anadromous fish.
- ▶ **Policy 6.C.6.** The County shall support preservation of the habitats of rare, threatened, endangered, and/or other special-status species. Federal and state agencies, as well as other resource conservation organizations, shall be encouraged to acquire and manage endangered species' habitats.
- ▶ **Policy 6.C.7.** The County shall support the maintenance of suitable habitats for all indigenous species of wildlife, without preference to game or nongame species, through maintenance of habitat diversity.

GOAL 6.D: To preserve and protect the valuable vegetation resources of Placer County.

- ▶ **Policy 6.D.3.** The County shall support the preservation of outstanding areas of natural vegetation, including but not limited to oak woodlands, riparian areas, and vernal pools.
- ▶ **Policy 6.D.4.** The County shall ensure that landmark trees and major groves of native trees are preserved and protected. In order to maintain these areas in perpetuity, protected areas shall also include younger vegetation with suitable space for growth and reproduction.
- ▶ **Policy 6.D.6.** The County shall ensure the conservation of sufficiently large, continuous expanses of native vegetation to provide suitable habitat for maintaining abundant and diverse wildlife.
- ▶ **Policy 6.D.7.** The County shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient catchment, and wildlife habitats. Such communities shall be restored or expanded, where possible.

PLACER COUNTY TREE ORDINANCE

The County Tree Ordinance applies to any project with the potential to affect protected trees. Protected trees are defined as any native tree species with a diameter at breast height (dbh) of 6 inches or greater. The County Tree Ordinance acknowledges Placer County's value for native trees and their preservation. This ordinance prohibits the removal of landmark trees, including stands or groves of native trees, native tree corridors, and other significant native tree habitats. In addition, trees that are designated for preservation and avoidance are not to be damaged. Removal of trees from riparian areas is also prohibited by the ordinance without prior evaluation and consideration of suitable mitigation measures.

PLACER COUNTY CONSERVATION PLAN

The draft *Placer County Conservation Plan (PCCP)* (Placer County 2005) was completed in February 2005 as a means for the County to pursue a natural community conservation plan and a habitat conservation plan for eastern Placer County. The PCCP aims to ensure the continued conservation of threatened and endangered species in Placer County and to resolve potential conflicts between otherwise lawful urban development activities and the conservation of the species on nonfederal land in Placer County. The PCCP encompasses 221,250 acres of western Placer County bordered on the west by Sutter County, on the north by Yuba and Nevada Counties, on the east by El Dorado County, and on the south by Sacramento County. The entire project area is included within the PCCP boundaries.

The PCCP establishes a comprehensive, countywide plan for the conservation of all natural communities, endangered species, and other less sensitive species of native wildlife, fish, and plants in western Placer County and is an important part of the Placer Legacy Open Space and Agricultural Conservation Program (see Section 1.4.1). The PCCP is under consideration by USFWS, NMFS, and DFG, and under the granted permit term is proposed to extend to the year 2050. Once approved, the PCCP would provide the County with a scientific and legal basis for a series of regulatory permits under Section 10 of ESA and authorization issued from DFG under Section 2081 of the California Fish and Game Code, in compliance with CESA that will make the environmental review of future public and private projects more consistent, more predictable and more efficient.

12.3 IMPACTS

12.3.1 ANALYSIS METHODOLOGY

The biological resources investigation involved the following:

- ▶ a literature review,
- ▶ focused wildlife surveys performed by DFG,
- ▶ focused botanical surveys,
- ▶ evaluation of potentially occurring special-status species and other sensitive biological resources, and
- ▶ a preliminary delineation of jurisdictional waters of the United States, including wetlands.

Effects of the proposed project on biological resources were assessed based on the project facilities described in Chapter 3.0, "Project Description."

12.3.2 THRESHOLDS OF SIGNIFICANCE

Based on the Placer County CEQA checklist and the State CEQA Guidelines, the proposed project would result in a potentially significant impact on biological resources if it would:

- ▶ substantially affect a rare, threatened, or endangered species;

- ▶ interfere substantially with the movement of any resident or migratory fish or wildlife species;
- ▶ substantially diminish habitat for fish, wildlife, or plants;
- ▶ substantially affect on any riparian areas or wetlands;
- ▶ conflict with any local policies or ordinances protecting biological resources; or
- ▶ conflict with an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Section 15380 of the State CEQA Guidelines further provides that a plant or animal species may be treated as rare or endangered even if it is not on one of the official lists under certain conditions if, for example, it is likely to become endangered in the foreseeable future.

Based on guidelines established by USFWS and DFG, a project could be considered to have a significant adverse impact on biological resources if it would result in substantial disruption to or destruction of any special-status species, its habitat, or breeding grounds. A project would also have a significant impact if it would result in a substantial loss of important plant or animal species or cause a change in species composition, abundance, or diversity beyond that of normal variability.

The construction and long-term use of the proposed trails, facilities, and road improvements along Garden Bar Road would not substantially interfere with the movement of any resident or migratory fish or wildlife species, nor would it affect important deer migration routes (Placer County Fish and Game Commission 1992). Vegetation would be removed only within the trail corridors, along Garden Bar Road, and immediately surrounding structures such as bridges and restrooms. The proposed project would support the plans and policies of the General Plan. The proposed project is within the area covered by the draft PCCP, but not within any adopted conservation plan areas. Because the proposed project would have no impact on these thresholds, they are not discussed further in this chapter.

The Didion Ranch parking area expansion, including relocation of the adjacent helistop, is in an area adjacent to the existing parking area that has been previously graded. A biological resources assessment was conducted by Northfork Associates in 2006, and no biological resources were identified within expansion area. Therefore, it is assumed that there would be no additional impacts to biological resources as a result of the parking area expansion and it will not be discussed further in this chapter.

12.3.3 IMPACT ANALYSIS

IMPACT	Biological Resources—Potential Disturbance of Aquatic Habitats and the Native Fish Community.
12-1	<i>Several native fish species, including special-status steelhead and fall-/late fall-run chinook salmon, are known to use aquatic habitats in Coon Creek within or immediately downstream of the project area. Implementation of the proposed project could result in temporary and long-term degradation of aquatic habitats, loss of instream cover, and increased injury or mortality of fishes because of increased angling pressure.</i>
Significance	<i>Potentially Significant</i>

Mitigation Proposed *Mitigation Measure 12-1: Implement Measures to Protect Aquatic Habitats and the Native Fish Community; Mitigation Measure 12-2: Replace, Restore, or Enhance Affected Jurisdictional Waters of the United States and Waters of the State; Mitigation Measure 5-1 in Chapter 5.0, "Soils, Geology, and Seismicity": Obtain Authorization for Construction and Operation Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required; and Mitigation Measure 11-1 in Chapter 11.0, "Hydrology and Water Quality": Prepare and Implement a Grading and Drainage Plan*

Residual Significance *Less than Significant*

TEMPORARY CONSTRUCTION-RELATED EFFECTS ON AQUATIC HABITATS

Construction-related increases in sediments and turbidity and the release and exposure of contaminants (e.g., fuels, lubricants) could adversely affect aquatic habitats and fish species immediately adjacent to and downstream of the project area. Increases in turbidity and sediment can harm fish respiration, feeding, and ability to perform other critical basic biological activities. Further, contamination of Coon Creek with construction-related chemicals could impair or even kill aquatic species. Fish population levels and survival have been linked to levels of turbidity and siltation in a watershed. Prolonged exposure to high levels of suspended sediment could create a loss of visual capability in fish, leading to a reduction in feeding and growth rates; a thickening of the gill epithelia, potentially causing the loss of respiratory function; clogging and abrasion of gill filaments; and increases in stress levels, reducing the tolerance of fish to disease and toxicants (Waters 1995).

Also, high levels of suspended sediments would cause the movement and redistribution of fish populations and could affect physical habitat. Once suspended sediment is deposited, it could reduce water depths in pools, decreasing the water's physical carrying capacity for juvenile and adult fish (Waters 1995). Increased sediment loading could degrade food-producing habitat downstream of the project area as well. Sediment loading could interfere with photosynthesis of aquatic flora and displace aquatic fauna. Many fish are sight feeders, and turbid waters reduce the ability of these fish to locate and feed on prey. Some fish, particularly juveniles, could become disoriented and leave areas where their main food sources are located, ultimately reducing their growth rates.

In addition, the potential exists for contaminants such as fuels, oils, and other petroleum products used during construction activities to be introduced into the water system directly or through surface runoff. Contaminants may be toxic to fish or may alter oxygen diffusion rates and cause acute and chronic toxicity to aquatic organisms, thereby reducing growth and survival.

LONG-TERM EFFECTS ON AQUATIC HABITATS AND THE FISH COMMUNITY

Construction of the trail system and bridges over Coon Creek would result in disturbance and removal of native riparian vegetation. Removal of such riparian vegetation or woody material could result in loss of SRA habitat that is important to fish, including special-status species. Construction of the on-site parking areas and access road would remove or adversely affect the dripline of native trees. Further, the construction of 14 miles of new natural-surface trails would increase the amount of soil exposed to erosion. In addition to the new trails that would be constructed in the project area, there are 10 miles of existing ranch roads for hikers, bikers, and equestrians, including bridge crossings over Coon Creek, Deadman Creek, and ephemeral streams. Increased use of these trails could increase erosion and degrade water quality.

Depending on the design used, the construction and long-term presence of bridges across Coon Creek could have an adverse effect on geomorphic processes and associated habitat functions in the creek. If bridge pilings were placed within the active stream channel, they could affect local currents, resulting in modified stream morphology and flow habitats.

As discussed above, DFG sampling in 2005 confirmed the presence of steelhead/rainbow trout in the project reach of Coon Creek and chinook salmon slightly downstream; however, these species were found to be present in low abundance. Increases in the number of anglers related to improved access to fishing locations and associated pressure in the project area could degrade habitats and, depending on the method and equipment used, increased angling pressure could result in varying effects on the fish community. The small populations of anadromous salmonids in Coon Creek could be adversely affected by increased angling pressure and would be subject to a decline in abundance.

Riparian and aquatic habitat restoration projects are planned for the reach of Coon Creek that is within the Park. Restoration of habitat along and within the creek would have a beneficial long-term effect on aquatic habitats and fisheries. These restoration projects would be implemented as funding allows and, therefore, the ultimate extent of restoration is unknown at this time.

CONCLUSION

Implementation of the proposed project could result in temporary and long-term degradation of aquatic habitats, loss of important SRA habitat functions, and increased injury or mortality of fishes related to increased angling pressure. This impact would be potentially significant. Implementation of Mitigation Measures 12-1, 12-2, 5-1, and 11-1 would reduce this impact to a less-than-significant level.

IMPACT 12-2 **Biological Resources—Potential Disturbance of California Red-Legged Frog.** *Suitable habitat for California red-legged frog exists within the project area. Construction and operation of proposed trails, bridges, septic system, and structures across or adjacent to stock ponds, creeks with backwaters, and freshwater marshes could degrade and possibly result in removal of aquatic habitat or could result in physical injury to red-legged frog.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 12-3: Implement Measures to Protect California Red-legged Frog*

Residual Significance *Less than Significant*

Creeks on the Spears Ranch property, including several areas with freshwater marsh and stock ponds with emergent vegetation, have an intermixed fringe of cattails appropriate for use by California red-legged frog. If California red-legged frog is present in the project area, construction of proposed trails, roads, and foot bridges across drainages, viewing boardwalks, a septic system, and other structures within 200 feet of occupied habitat could directly and indirectly affect California red-legged frogs. Construction at these locations could kill adults, larvae, or eggs. Construction in aquatic sites could also cause loss of habitat. Indirect effects could result from the temporary release of sediments or spills of hazardous materials into occupied aquatic habitat. Trail use is not expected to have a long-term significant effect on California red-legged frogs, because foot bridges and boardwalks would be provided for trail users to avoid long-term damage to waterways. However, the construction-related impact would be potentially significant. Implementation of Mitigation Measure 12-3 would reduce this impact to a less-than-significant level.

IMPACT 12-3 **Biological Resources—Potential Disturbance of Foothill Yellow-Legged Frog and Northwestern Pond Turtle.** *Habitat for foothill yellow-legged frog and northwestern pond turtle occurs in the project area. Construction of trails across drainages could degrade aquatic habitat or could result in physical injury to yellow-legged frog and pond turtle.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 12-4: Implement Measures to Protect Foothill Yellow-Legged Frog and Northwestern Pond Turtle*

Residual Significance *Less than Significant*

Foothill yellow-legged frog could occur within the project area. Most of Coon Creek is too wide and deep to support populations of foothill yellow-legged frog; however, a few areas along Coon Creek have terraces and small pools with tail-outs that may have appropriate substrate and water velocity for egg deposition and development. Northwestern pond turtle occurs in Coon Creek and may occur in other drainages and stock ponds in the southwestern section of the Park.

Construction and installation of proposed trails, roads, and foot bridges across drainages, viewing boardwalks, a septic system, and other structures during the breeding season may affect foothill yellow-legged frog and northwestern pond turtles by causing the temporary release of sediments in the water. Direct effects could result from physically disturbing foothill yellow-legged frog egg masses, larvae, or adults. Indirect effects could result from the release of sediments or hazardous materials into aquatic habitat. Northwestern pond turtle could also be affected in the same manner by construction of viewing boardwalks at stock ponds.

Trail use is not expected to have a significant effect on foothill yellow-legged frogs or northwestern pond turtle because crossings over Coon Creek would be provided for trail users to avoid impacts on waterways. However, construction-related impacts would be potentially significant. Implementation of Mitigation Measure 12-4 would reduce this impact to a less-than-significant level.

IMPACT 12-4 **Biological Resources—Potential Disturbance of Nests of Raptors and Other Birds.** *Trees and other vegetation in and adjacent to the project area provide potential nest sites for raptors and migratory birds. Removal of trees or other vegetation during construction and maintenance of trails and fuel breaks and for road improvements could destroy or disturb nests, resulting in loss of eggs or young. Use of the Park by reservation-based events may also cause nest failure. Use of trails could cause potential temporary disturbance to golden eagle nest sites.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 12-5: Implement Measures to Protect Raptors and Other Nesting Birds*

Residual Significance *Less than Significant*

Removal of vegetation would occur between September to March, outside of the raptor breeding season, or outside of nesting areas identified during preconstruction surveys. Removal of trees greater than 6 inches dbh would be avoided to the extent possible; however, removal of some trees to conduct road improvements and to

construct and install bridges, trails, and other structures may be unavoidable. Removal of trees and shrubs could result in loss of golden eagle nests and migratory birds. Indirect disturbance during construction or during reservation-based events permitted in the Park (e.g. filming movies) could also result in the loss of raptor nests.

Nesting golden eagles are particularly sensitive to disturbances near their nests. In 2007 a golden eagle nest was documented within 100 feet of a Park road that would be used as a trail. Public use of trails in the Park could result in an elevated level of disturbance to golden eagle nests near trails, which could cause the abandonment or failure of an active nest. Therefore this impact would be potentially significant. Implementation of Mitigation Measure 12-5 would reduce this impact to a less-than-significant level.

IMPACT 12-5 **Biological Resources—Potential Disturbance of Dens and Individual Ringtails.** *Trees along riparian portions of the project area such as Coon Creek that are 6 inches or greater dbh and are hollow or have large cavities provide potential den sites for ringtail. Removal of such trees or other vegetation during trail construction and for road improvements could destroy dens, resulting in potential loss of adults and/or young.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 12-6: Implement Measures to Protect Ringtail and Townsend's Big-Eared Bat*

Residual Significance *Less than Significant*

Although removal of trees greater than 6 inches dbh that are hollow or contain large cavities would be avoided during construction to the extent possible, removal of some trees in riparian areas to construct trails would be unavoidable. Removal of these trees could result in loss of ringtail dens and loss of adults and/or young. This impact would be potentially significant. Implementation of Mitigation Measure 12-6 would reduce this impact to a less-than-significant level.

IMPACT 12-6 **Biological Resources—Potential Disturbance of Townsend's Big-Eared Bat Habitat or Individuals.** *Limited habitat for Townsend's big-eared bats occurs in the project area. Construction of trails, bridges, and structures could result in the disturbance of Townsend's big-eared bat maternity or winter roosts.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 12-6: Implement Measures to Protect Ringtail and Townsend's Big-Eared Bat*

Residual Significance *Less than Significant*

Townsend's big-eared bat, which is a state species of special concern, could occur within the project area. This species may use rock crevices for roosting within foothill pine-oak woodlands and riparian habitat present in the project area. Construction of trails, bridges, and structures could result in the disturbance of Townsend's big-eared bat maternity or winter roosts. This species uses rock crevices, bridges, and other artificial structures for roosting. Also, vibrations and noise associated with construction could disturb bats roosting adjacent to construction activities. This impact would be potentially significant. Implementation of Mitigation Measure 12-6 would reduce this impact to a less-than-significant level.

IMPACT 12-7 **Biological Resources—Potential Loss of Brandegee's Clarkia.** *Populations of Brandegee's clarkia were documented in the Spears Ranch portion of the Park. Construction of trails, fuel breaks, parking areas, and road improvements along Garden Bar Road could potentially disturb known populations of Brandegee's clarkia.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 12-7: Implement Measures to Protect Brandegee's Clarkia*

Residual Significance *Less than Significant*

Multiple populations of Brandegee's clarkia, a CNPS List 1B plant species, were observed and mapped throughout the Spears Ranch property during focused botanical surveys. Construction of trails, fuel breaks, parking areas, and Park facilities could potentially result in reductions of these populations. Most of the populations of Brandegee's clarkia occur along existing roads on roadcuts. Brandegee's clarkia is an annual plant and is somewhat tolerant to disturbance, especially if the ground disturbance occurs once the plant has dispersed its seeds in the fall. However, road widening or trail construction has the potential to remove entire populations of Brandegee's clarkia. Therefore, this impact would be potentially significant. Implementation of Mitigation Measure 12-7 would reduce this impact to a less-than-significant level.

IMPACT 12-8 **Biological Resources—Impacts on Waters of the United States and Waters of the State.** *A preliminary wetland delineation identified approximately 31.5 acres of potentially jurisdictional waters of the United States and waters of the state on the Spears Ranch property and along Garden Bar Road. Although the majority of this area would be avoided and not affected by project implementation, installation of stream crossings and bridges, viewing boardwalks, and trail construction in the project area and road improvements along Garden Bar Road could result in the fill of jurisdictional waters of the United States and waters of the state, including wetlands.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 12-2: Replace, Restore, or Enhance Affected Jurisdictional Waters of the United States and Waters of the State*

Residual Significance *Less than Significant*

Construction of the trail system would minimize fill of jurisdictional waters through design and location. However, trail construction would require the installation of multiple stream crossings and three bridges across Coon Creek and other drainages. Placement of trail material or bridge footings in the drainages or in adjacent wetlands, and construction of a viewing boardwalk adjacent to one of the stock pond would fill jurisdictional waters of the United States and waters of the state. Road widening along Garden Bar Road and the access road between Garden Bar Road and the Park would also result in permanent and temporary fill of jurisdictional waters of the United States and waters of the state. Temporary and permanent impacts to waters of the United States and waters of the state from construction of project facilities and improvements to Garden Bar Road and the access road to the western parking area would be less than 0.5 acre. Because the proposed project would have an impact on waters of the United States and waters of the state, this impact would be potentially significant. Implementation of Mitigation Measure 12-2 would reduce this impact to a less-than-significant level.

IMPACT 12-9 **Biological Resources—Impacts on Oak Woodland Habitat.** *The proposed project may result in the removal of trees that are 6 inches dbh or larger from oak woodland habitat. Native oak trees are protected under the Placer County Tree Ordinance and SB 1334.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 12-8: Protect Oak Woodland Habitat*

Residual Significance *Less than Significant*

Although removal of trees greater than 6 inches dbh would be avoided to the extent possible by refining precise facility locations and trail alignments and constructing road improvements on the side of the road with the least amount of trees, some tree removal as a result of construction of the proposed project may be unavoidable. Fuel load reduction activities performed in the Park under the guidance of a registered forester and approved by the fire authority would not include removal of oaks larger than 6 inches dbh. This includes the establishment of shaded fuel breaks. All status oaks were avoided during trail layout within the Didion Ranch portion of the Park. In addition, a 2-year post construction survey by a qualified biologist within the Didion portion of the Park confirmed that there was negligible impact to the health of oaks adjacent to the newly constructed trail system. Similar construction methods would be used for the development of trails within the Spears Ranch Portion of the Park so that oak impacts associated with trail construction would be minimized. Although tree removal would be avoided to the extent possible, some trees greater than 6 inches dbh may need to be removed. Native trees that are 6 inches dbh or larger are protected under the Placer County Tree Ordinance and oak woodland habitat is protected under SB 1334 (2004). This impact would be potentially significant.

Implementation of Mitigation Measure 12-8 would reduce this impact to a less-than-significant level.

12.4 MITIGATION MEASURES

Mitigation Measure 12-1: Implement Measures to Protect Aquatic Habitats and the Native Fish Community.

Mitigation Measure 12-1 applies to Impact 12-1.

The County and its primary construction contractor shall implement the following measures to reduce impacts on aquatic habitats and the native fish community in the project area:

- ▶ All in-water construction activities shall be conducted during months when sensitive fish species are less likely to be present or less susceptible to disturbance (i.e., April 15 - October 15 or as directed by DFG).
- ▶ The County shall obtain and implement the conditions of a streambed alteration agreement. DFG shall be consulted regarding potential disturbance to fish habitat, including SRA habitat, as part of the process for obtaining a streambed alteration agreement, pursuant to Section 1602 of the California Fish and Game Code. Affected habitats shall be replaced and/or rehabilitated to the extent feasible and practicable. The acreage of riparian habitat that would be removed shall be replaced or rehabilitated on a “no-net-loss” basis in accordance with DFG regulations and as specified in the streambed alteration agreement. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to DFG. Minimization and compensation measures adopted through the permitting process shall be implemented.

- ▶ The County shall consult and coordinate with DFG to develop regulations and limits for angling in Coon Creek, restrict angling activities while adult steelhead and salmon are present, and coordinate on enforcement of the area to monitor and regulate fishing activities.

Implementation of this mitigation measure along with Mitigation Measure 12-2 below, Mitigation Measure 5-1 in Chapter 5.0, “Soils, Geology, and Seismicity,” and Mitigation Measure 11-1 in Chapter 11.0, “Hydrology and Water Quality,” would reduce Impact 12-1 to a less-than-significant level.

Mitigation Measure 12-2: Replace, Restore, or Enhance Affected Jurisdictional Waters of the United States and Waters of the State.

Mitigation Measure 12-2 applies to Impacts 12-1 and 12-8.

Prior to construction, the County shall obtain a verified wetland delineation from USACE. Based on the results of the verified delineation, the County shall commit to replace, restore, or enhance on a “no net loss” basis, in accordance with USACE and the Central Valley RWQCB, the acreage of all waters of the United States and wetland habitats that would be affected by implementation of the project. Wetland restoration, enhancement, and/or replacement shall be at a location and by methods agreeable to USACE, DFG, and the Central Valley RWQCB, as determined during the Sections 404, 1602, and 401 permitting processes.

The County shall either obtain credits from an approved mitigation bank, at a rate determined by USACE, to replace lost wetland values at a 1:1 ratio, or shall prepare and submit a wetland mitigation and monitoring plan to USACE for the creation of jurisdictional waters at a mitigation ratio no less than 1 acre of created water of the United States, including wetlands, for each acre filled. The mitigation plans shall demonstrate how the USACE criteria for jurisdictional waters will be met through implementation. The wetland mitigation and monitoring plan shall include the following:

- ▶ target areas for creation,
- ▶ a complete biological assessment of the existing resources on the target areas,
- ▶ specific creation and restoration plans for each target area,
- ▶ performance standards for success that will illustrate that the compensation ratios are met, and
- ▶ a monitoring plan, including schedule and annual report format.

The County shall secure the following permits and regulatory approvals, as necessary, and implement all permit conditions before implementation of any construction activities associated with the proposed project.

- ▶ Authorization for the fill of jurisdictional waters of the United States shall be secured from USACE through the CWA Section 404 permitting process before any fill is placed in jurisdictional wetlands. Timing of compliance with the specific conditions of the 404 permit shall be in accordance with conditions specified by USACE as part of permit issuance. In its final stage and once approved by USACE, this mitigation plan shall detail proposed wetland restoration, enhancement, and/or replacement activities that would ensure no net loss of jurisdictional wetlands function and services in the project vicinity. As required by Section 404, approval and implementation of the wetland mitigation and monitoring plan shall ensure no net loss of jurisdictional waters of the United States, including jurisdictional wetlands.
- ▶ Water quality certification pursuant to Section 401 of the CWA is required as a condition of issuance of the 404 permit. Before construction in any areas containing wetland features, the County shall obtain water quality certification for the project. Any measures required as part of the issuance of water quality certification shall be implemented.

Implementation of this mitigation measure along with Mitigation Measure 12-1 above, Mitigation Measure 5-1 in Chapter 5.0, “Soils, Geology, and Seismicity,” and Mitigation Measure 11-1 in Chapter 11.0, “Hydrology and Water Quality,” would reduce Impacts 12-1 and 12-8 to a less-than-significant level.

Mitigation Measure 12-3: Implement Measures to Protect California Red-Legged Frog.

Mitigation Measure 12-3 applies to Impact 12-2.

The County and its primary contractor shall implement the following measures to reduce impacts on California red-legged frogs:

- ▶ Before any work in or within 200 feet of aquatic habitat, the County shall determine whether aquatic habitat is occupied by California red-legged frog, in consultation with USFWS. This determination may be supported by a habitat assessment for California red-legged frog prepared according to USFWS guidelines (USFWS 2005) as revised, and focused surveys if recommended by USFWS. If aquatic habitat in the project area is not occupied by California red-legged frog, there would be no impacts on this species and no further mitigation would be required.
- ▶ If aquatic habitat in the project area is occupied by California red-legged frog, the County shall minimize impacts on California red-legged frog by implementing the following measures:
 - Worker awareness training shall be provided to construction crews working in California red-legged frog habitat. At a minimum, the training shall include a description of California red-legged frog and its habitat and their importance, general measures that are being implemented to conserve California red-legged frog as such measures relate to the project, and the boundaries within which construction activities shall occur.
 - Suitable California red-legged frog habitat shall be surveyed 2 weeks before the start of construction activities. If California red-legged frogs, tadpoles, or eggs are found, they may be moved from the project area only with regulatory agency approval. If California red-legged frogs are not identified, construction may proceed.
 - Exclusionary fencing (i.e., silt fences) shall be installed no more than 200 feet around all areas that are within or adjacent to California red-legged frog habitat.
 - A USFWS-approved biologist shall be present at active project areas until the removal of California red-legged frog, instruction of workers, and habitat disturbance have been completed. After this time, the County shall designate a person to monitor on-site compliance with all minimization measures.
 - If any work area will be temporally dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 5 millimeters. Water shall be released downstream at an appropriate rate to maintain downstream flows during construction and in such a manner as to prevent erosion. Dewatering structures shall be removed upon completion of the project.
 - Guidelines shall be implemented to protect water quality and prevent erosion, as outlined in the best management practices (BMPs) in Mitigation Measure 11-1, "Obtain Authorization for Construction Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required."
 - The County shall compensate for permanently lost habitat by developing and/or implementing a habitat creation/restoration plan for California red-legged frog. This plan shall, at a minimum, compensate for lost habitat on an acre-for-acre basis, and it shall include verifiable performance criteria and remediation measures developed with USFWS during the Section 7 consultation process.

Implementation of this mitigation measure would reduce Impact 12-2 to a less-than-significant level.

Mitigation Measure 12-4: Implement Measures to Protect Foothill Yellow-Legged Frog and Northwestern Pond Turtle.

Mitigation Measure 12-4 applies to Impact 12-3.

The County and its contractor shall implement the following measures to reduce impacts on foothill yellow-legged frogs and northwestern pond turtles:

- ▶ Construction of foot bridges and trails across smaller drainages shall occur when the drainages are dry, to the extent feasible.
- ▶ Before any work in Coon Creek, the County shall determine, in consultation with DFG, whether aquatic habitat at work sites would support foothill yellow-legged frog and/or northwestern pond turtle habitat. If no aquatic habitat for foothill yellow-legged frog or northwestern pond turtle habitat occurs at a work site, there would be no impacts on these species and no further mitigation is required.
- ▶ If aquatic habitat for foothill yellow-legged frog and/or northwestern pond turtle is present at work sites, the County shall minimize impacts on these species by implementing the following measures:
 - Worker awareness training shall be provided to construction crews working in foothill yellow-legged frog and northwestern pond turtle habitat. At a minimum, the training shall include a description of foothill yellow-legged frog and northwestern pond turtle and their habitats and their importance, general measures that are being implemented to conserve foothill yellow-legged frog and northwestern pond turtle as such measures relate to the project, and the boundaries within which construction activities shall occur.
 - Suitable foothill yellow-legged frog and northwestern pond turtle aquatic habitat shall be surveyed within 2 weeks before the start of construction activities. If northwestern pond turtles or foothill yellow-legged frogs, tadpoles, or eggs are found, they may be moved from the project area only with DFG approval. If neither northwestern pond turtle nor foothill yellow-legged frog is identified, construction may proceed.
 - A qualified biologist holding the appropriate permits shall be present at active work sites until the removal of foothill yellow-legged frog and northwestern pond turtle, instruction of workers, and habitat disturbance have been completed. After this time, the County shall designate a person to monitor on-site compliance with all minimization measures.
 - If any work site will be temporally dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 5 millimeters. Water shall be released downstream at an appropriate rate to maintain downstream flows during construction and in such a manner as to prevent erosion. Dewatering structures shall be removed upon completion of the project.
 - Guidelines shall be implemented to protect water quality and prevent erosion, as outlined in the BMPs in Mitigation Measure 11-1, "Obtain Authorization for Construction Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required."

Implementation of this mitigation measure would reduce Impact 12-3 to a less-than-significant level.

Mitigation Measure 12-5: Implement Measures to Protect Raptors and Other Nesting Birds.

Mitigation Measure 12-5 applies to Impact 12-4.

The County and its contractors shall implement the following measures to reduce impacts on raptors and other nesting birds:

- ▶ If trees larger than 6 inches dbh must be removed, then the following mitigation measures shall be implemented:
 - Tree removal shall be completed in accordance with the Placer County Tree Ordinance.
 - For any construction activities that take place between March 1 and August 31 (raptor breeding season), preconstruction or pre-event surveys for active raptor nests shall be conducted no more than 2 weeks prior to the start of the activity. If no active raptor nests are found, no further mitigation is required. If any active raptor nests are identified during surveys, then impacts on active raptor nests shall be avoided by establishing minimum buffers of 500 feet (0.25 mile for golden eagle) until young have fledged or the nest is otherwise no longer active. These buffers may be reduced if a qualified biologist determines that such a reduction would not risk failure of a nest.
- ▶ If active golden eagle nests are located within 0.25-mile of public trails or roads, the County shall:
 - Notify DFG of the nest; and
 - Cooperate with DFG in implementation of measures to protect the nests during nesting.

Implementation of this mitigation measure would reduce Impact 12-4 to a less-than-significant level.

Mitigation Measure 12-6: Implement Measures to Protect Ringtail and Townsend’s Big-Eared Bat.

Mitigation Measure 12-6 applies to Impacts 12-5 and 12-6.

The County and its contractor shall implement the following measures to protect Townsend’s big-eared bat and ringtail:

- ▶ A qualified biologist shall conduct pre-construction surveys to identify bat hibernation roost and maternity sites and potential ringtail den sites in suitable habitat within 100 feet of proposed trails (i.e., those areas directly affected by trail construction). For bats, roost habitat surveys should focus on locations of mine tunnels, caves, abandoned buildings, and rock crevices; for ringtail, potential den site surveys should focus on locations of trees 6 inches dbh or greater in riparian areas.
- ▶ The County shall avoid locating trails within 100 feet of bat roosts and ringtail dens. If avoidance is not possible, the County shall survey those locations to determine if they are occupied by the target species. If sites are not occupied, they may be sealed or removed in accordance with the following specifications:
 - Potential Townsend’s big-eared bat nursery roosts may be sealed from September through March, before the nursery season. The County shall verify that the potential roost is not occupied immediately before sealing it.
 - Potential Townsend’s big-eared bat hibernation roosts may be sealed from April through October, prior to before the hibernation season. The County shall verify that the potential roost is not occupied immediately before sealing it.
 - Potential ringtail den sites may be removed only from September through April. The County shall verify that the potential den is not occupied immediately before sealing it.

Implementation of this mitigation measure would reduce Impact 12-5 to a less-than-significant level.

Mitigation Measure 12-7: Implement Measures to Protect Brandegee's Clarkia.

Mitigation Measure 12-7 applies to Impact 12-7.

The County and its contractor shall implement the following measures to protect Brandegee's clarkia populations:

- ▶ The locations of known Brandegee's clarkia occurrences in the project area shall be clearly marked for avoidance by construction crews before the commencement of project construction activities.
- ▶ If construction activities cannot avoid Brandegee's clarkia occurrences, then prior to commencement of construction, the following measures shall be implemented:
 - Information on Brandegee's clarkia occurrences in the project area shall be recorded on California Native Species Field Survey Forms and submitted to the CNDDDB.
 - Seed from Brandegee's clarkia populations shall be collected and redistributed into suitable habitat by a qualified botanist. Seed shall be distributed over an area twice the size of the affected area. Because Brandegee's clarkia is an annual plant that is tolerant of some disturbance, this measure will allow the perpetuity of populations in the project area and minimize the impact of project activities.

Implementation of this mitigation measure would reduce Impact 12-7 to a less-than-significant level.

Mitigation Measure 12-8: Protect Oak Woodland Habitat

Mitigation Measure 12-8 applies to Impact 12-9.

If removal of native trees larger than 6 inches dbh is required during construction of the proposed project, the County shall compensate for removal of those trees by paying in-lieu fees into the County approved oak woodland preservation fund as stipulated in the Placer County Tree Ordinance and in consultation with a certified arborist.

Implementation of this mitigation measure would reduce Impact 12-9 to a less-than-significant level.

13.0 PUBLIC SERVICES AND UTILITIES

This chapter describes the existing public services and utilities for the project area and any impacts anticipated with implementation of the proposed project. Public services and utilities included in this discussion are water, wastewater, fire protection, police protection, public schools, and maintenance of public facilities. Runoff and water quality are discussed in Chapter 11.0, “Hydrology and Water Quality.”

13.1 Environmental Setting

The project area is outside of existing municipal service areas for water and wastewater. The Spears Ranch portion of the Park contains an existing ranch house, with two supporting structures. Each of the buildings was formerly used as a single-family residence; the remainder is open space, including Coon Creek, which flows from the eastern portion of the Spears Ranch property to the westernmost property boundary. Other waterways within the Spears Ranch portion of the Park include Deadman Creek and Whiskey Diggins Canal.

13.1.1 WATER

Water sources in the project area are groundwater, Coon Creek, Deadman Creek, and Whiskey Diggins Canal. Potential groundwater sources in the area are rock fractures found in the existing hardpan; regional groundwater levels are expected to be greater than 50 feet in depth. An existing groundwater well serves the ranch house. For a more detailed description of water resources in the project area, see Chapter 11.0, “Hydrology and Water Quality.”

13.1.2 WASTEWATER

There is a septic system at the ranch house site; however, soils on-site are not optimal for septic systems. Soil data provided by the U.S. Geological Survey indicate limitations on the ability of project area soils to support the use of on-site sewage disposal, in which effluent from a septic tank is distributed into the soil through subsurface perforated pipe. Specifically, all soil complexes in the project area exhibit restricted permeability as a result of limited depth to bedrock or hardpan (USGS 2007). However, soil testing conducted for the project in 2008 indicated that soils suitable for septic systems exist in the southwest portion of the Park.

13.1.3 OTHER UTILITIES

Pacific Gas and Electric Company (PG&E) provides electricity and natural gas service to most of Northern California and would supply the project area. AT&T provides telephone and communication services to the area, and the project area is within the service area of Auburn Placer Disposal Service. This company provides garbage pickup services and pickup service for recyclable materials.

13.1.4 PUBLIC SCHOOLS

The project area is located in the Western Placer Unified School District, headquartered in Lincoln. Carlin C. Coppin Elementary School is the closest elementary school to the project area, located in the town of Lincoln approximately 9 miles from the project area. Carlin C. Coppin serves students from kindergarten through 5th grade (Carlin C. Coppin Elementary School 2007). The closest middle school to the project area is Glen Edwards Middle School, which is located in Lincoln approximately 11 miles from the project area and serves grades 6–8 (Western Placer Unified School District 2007). Lincoln High School, which serves grades 9–12, is the closest high school, also located in Lincoln approximately 10 miles from the project area (Lincoln High School 2007).

13.1.5 FIRE PROTECTION

The project area is within the fire protection area covered by the California Department of Forestry and Fire Protection (CalFire), under contract with the County. CalFire utilizes ground personnel/equipment and aerial equipment to fight fires within the project area (Placer County 2007). The project area is served by two of CalFire's existing staffed stations and two volunteer stations. The Ophir fire station is located on Wise Road in Auburn, approximately 12 miles southeast of the project area, and the Lincoln station is located on Oak Tree Lane in Lincoln, approximately 13.5 miles southwest of the project area. These stations have a total of two engines and a minimum of four full-time staff members. The Thermaland volunteer fire station, approximately 5 miles west of the project area, and the Fowler volunteer fire station, approximately 7.5 miles south, also serve the project area. Staffing levels are generally greater in the summer months (during fire season) and less in winter months because of the reduced demand for fire services. The two volunteer stations would be capable of providing four to 12 volunteer firefighting staff during an on-call situation (Eicholtz, pers. comm., 2007). According to the *Placer County General Plan* (General Plan), the County encourages the local fire protection agencies in the county to maintain an emergency response time of 10 minutes in rural areas of the county.

13.1.6 POLICE PROTECTION

Law enforcement services for the project area are provided by the County Sheriff's Department. The main station is based in Auburn. The Sheriff's Department operates three substations and three "service centers." The nearest facility to the project area that provides full police protection services is the Auburn station. Currently, the Auburn station is staffed by 25 patrol deputies and six patrol sergeants. In 2004, the station received approximately 51,000 calls for service from the reporting district in which the project is located.

13.2 REGULATORY SETTING

13.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws related to public services are applicable to the proposed project.

13.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

No state plans, policies, regulations, or laws related to public services are applicable to the proposed project.

13.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

PLACER COUNTY GENERAL PLAN

The following are the relevant goals and policies identified by the *Placer County General Plan* (General Plan) (Placer County 1994) for public services.

GOAL 4.H: To provide adequate sheriff services to deter crime and to meet the growing demand for services associated with increasing population and commercial/industrial development in the county.

- ▶ **Policy 4.H.2.** The County Sheriff shall strive to maintain the following average response times for emergency calls for service:
 - a. 6 minutes in urban areas
 - b. 8 minutes in suburban areas
 - c. 15 minutes in rural areas
 - d. 20 minutes in remote rural areas

GOAL 4.I: To protect residents of and visitors to Placer County from injury and loss of life and to protect property and watershed resources from fires.

- ▶ **Policy 4.I.2.** The County shall encourage local fire protection agencies in the County to maintain the following standards (expressed as average response times to emergency calls):
 - a. 4 minutes in urban areas
 - b. 6 minutes in suburban areas
 - c. 10 minutes in rural areas

HIDDEN FALLS REGIONAL PARK VEGETATION, FUELS AND RANGE MANAGEMENT PLAN

The following fire prevention measures, derived from the *Hidden Falls Regional Park Vegetation, Fuels and Range Management Plan*, apply to the project area and would be implemented by the County.

Short-Term (Less than 5 Years) Recommendations:

- ▶ Create defensible space (150 feet) around the perimeter of the parking/improvement area at the southeastern end of Park.
- ▶ Acquire an industrial-use knife chipper capable of chipping material up to 12 inches in diameter or participate in the existing County chipper program.
- ▶ Construct and maintain a fire-safe area adjacent to the interior park management road/emergency access down to and across Deadman Creek for 20 feet either side of the centerline of the road with at least 15 feet ground clearance above the road.
- ▶ Create shaded fuel break areas using hand crews and a chipper.
- ▶ Flag all boundaries of work areas and put up temporary signs to educate the public about shaded fuel breaks.
- ▶ Develop a plan that will outline measures to maintain defensible space around existing and proposed facilities, roads, and shaded fuel breaks.
- ▶ Finalize long-term plans for the Spears Ranch portion of the Park, including siting development areas and storage of park maintenance and emergency vehicles.
- ▶ Investigate options for locating a permanent crossing of Coon Creek, capable of supporting 90,000 pounds of heavy equipment.

Long-Term (More than 5 Years) Recommendations:

- ▶ Based on infrastructure plans, select one of the shaded fuel break areas that will help lower potential fire danger for those sites and assist in fighting fire.
- ▶ Create fire-safe areas adjacent to the main vehicle-access road system, including park maintenance/emergency access roads.
- ▶ Thin and clear defensible space areas around Park improvements such as buildings, parking areas, etc., as they are planned and built in the western portion of the Park.
- ▶ Thin out vegetation and mow grass-size vegetation in selected shaded fuel break areas.
- ▶ Develop a maintenance program for maintaining all defensible space, fire-safe, and shaded fuel break areas.

Grazing Recommendations

- ▶ The Park can either continue to be grazed on a year-round basis or seasonally.
- ▶ Carrying capacity estimates indicate that 75 cows would be an appropriate number to graze on a year-round basis in normal rainfall years.
- ▶ Develop at least two more livestock watering points, one on the Didion Ranch portion of the Park and the other on Spears Ranch portion of the Park to help improve livestock distribution.
- ▶ Consider the use of goats and/or sheep to reduce fuel loads, maintain shaded fuel breaks, and control noxious plants.
- ▶ Consider multi-species grazing to maintain shaded fuel breaks as the issues of electric fencing and guard dogs and public access are discussed. For the short term, it may make the most sense to use mechanical chipping and/or mowing to maintain the fuel breaks.

13.3 IMPACTS

13.3.1 ANALYSIS METHODOLOGY

Potential impacts on water, wastewater, fire protection, police protection, public schools, and other public facilities that would result from the proposed project were identified by comparing existing service capacity and facilities against anticipated future demand associated with implementation of the proposed project.

13.3.2 THRESHOLDS OF SIGNIFICANCE

Thresholds for determining the significance of impacts on public utilities and services were based on the Placer County CEQA checklist and Appendix G of the State CEQA Guidelines. The project would have a significant impact on public services or utilities if it would:

- ▶ exceed wastewater treatment requirements of the applicable regional water quality control board;
- ▶ 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;
- ▶ 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;
- ▶ have insufficient water supplies available to serve the project and require new or expanded entitlements; or
- ▶ result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable ratios, response times, or other performance objectives for any of the public services (i.e., fire, police, schools, parks, and other public facilities).

Because the proposed project does not include new development, it would not result in demand for increased natural gas facilities or communication systems beyond their current capacity. Therefore, increased demand for these services is not evaluated further. Impacts related to water quality and water supply are discussed in Chapter 11.0, "Hydrology and Water Quality."

13.3.3 IMPACT ANALYSIS

IMPACT 13-1 **Public Services and Utilities—Potential for Damage to Water or Wastewater Facilities.**
Implementation of the proposed project would require the installation of up to two groundwater wells and a septic system within the Spears Ranch portion of the Park, and the existing groundwater well and septic system could be upgraded or abandoned and replaced as part of the project. The project would not damage any public water or wastewater facilities.

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Up to two groundwater wells would be required for drinking water and restrooms as required to accommodate Park needs. The project would include renovation of the existing ranch house, and the two existing buildings southwest of the ranch house. Additional buildings may be constructed near the existing ranch house for overnight camp functions or environmental education. If constructed, these buildings would be within the facility development zone. Water for irrigation would continue to be supplied by the Nevada Irrigation District canal on the property, and irrigation needs are expected to be similar to past irrigation patterns.

Uses within the Park would include hiking, biking, equestrian uses, informational/educational classes and programs, multiple-day or overnight educational, agricultural, cultural, and scouting camps (subject to agreement and conditions determined by the County on a case-by-case basis), and access for school programs such as cross-country training and meets, and educational field trips that are consistent with passive recreation and education. The proposed uses within the Park, such as reservation-based events could result in an increase in Park attendance for the duration of the event. Any reservation-based events that would exceed the capacity of the on-site restrooms would need to supply portable toilets and any reservation-based events that would exceed the capacity of on-site wells would be required to supply their own water.

The existing water well on-site would be either rehabilitated to public-well standards or abandoned and replaced with a new well. A licensed well driller would be required to assess well locations and alternatives. A separate well would be drilled near the western parking area to serve the proposed restroom. A permit to construct the groundwater well and a public water provider's permit would be required. Although the existing well could be abandoned, it is not currently used for public consumption, and it would be replaced by another well that could better serve the Park, if rehabilitation is not feasible.

The proposed project would include permanent restroom facilities or portable and/or vault type restroom facilities. Restroom facilities would use low-flow toilets to reduce the use of water within the Park. The existing septic system constructed to serve the ranch house would be either used as is, expanded, or replaced, depending on its current condition and capacity needs for the future use of the ranch house. In addition, a new septic system would be installed to serve the parking-area restroom located at the entrance of the Park. This septic system would be located in the southwest portion of the Park. Associated underground pipelines would also be constructed to connect the septic system to the parking area and to the bunkhouse area. A contractor would remove septic tank sludge from the project area. Because the existing septic system does not currently support public use, it would be expanded or replaced by another septic system that could better serve the proposed uses around the existing ranch house.

Because no on-site water or wastewater facilities would be damaged as a result of the project and adequate water and wastewater facilities would be included for proposed uses, this impact would be less than significant.

IMPACT 13-2 **Public Services and Utilities—Increase in Demand for Police Services.** *Use of the proposed Park would increase demand for police services in the project area. However, measures would be taken to minimize such demand.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

The proposed project would lead to an increase in the number of visitors to the project area, which is located in a rural area between Auburn and Lincoln. Park use would occur primarily from sunrise to sunset, with limited overnight use subject to County approval on a case-by-case basis. Primary use of the area would include hiking, biking, and equestrian uses, as well as educational programs; and access for school programs such as cross-country training and meets, and educational field trips that are consistent with passive recreation and education would occur within the Park.

The increased visitation would add to existing law enforcement demands in the area; however, oversight of the Park would be provided through the collective efforts of the County Sheriff's Department, County maintenance staff, volunteer patrol groups, and users of the trails and facilities. It is also expected that a full-time caretaker may live on the Park grounds, which is expected to reduce the number of incidents of vandalism, crime, and misuse of Park property. In addition, the Park would be closed at night and all gates on access roads to the Park would be locked to further deter unauthorized activities.

Because the collective options for Park patrol would reduce illegal activities, the project would not place a significant demand on existing police services. Therefore, this impact would be less than significant.

IMPACT 13-3 **Public Services and Utilities—Increase in Demand for Fire Services.** *Construction and use of the Park facilities may increase the risk of wildfire in the project area because more people would be allowed into an area that is not currently open to the public. However, the County would implement measures to reduce the potential for a fire within the Park. Therefore, the project is not expected to cause a significant increase in demand for fire services.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Fire services in the project area are currently provided by CalFire. CalFire has rated the overall fire danger for the property as medium, which is based on several factors: risks to hydroelectric power, soil erodability, water storage facilities, water transportation facilities, timber resources, range resources, air basins involved, historic buildings and landmarks, housing, recreational opportunities, wildlife, infrastructure, fire-flood watershed facilities,

ecosystem sensitivity, and the amount of available fuels, such as dried woods and low-lying shrubs (Placer County 2007).

There is a potential for wildfire to occur during construction if equipment such as a trail dozer or mini excavator generates sparks near vegetation in construction areas. Depending on the equipment required for Park maintenance, equipment-related fire risks could persist. Implementation of the proposed project would also open the project area to the public, and occasional campfires may be allowed within the Park in association with overnight educational or scout camps, which could result in an increase in the potential for wildfires.

Although the project could cause an increase in the potential for wildfires, the potential for wildfire resulting from human or natural causes has previously existed in the project area. Campfires would be allowed only under restricted conditions and would not be allowed outside of the designated campfire pit areas within the facility development zone. The County would consult with CalFire on local fire conditions and would not allow campfires during high fire hazard days. The County would also provide 2 weeks notification to CalFire of any events that would have greater than 30 vehicles and/or between 100 and 200 participants so that the potential fire hazard of the event can be evaluated. CalFire may request cancellation of events if there are high fire risk conditions such as red flag warning days. The project would also include fire suppression facilities, including the construction of an emergency access bridge over Coon Creek, a new helistop on the Spears Ranch portion of the Park for emergency use, a hydrant system, and an emergency water storage system to be used for fire protection. The helistop within the Didion Ranch portion of the Park would be relocated adjacent to the Didion Ranch parking area immediately south of the existing helistop and would continue to provide the same level of emergency access. In addition, the *Hidden Falls Regional Park Vegetation, Fuels and Range Management Plan* will continue to serve as a working guide to reduce the risk of fire in the project area (Placer County 2007). Refer to measures described in Section 13.2.3 above.

Although the project could increase the potential risk of wildfire in the project area, the measures described above would improve CalFire's ability to respond more quickly to fires and would reduce the severity and size of potential fires. Therefore, the project is not expected to cause a significant increase in the demand for fire services. This impact would be less than significant.

IMPACT **Public Services and Utilities—Increase in Emergency Response Times.** *The proposed project may cause an increase in demand for emergency services. However, adequate access to the proposed Park would be provided for emergency vehicles. Therefore, current emergency response times are not expected to increase.*

13-4

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

The proposed project may cause an increase in demand for emergency services. However, adequate access to the proposed Park would be provided for emergency vehicles. The project would include a new helistop on the Spears Ranch portion of the Park and a relocated helistop on the Didion Ranch portion of the Park for emergency use. Emergency access bridges would be provided to provide emergency access across Coon Creek. Public access to the Park would be provided via Garden Bar Road, and emergency access would be available from the existing access road/easement from Garden Bar Road to the proposed western parking area. This existing access road would be improved in phases as part of the project. Additional emergency access to portions of the Park would be available via Mears Drive and trails within the Didion Ranch portion of the Park. The County would also provide

2 weeks notification to CalFire of any events that would have greater than 30 vehicles and/or between 100 and 200 participants to allow for improved emergency response, if needed. Also see Impact 8-6, "Potential Interference with Emergency Response Routes," in Chapter 8.0, "Transportation and Circulation," for further discussion of emergency access. This impact would be less than significant.

IMPACT 13-5 **Public Services and Utilities—Temporary Disruption of Utility Service during Construction.**
Implementation of the proposed project could require the relocation of utility poles that are adjacent to Garden Bar Road. Relocation of utility poles could cause temporary disruptions in service.

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Aboveground utility poles carrying electricity and telephone/communication lines are located along the length of Garden Bar Road. These utility lines serve the residences along Garden Bar Road and are maintained by PG&E and AT&T. Road improvements to Garden Bar Road could include some areas of widening that would require relocation of adjacent utility poles. Utility poles may need to be relocated outside the footprint of the road improvements. Electrical and/or telephone service could be disrupted during relocation of these poles. Potential disruption of utility services during construction activities would be temporary. In addition, the County would coordinate utility relocation as part of the construction to avoid disruption. Therefore, before road improvements begin, the County would consult with PG&E and AT&T to determine the best course of action to avoid or minimize disruption of electrical and/or telephone service. If disruptions in service cannot be avoided, the utility providers would notify all residences that would be affected. This impact would be less than significant.

IMPACT 13-6 **Public Services and Utilities—Increase in Solid Waste and Wastewater Generation.** *Operation of the Park would increase generation of solid waste and wastewater on the Spears Ranch portion of the Park and would increase the demand for solid waste disposal services. However, solid waste and wastewater generated by the project are expected to be minimal. In addition, the County would contract with Auburn Placer Disposal to provide solid waste disposal service to the Park and the on-site sewage disposal system and/or vault system would be designed to accommodate Park use.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

The proposed project would increase generation of solid waste and wastewater on the Spears Ranch portion of the Park, which would increase the demand for solid waste and wastewater disposal services to the Spears Ranch portion of the Park. Auburn Placer Disposal service currently provides solid waste disposal service for the Didion Ranch portion of the Park. The County would expand this disposal service to include the Spears Ranch portion of the Park. Solid waste disposal would be provided on a weekly or more frequent basis if needed. Solid waste would be stored on-site in enclosed bear-proof trash receptacles located throughout the Park until the waste can be hauled off-site to the nearest waste disposal facility. Daily use of the project area is not expected to generate a

large amount of solid waste and would not exceed the capacity of any landfills. Large events that would exceed the capacity of the disposal services provided for the Park would be required to provide additional disposal services or pay a fee to cover additional disposal services provided by County staff as a condition of the Temporary Event Permit.

In addition, an on-site sewage disposal system and/or vault toilets would be provided as part of the project. The on-site system and/or vault system would be designed with enough capacity to accommodate daily Park uses, including occasional overnight camping. Large events would be evaluated through the review of the Temporary Event Permit application process to determine if additional portable toilets would be required to accommodate the event. Because the solid waste and wastewater generated by the project would not exceed the capacity of any landfills or on-site systems and large events would be required to provide additional capacity, if needed, this impact would be less than significant.

13.4 MITIGATION MEASURES

No mitigation measures are necessary.

14.0 HAZARDOUS MATERIALS AND HAZARDS

This chapter evaluates information about hazardous materials and hazards in the project area. It describes existing characteristics of the area, summarizes pertinent regulations, analyzes the environmental impacts from implementation of the proposed project on hazardous materials and hazards, and provides mitigation measures as needed to reduce those impacts.

14.1 ENVIRONMENTAL SETTING

For purposes of this chapter, the term “hazardous materials” refers to both hazardous substances and hazardous wastes. A “hazardous material” is defined in the Code of Federal Regulations (CFR) as “a substance or material that...is capable of posing an unreasonable risk to health, safety, and property when transported in commerce” (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

“Hazardous material” means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. “Hazardous materials” include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

“Hazardous wastes” are defined in California Health and Safety Code Section 25141(b) as wastes that:

... because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness, [or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

14.1.1 REGIONAL SETTING

The project area is located along Coon Creek in the Sierra Nevada foothills of Placer County. It is surrounded by undeveloped land dominated by natural vegetation. According to the California Department of Forestry and Fire Protection (CalFire), the overall fire danger in the vicinity of the Park is rated as medium (CalFire 2007).

14.1.2 EXISTING SITE CONDITIONS

There is an existing ranch house within the Spears Ranch portion of the Park; however, it is not currently in use. None of the land in the project area is in agricultural production or in timber resource operations; however, the proposed Park and surrounding area are used for livestock grazing. Historic uses of the project area include mining and prospecting and several remnants of these activities exist within the project area. Heavy metals such as mercury and arsenic were often used in mining operations; however, it is unknown if these contaminants are present within the project area.

Elevations in the project area range from less than 400 feet to more than 1,200 feet above mean sea level. Side slopes are steepest adjacent to the eastern portion of Coon Creek. Geology and geologic hazards in the project area are described in Chapter 5.0, “Soils, Geology, and Seismicity.” Several stock ponds exist within the Spears Ranch portion of the Park that could provide potential habitat for mosquitoes. The project area is served by the Placer Mosquito and Vector Control District (Vector Control District), which serves all of Placer County. The Vector Control District routinely inspects and treats agricultural, industrial, and residential vector sources such as creeks, wetlands, and human-made water features, as needed (Placer Mosquito and Vector Control District 2009).

The U.S. Environmental Protection Agency's (EPA's) Envirofacts database and EnviroMapper was reviewed for the project area. The Envirofacts database contains a variety of environmental information maintained by EPA, such as the locations of releases of more than 650 toxic chemicals. EnviroMapper was used to depict graphically whether EPA maintains any information about the project area in Envirofacts. No records of any toxic releases, hazardous waste, or other violations were found (EPA 2007). A Phase I Site Assessment, Asbestos Building Material and Lead-Based Paint Survey Report, and a Limited Phase II Soil and Domestic Well Water Assessment were also conducted within the Spears Ranch portion of the Park by Kleinfelder, Inc., in 2003 (Trust for Public Lands 2003a, 2003b, 2003c). The Phase I Site Assessment concluded that there were no records of any toxic releases, hazardous waste, or other violations recorded for the Spears Ranch portion of the Park; however, some areas of stained soils were observed on the property and some of the on-site buildings were identified as potentially containing asbestos containing materials (ACMs) and/or lead-based paint (LBP) (Trust for Public Lands 2003b). The Asbestos Building Material and Lead-Based Paint Survey Report identified six samples of painted surfaces that contained LBP exceeding the Housing and Urban Development and EPA criterion for lead and two structures on-site were identified as containing or having the potential to contain ACMs (Trust for Public Lands 2003c).

14.2 REGULATORY SETTING

14.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

U.S. ENVIRONMENTAL PROTECTION AGENCY

EPA is the agency primarily responsible for enforcing and implementing federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are contained mainly in CFR Titles 29, 40, and 49. Hazardous materials, as defined in the CFR (see the definitions of terms above), are listed in 49 CFR 172.101. Management of hazardous materials is governed by the following laws:

- ▶ Resource Conservation and Recovery Act of 1976 (RCRA) (42 U.S. Code [USC] 6901 et seq.);
- ▶ Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also called the Superfund Act) (42 USC 9601 et seq.); and
- ▶ Superfund Amendments and Reauthorization Act (SARA) of 1986 (Public Law 99-499).

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. EPA provides oversight for and supervision of federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops restrictions on disposal of hazardous materials and standards for treatment.

Hazardous Substances

Hazardous substances are a subclass of hazardous materials. They are regulated under CERCLA and SARA (and the federal Clean Water Act for water resources; see Chapter 11.0, "Hydrology and Water Quality"). Under CERCLA, EPA has authority to seek the parties responsible for releases of hazardous substances and ensure that the responsible parties remediate the site. CERCLA also provides federal funding (the "Superfund") for remediation. SARA Title III, the Emergency Planning and Community Right-to-Know Act, requires companies to declare potential toxic hazards to ensure that local communities can plan for chemical emergencies. EPA maintains a National Priority List of uncontrolled or abandoned hazardous waste sites identified as high priorities for remediation under the Superfund program. EPA also maintains the CERCLIS database, which contains information on hazardous waste sites, potential hazardous waste sites, and remedial activities across the nation.

Hazardous Wastes

Hazardous wastes, although included in the definition of hazardous materials and hazardous substances, are regulated separately under RCRA. A waste can legally be considered hazardous if it is classified as ignitable, corrosive, reactive, or toxic. Title 22, Section 66261.24 of the California Code of Regulations (CCR) (i.e., 22 CCR 66261.24) defines characteristics of toxicity. Under RCRA, EPA regulates hazardous waste from the time that the waste is generated until its final disposal (“cradle to grave”). RCRA also authorizes EPA or a state to inspect individual facilities for compliance with regulations and to pursue enforcement action if a violation is discovered. EPA can delegate its responsibility to a state if the state’s regulations are at least as stringent as the federal ones. RCRA was updated in 1984 by the passage of the federal Hazardous and Solid Waste Amendments, which required phasing out land disposal of hazardous waste.

OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor is responsible for enforcing and implementing federal laws and regulations pertaining to worker health and safety. Workers at hazardous waste sites must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response regulations (29 CFR 1910.120).

14.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

The California Department of Toxic Substances Control (DTSC), a division of the California Environmental Protection Agency, has primary regulatory responsibility over hazardous materials in California. DTSC works in conjunction with the federal EPA to enforce and implement hazardous materials laws and regulations; it can delegate enforcement responsibilities to local jurisdictions.

The hazardous waste management program enforced by DTSC was created by the Hazardous Waste Control Act (California Health and Safety Code Section 25100 et seq.), which is implemented by regulations described in CCR Title 26. The state program thus created is similar to, but more stringent than, the federal program under RCRA. The regulations list materials that may be hazardous and establish criteria for their identification, packaging, and disposal.

Environmental health standards for management of hazardous waste are contained in CCR Title 22, Division 4.5. In addition, as required by Section 65962.5 of the California Government Code, DTSC maintains a hazardous waste and substances site list for the state, called the Cortese List. The project area is not included on this list (DTSC 2007).

California’s Secretary for Environmental Protection has established a unified hazardous waste and hazardous materials management regulatory program (Unified Program) as required by Senate Bill 1082 (1993). The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for the following environmental programs:

- ▶ programs for hazardous waste generators and on-site treatment of hazardous waste;
- ▶ underground storage tank program;
- ▶ hazardous-materials release response plans and inventories;
- ▶ California Accidental Release Prevention Program;
- ▶ Aboveground Petroleum Storage Act requirements for spill prevention, control, and countermeasure plans; and
- ▶ hazardous-material management plans and inventories under the California Uniform Fire Code.

The six environmental programs within the Unified Program are implemented at the local level by local agencies.

STATE WATER RESOURCES CONTROL BOARD

The State Water Resources Control Board, through its nine regional water quality control boards (RWQCBs), has primary responsibility for protecting water quality and supply. The project area is located within the jurisdiction of the Central Valley RWQCB. See Chapter 11.0, "Hydrology and Water Quality," for further discussion of the Central Valley RWQCB.

CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS, DIVISION OF OCCUPATIONAL HEALTH ADMINISTRATION

The California Department of Industrial Relations, Division of Occupational Safety and Health Administration (Cal/OSHA), assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are more stringent than federal OSHA regulations and are presented in CCR Title 8. Standards for workers dealing with hazardous materials include practices for all industries (General Industry Safety Orders); specific practices are described for construction and for hazardous waste operations and emergency response. Cal/OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

14.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

PLACER COUNTY GENERAL PLAN

The following are the relevant goals and policies identified by the *Placer County General Plan* (General Plan) (Placer County 1994) for hazardous materials and hazards.

GOAL 8.C: To minimize the risk of loss of life, injury, and damage to property and watershed resources resulting from unwanted fires.

- ▶ **Policy 8.C.7.** [Placer] County shall work with local fire protection agencies, the California Department of Forestry and Fire Protection, and the U.S. Forest Service to promote the maintenance of existing fuel breaks and emergency access routes for effective fire suppression.
- ▶ **Policy 8.C.11.** The County shall continue to work cooperatively with the California Department of Forestry and Fire Protection and local fire protection agencies in managing wildland fire hazards.
- ▶ **Policy 8.E.4.** The County shall, through its Office of Emergency Services, maintain the capability to effectively respond to emergency incidents.
- ▶ **Policy 8.E.5.** The County shall maintain an emergency operations center to coordinate emergency response, management, and recovery activities.

GOAL 8.G: To minimize the risk of loss of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous materials wastes.

- ▶ **Policy 8.G.1.** The County shall ensure that the use and disposal of hazardous materials in the County complies with local, state, and federal safety standards.
- ▶ **Policy 8.G.5.** The County shall strictly regulate the storage of hazardous materials and wastes.
- ▶ **Policy 8.G.6.** The County shall require secondary containment and periodic examination for all storage of toxic materials.

- ▶ **Policy 8.G.13.** The County shall work with local fire protection and other agencies to ensure an adequate Countywide response capability to hazardous materials emergencies.

14.3 IMPACTS

14.3.1 ANALYSIS METHODOLOGY

The environmental analysis for hazardous materials and hazards was based largely on the results of searches of EPA's Envirofacts database and EnviroMapper and DTSC's Hazardous Waste and Substances Site List, as well as field review of the project area. Background information included in the General Plan was also used in this analysis. The effects of the proposed project were compared to environmental baseline conditions (i.e., existing conditions) to determine impacts.

14.3.2 THRESHOLDS OF SIGNIFICANCE

CEQA THRESHOLDS

Based on the Placer County CEQA checklist and the State CEQA Guidelines, the proposed project would result in a potentially significant impact on hazardous materials or hazards if it would:

- ▶ create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- ▶ create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment;
- ▶ emit hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school;
- ▶ be located on a site that is included on a list of hazardous materials sites, and as a result, would create a significant hazard to the public or the environment;
- ▶ impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- ▶ expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

ISSUES NOT ANALYZED FURTHER

The proposed project would have no impact associated with the following issues, and these issues will not be analyzed further in this chapter:

- ▶ **Emergency Response/Emergency Evacuation Plans:** The proposed project would not impair implementation of or interfere with an adopted emergency response plan or emergency evacuation plan. As mentioned in Chapter 3.0, "Project Description," and Impact 8-6 in Chapter 8.0, "Transportation and Circulation," proposed roads would provide emergency access to all portions of the project area, including those across Coon Creek.
- ▶ **Emissions or Hazardous Materials within One-Quarter Mile of a School:** There are no schools within 0.25-mile of the project area. As mentioned in Chapter 13.0, "Public Services and Utilities," the closest schools to the project area are located approximately 9 miles to the southwest in Lincoln.

- ▶ **Hazardous Materials Sites:** As mentioned above in Section 14.2.2, “State Plans, Policies, Regulations, and Laws,” the project area is not included on DTSC’s Hazardous Waste and Substances Site List for the state (the Cortese List), compiled pursuant to Government Code Section 65962.5. As a result, construction and use of the project area would not create a significant hazard to the public or the environment.

14.3.3 IMPACT ANALYSIS

IMPACT 14-1 **Hazardous Materials and Hazards—Potential for Fire to Occur during or after Construction.** *The potential exists for wildfire to occur during or after project construction. However, as part of the project, the County would implement management actions and fire response facilities that would reduce the risk of wildfire.*

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Fire services in the project area are currently provided by CalFire. CalFire has rated the overall fire danger for the property as medium, which is based on several factors: risks to hydroelectric power, soil erodability, water storage facilities, water transportation facilities, timber resources, range resources, air basins involved, historic buildings and landmarks, housing, recreational opportunities, wildlife, infrastructure, fire-flood watershed facilities, ecosystem sensitivity, and the amount of available fuels, such as dried woods and low-lying shrubs (Placer County 2007).

There is a potential for wildfire to occur during construction if equipment such as a trail dozer or mini excavator generates sparks near vegetation in construction areas. Depending on the equipment required for Park maintenance, equipment-related fire risks could persist. Implementation of the proposed project would also open the project area to the public, and occasional campfires may be allowed within the Park in association with overnight educational or scout camps, which could result in an increase in the potential for wildfires.

Although the project could cause an increase in the potential for wildfires, the potential for wildfire resulting from human or natural causes has previously existed in the project area. Campfires would be allowed only under restricted conditions and would not be allowed outside of the designated campfire pit areas. In addition, the project would include fire suppression facilities, including the construction of an emergency access bridge over Coon Creek, a new helistop on the Spears Ranch portion of the Park for emergency use, a hydrant system, and an emergency water storage system for fire protection. The helistop adjacent the Didion Ranch parking area would also be relocated immediately south of the existing helistop and would continue to provide the same level of emergency access. The County would also consult with CalFire on local fire conditions and would not allow campfires during high fire hazard days. The County would also implement recommendations included in the *Hidden Falls Regional Park Vegetation, Fuels and Range Management Plan* to reduce the risk of fire in the project area (Placer County 2007). These measures are described in Section 13.2.3, in Chapter 13.0, “Public Services and Utilities”.

Although the project could increase the potential risk of wildfire in the project area, the measures described above would improve CalFire’s ability to respond more quickly to fires and would reduce the severity and size of potential fires. Therefore, this impact would be less than significant.

IMPACT 14-2 **Hazardous Materials and Hazards—Potential for Release of Hazardous Materials during Construction or Operation.** *Park construction and maintenance equipment may use small amounts of hazardous materials. The proposed project would comply with all applicable federal and state regulations pertaining to handling of hazardous materials and worker health and safety; however, accidental spills or other releases of small amounts of hazardous materials could occur during construction or operation of the Park.*

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 14-1: Implement Measures to Reduce Hazards Associated with Potential Releases of Hazardous Materials; and Mitigation Measure 5-1 in Chapter 5.0, "Soils, Geology, and Seismicity": Obtain Authorization for Construction and Operation Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required*

Residual Significance *Less than Significant*

Construction of the proposed project would involve the use of a Sweco trail dozer, a mini excavator, and/or other machinery capable of conforming to the dimensional requirements of the trail system. In addition, other larger mechanized equipment (e.g., tractors, graders) would be used for construction of parking areas, bridges, road improvements along Garden Bar Road, and other recreational facilities. For long-term maintenance of the Park, construction equipment and localized hand spraying of herbicide along the trail would be required to prevent vegetation from overgrowing the trails. Herbicides would be applied by County staff members certified in herbicide/pesticide application. Construction and maintenance equipment may use small amounts of hazardous materials, including gasoline, diesel fuel, engine oil, and hydraulic fluids. Accidental spills of construction-related contaminants could occur during construction, resulting in contamination of surface soils. As described in Impact 11-1, "Potential for Short-Term, Construction-Related Soil Erosion and Impairment of Water Quality," in Chapter 11.0, "Hydrology and Water Quality," discharges of these contaminants to receiving waters during storm events could degrade water quality.

Operation of mechanized equipment during trail construction and maintenance, including spraying of herbicides, would proceed in compliance with applicable federal and state regulations pertaining to handling of hazardous materials and worker health and safety. Compliance with these regulations would protect workers from health hazards associated with routine exposure to hazardous materials and would minimize the potential for accidental spills and resultant hazards to people, animals, or plants in the area. Hazardous materials used for ongoing maintenance within the Park would also be stored in accordance with applicable federal and state regulations pertaining to storage of hazardous materials.

The project area is located in an undeveloped area that lacks existing sources of hazardous materials, and the purpose of the project is specifically for recreation in an unspoiled environment. An accidental spill or other release of even a small amount of a hazardous material in this area during project construction or maintenance could have a substantial effect on the quality of the natural environment. Therefore, this impact would be potentially significant.

Implementation of Mitigation Measures 14-1 and 5-1 would reduce this impact to a less-than-significant level.

IMPACT 14-3 **Hazardous Materials and Hazards—Potential for a Public Safety Hazard from Hunting Activities.**
Activities allowed in the Park would include hunting to control damage to the Park, especially wild pigs and hunting of legal game. Hunting activities could conflict with other recreational activities occurring in the Park. However, measures would be implemented to protect the visiting public and surrounding residents from hunting activities.

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Up to four days of hunting of legal game would be allowed in the Park during two, 2-day seasons per year with up to 10 hunting permits being issued per season. Each season would be a maximum of 2 days, for a total of 4 open hunting days per year. Deprivation permits to control nuisance species (e.g. feral pigs) that cause damage to vegetation within the Park may also be obtained under California Department of Fish and Game (DFG) regulations. Because other recreation activities (e.g., hiking, biking, picnicking) would be allowed and encouraged in the Park, the potential for conflict with hunting activities exists. Therefore, hunting would only take place during times of Park closure to eliminate conflicts with other recreation activities. In addition, hunting would not be allowed within 0.5-mile of any neighboring residences. Hunting would be regulated by the County reservation system and DFG officials.

Because hunting would not be allowed when the Park is open to the public and would not take place near any residences, which would protect the public from hazards associated with hunting activities, this impact would be less than significant.

IMPACT 14-4 **Hazardous Materials and Hazards—Potential Exposure of People to Hazardous Materials.**
Although there have been no recorded releases of toxic materials in the project area, the Asbestos Building Material and Lead-Based Paint Survey Report concluded that several on-site buildings likely contain ACMs and LBP. In addition, several remnant mining or prospecting resources are located on-site that could contain hazardous materials.

Significance *Potentially Significant*

Mitigation Proposed *Mitigation Measure 14-2: Prepare and Implement a Safety Hazard Plan and Conduct Soil Sampling*

Residual Significance *Less than Significant*

Although there are no recorded releases of toxic materials within the project area, the Asbestos Building Material and Lead-Based Paint Survey Report concluded that several existing on-site buildings could contain ACMs and LBP (Trust for Public Lands 2003b); therefore, renovation or demolition of on-site buildings could expose workers to ACMs and LBP. Exposure of workers to these materials could pose a potential health hazard. Therefore, this impact would be potentially significant.

In addition, several mining- and/or prospecting-related resources were identified within the Spears Ranch portion of the Park during the cultural resources inventory (see Chapter 6.0, “Cultural Resources”). Mining-related

resources could contain hazardous materials (i.e., heavy metals) that were commonly used in mining operations; however, it is unlikely that prospecting-related resources contain any hazardous materials. Because it is unknown if these resources are mining-related or prospecting-related, there is the potential that they could contain hazardous materials. If any of these resources are in close proximity to a project facility, the affected resources would be removed during construction. Because these resources would either be removed during construction or would not be located near any Park facilities that are being accessed by Park users, this would not pose a hazard to the public. However, these features may be disturbed during construction, and construction workers could be exposed to hazardous materials. Therefore, this impact would be potentially significant.

Because workers could be exposed to heavy metals, ACMs, and/or LBP, this impact would be potentially significant. Implementation of Mitigation Measure 14-2 would reduce this impact to a less-than-significant level.

IMPACT 14-5 **Hazardous Materials and Hazards—Increased Risk of Health Hazard from Vector-borne Diseases.**
There are existing stock ponds on the Spears Ranch portion of the Park and several new fishing ponds could be constructed as part of the project. These ponds could serve as potential habitat for mosquitoes. The project would also increase the number of people in an area that could contain several mosquito-breeding sites and therefore would increase the number of people potentially exposed to vector-borne diseases carried by mosquitoes. However, the County would coordinate with the Vector Control District to ensure these sites are not a hazard to the public.

Significance *Less than Significant*

Mitigation Proposed *None Warranted*

Residual Significance *Less than Significant*

Several stock ponds currently exist within the Spears Ranch portion of the Park. The proposed project could include construction of new fishing ponds developed in conjunction with the fuel load reduction and/or grazing plans. These ponds could provide potential habitat for mosquitoes that can pose a health hazard to the public. The project would also increase the number of people in an area that could contain several mosquito-breeding sites and therefore would increase the number of people potentially exposed to vector-borne diseases carried by mosquitoes. However, this condition would be alleviated by close coordination with the Vector Control District to ensure routine monitoring and treatment of potential vector sources in the project area. If favorable conditions for vectors are found in the project area measures would be taken to reduce the potential sources for vectors. Measures would include actions such as, use of larvacides, stocking ponds with mosquito fish, and managing water levels and aquatic vegetation to discourage mosquito breeding. Larvacides used by the Vector Control District are the safest and least toxic materials available for public health and would not affect aquatic invertebrates or non-target insects.

Close coordination with the Vector Control District to monitor the project area and implementation of measures as necessary to reduce vector sources would reduce this impact to a less-than-significant level.

14.4 MITIGATION MEASURES

Mitigation Measure 14-1: Implement Measures to Reduce Hazards Associated with Potential Releases of Hazardous Materials.

Mitigation Measure 14-1 applies to Impact 14-2.

The County shall ensure that the following measures are implemented before project construction begins:

- ▶ The County or the County's contractor shall prepare and implement an accidental-spill prevention and response plan for storage and use of hazardous materials during trail construction and maintenance. This plan shall identify measures to prevent accidental spills from leaving the area and methods for responding to and cleaning up spills before neighboring properties are exposed to hazardous materials.
- ▶ The County shall ensure that any employee handling hazardous materials is trained in the safe handling and storage of hazardous materials and is trained to follow all applicable regulations with regard to such hazardous materials.
- ▶ The primary construction contractor shall identify a staging area where hazardous materials will be stored during construction, in accordance with applicable state and federal regulations.

Implementation of this mitigation measure and Mitigation Measure 5-1, "Obtain Authorization for Construction and Operation Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required," in Chapter 5.0, "Soils, Geology, and Seismicity," would reduce Impact 14-2 to a less-than-significant level.

Mitigation Measure 14-2: Prepare and Implement a Safety Hazard Plan and Conduct Soil Sampling.

Mitigation 14-2 applies to Impact 14-4.

To avoid health risks to construction workers, Placer County shall require the contractor to prepare and implement a site health and safety plan if areas containing hazardous materials are to be disturbed. This plan will outline measures that will be employed to protect construction workers and the public from exposure to hazardous materials during remediation, demolition, and construction activities. The County shall consult with the contractor to determine the measures to be employed at the site, which could include posting notices, limiting access to the site, monitoring the air quality, watering, and installation of wind fences. Contractors shall be required to comply with state health and safety standards for all demolition work, including compliance with OSHA and Cal/OSHA requirements regarding exposure to ACMs and LBP.

For any prospecting or mining resources (Abandoned Mine Lands) that are in close proximity to a project facility, a Phase 2 Limited Soil Sampling (soil sampling) shall be conducted to determine if there are any hazardous materials present on-site. The soil sampling of the tailings shall be conducted during the entitlement process (i.e. conditional use permit). Soil sampling will determine the California Human Health Screening Levels (CHHSL) of the testing protocol (CAM 17 metals, a list of 17 metals found typically in hazardous materials and mining sites). The CHHSLs are a list of 54 hazardous chemicals in soil or soil gas that the California Environmental Protection Agency (CalEPA) considers to be below thresholds for risks to human health.

The soil sampling results shall be reviewed by Placer County Environmental Health Services. If the soil sampling results are above the CHHSLs, then Placer County Environmental Health Services would refer the project to the DTSC. DTSC requires the project proponent to enter their Voluntary Cleanup Agreement (VCA) program. The VCA typically requires more soil testing to determine the scope of the contamination area. Furthermore, DTSC may require a Preliminary Endangerment Assessment (PEA) and/or a removal action workplan (RAW). The PEA is used to discuss the health risks associated with hazardous materials site releases and the RAW is used to specifically detail the areas of the project area to have soil removed and the contaminated soils disposal at an appropriate solid waste facility. Following soils removal, DTSC issues a "No Further Action" letter indicating that the project site is safe.

In addition, the contractor shall prepare and implement a site plan that identifies necessary remediation activities appropriate for proposed land uses, including excavation and removal of on-site contaminated soils, and redistribution of clean fill material within the project area. The plan shall include measures that ensure the safe

transport, use, and disposal of contaminated soil and building debris removed from the project area. In the event that contaminated groundwater is encountered during site excavation activities, the contractor shall report the contamination to appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminants before discharge into the sanitary sewer system. The contractor shall be required to comply with the plan and with applicable local, state, and federal laws.

Implementation of this mitigation measure would reduce Impact 14-4 to a less-than-significant level.

15.0 OTHER CEQA-REQUIRED SECTIONS

15.1 ALTERNATIVES

This chapter provides a description of alternatives to the proposed project, including alternatives that were considered and eliminated from further consideration. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the basic project objectives, are infeasible, or do not avoid any significant environmental effects (State CEQA Guidelines Section 15126.6[c]). Lead agencies are guided by the general definition of feasibility found in CEQA: “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors” (State CEQA Guidelines Section 15364). Based on these guidelines, one alternative has been eliminated from further consideration. This alternative is briefly described below.

This chapter also provides a comparative analysis of four alternatives—the No Project Alternative, the Single-Track Trails Alternative, the Dispersed Recreation Alternative, and the Reduced Access Alternative—pursuant to Section 15126.6 of the State CEQA Guidelines. These alternatives are examined at a lesser level of detail than the analysis of the proposed project in Chapters 4.0 through 14.0 of this EIR (State CEQA Guidelines Section 15126.6[d]). The purpose of this chapter is to provide decision-makers with an assessment of the comparative effects of the project alternatives, focusing on the significant impacts and on mitigation of such impacts. An “environmentally superior” alternative is identified pursuant to Section 15126.6(e)(2) of the State CEQA Guidelines.

15.1.1 ALTERNATIVES CONSIDERED AND ELIMINATED FROM DETAILED ANALYSIS

The Burnett Road Access Alternative, as well as alternative locations for the Park, was considered in the planning stages of the proposed project; however, because these alternatives were determined to be infeasible, they are not considered further in this EIR.

Under the Burnett Road Access Alternative, access would have been provided to the Park via Burnett Road, which is south of the Park. All project facilities would have been the same under this alternative as under the proposed project, and Garden Bar Road would have continued to be used for maintenance and emergency access only. Under this alternative, Burnett Road would have been extended through private property and paved. This alternative would have had more severe impacts on soils, geology, and seismicity; hydrology and water quality; biological resources; air quality; and noise than the proposed project because of the additional construction associated with building a new road. In addition, the owner(s) whose property would have been affected by extension of Burnett Road were not willing to sell all or a portion of this property or to allow for an access easement. In the case of extending Burnett Road, there were not willing sellers, which made this alternative infeasible in keeping with the Placer Legacy Program’s goal of only pursuing willing seller acquisitions.

In addition to the Burnett Road Alternative, other alternative locations were considered for the proposed Park. Criteria used for choosing a location for the proposed project included goals of the Placer Legacy Program and objectives of the project. A goal of the Placer Legacy Program is to conserve natural features for outdoor recreation in Placer County. To be consistent with this goal, properties outside of Placer County were eliminated from further consideration. The Placer Legacy Program also requires that properties purchased under this program have a willing seller, which eliminated consideration of properties without a willing seller. The Spears Ranch location was also chosen for its contiguous size and habitat value including blue oak woodland and riparian areas along Coon and Deadman Creeks.

15.1.2 ALTERNATIVES SELECTED FOR MORE DETAILED ANALYSIS

In accordance with Section 15126(f) and Section 15126.6 of the State CEQA Guidelines, this EIR includes an analysis of three project alternatives, as well as the required review of the No Project Alternative.

State CEQA Guidelines Section 15126.6(a) calls for an evaluation of "... a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Section 15126.6(f) specifies that the range of alternatives is governed by the "rule of reason," requiring evaluation of only those alternatives "necessary to permit a reasoned choice." Alternatives shall be "limited to ones that avoid or substantially lessen any of the significant effects" of the proposed project.

Section 15126.6(e) of the State CEQA Guidelines requires that, among other alternatives, a "no project" alternative be evaluated in comparison to the proposed project. It states that the purpose of the "no project" alternative is to "allow decision-makers to compare the impacts of approving the proposed project with the impact of not approving the proposed project." It also states that the "no project" analysis shall "discuss the existing conditions..., as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved..." Accordingly, this section provides an analysis of the "no project" alternative.

The environmentally superior alternative is also identified, as required by the State CEQA Guidelines. Section 15126(e)(2) states that "[i]f the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

NO PROJECT ALTERNATIVE (ALTERNATIVE 1)

The No Project Alternative assumes that the proposed natural-surface trails and related recreational amenities would not be constructed and that the Spears Ranch portion of the Park would not be open to the public. The surrounding area would continue to be grazed and access would be limited to County maintenance staff and emergency vehicles. The Spears Ranch portion of the Park would be managed by the County without public access, and the Didion Ranch portion of the Park would be managed by the County and would remain open to the public.

This alternative would not meet the demands for recreational opportunities within Placer County, specifically hiking, biking, and equestrian trails, and would not meet the goals of the Placer Legacy Program for which the property was purchased. Because no trails or related facilities would be constructed under this alternative, the impacts associated with the proposed project on biological resources; cultural resources; transportation and circulation; air quality; noise; soils, geology, and seismicity; hydrology and water quality; public services and utilities; visual resources, and hazardous materials and hazards would not occur. Because the proposed project would have little to no impact on land use and agriculture; population, employment, and housing; and mineral resources, impacts on these resources under the No Project Alternative would be similar to those under the proposed project. This alternative would not have the beneficial effects on recreation compared to the proposed project.

SINGLE-TRACK TRAILS ALTERNATIVE (ALTERNATIVE 2)

Under the Single-Track Trails Alternative, the proposed natural-surface trails and related recreational amenities would be constructed as described for the proposed project; however, the trails would be designed as hiking trails, not multiple-use trails. There would be no equestrian facilities (e.g., water troughs, tie rails) within the Spears Ranch portion of the property, and the parking areas constructed on the Spears Ranch portion of the property would be smaller and would not include larger parking spaces or an overflow gravel area for trucks and trailers. Automobile access would be provided via Garden Bar Road and Mears Drive; however, Garden Bar Road would not be used for horse trailer access. Large events requiring multiple buses for transportation would not be allowed

under this alternative; however, class-room sized groups would be allowed under this alternative at the discretion of the County. The existing trails and parking areas on the Didion Ranch portion of the Park would continue to be multiple-use. Improvements would be made to Garden Bar Road to allow access by automobiles; however, no additional road improvements would be made to accommodate horse trailers. Garden Bar Road would continue to be used by County staff for maintenance and for emergency vehicle access. Impacts of the Single-Track Trails Alternative are described below by resource topic.

Land Use and Agricultural Resources

The Single-Track Trails Alternative would be consistent with the *Placer County General Plan* (General Plan) and the Placer County Zoning Ordinance. This alternative would not divide an established community, nor would it affect timber resources or operations. Grazing would be allowed to continue on the property, but no other agricultural uses would be allowed. This alternative would not interfere with surrounding land uses. This alternative would also be consistent with the *Draft Placer County Conservation Plan: Western Placer County*. Because the Single-Track Trails Alternative would not conflict with any land use plans in the project area and grazing would be allowed to continue, it would have a less-than-significant impact on land use, planning, and agricultural resources. The impacts of the Single-Track Trails Alternative on land use, planning, and agricultural resources would be similar to those of the proposed project.

Population, Employment, and Housing

The Single-Track Trails Alternative would not involve construction of new homes or businesses. This alternative would not displace any existing housing, nor would it result in disruption or division of an established community. The proposed trails and facilities would be constructed primarily with mechanized construction techniques and only one permanent job would be created by this alternative. Therefore, construction and operation of this alternative would require few workers and would have very little effect on the local workforce. This alternative would have no effect on population, employment, or housing. The impacts of the Single-Track Trails Alternative on population, employment, and housing would be similar to those of the proposed project.

Biological Resources

With implementation of mitigation, the Single-Track Trails Alternative would not substantially affect any threatened or endangered species. This alternative would have minor effects on Coon Creek, Deadman Creek, and other unnamed drainages within the Park. The Single-Track Trails Alternative would require the removal of vegetation, including some trees. This alternative would have less potential than the proposed project to introduce invasive weeds because horses would not introduce them under this alternative; however, invasive weeds currently exist throughout much of the Park. Because this alternative would not include additional improvements along Garden Bar Road to accommodate horse trailers, there would be less of an impact on biological resources, including less tree removal, along Garden Bar Road than under the proposed project. In addition, less vegetation would be removed for larger parking areas and trails because the single-track trails would be narrower than the multiple-use trails and the parking areas would not accommodate horse trailers. This alternative would include mitigation to reduce impacts on special-status species, oak woodlands, and waters of the United States. For these reasons, the impacts of the Single-Track Trails Alternative on biological resources would be less than those associated with the proposed project.

Cultural Resources

Nine potentially significant cultural resources and one significant cultural resource are located within the Spears Ranch portion of the Park. The Single-Track Trails Alternative would include mitigation measures to reduce impacts on known and yet-to-be-discovered cultural resources. With implementation of these mitigation measures, this alternative would have a less-than-significant impact on cultural resources. The impacts of the Single-Track Trails Alternative on cultural resources would be similar to those of the proposed project.

Visual Resources

The Single-Track Trails Alternative would introduce new physical elements into the landscape; however, views of the trail system and recreational facilities from off-site locations would be limited. There would be changes to the visual character of Garden Bar Road under this alternative; however, the changes would be less substantial than those under the proposed project because additional widening to accommodate horse trailers would not be needed. Construction of the project facilities under this alternative would minimize the removal of trees greater than 6 inches in diameter at breast height (dbh), thus minimizing visible canopy reduction, and would incorporate the use of natural colors and materials into Park facilities to be consistent with the natural character of the Park. In addition, less vegetation would be removed for trails and parking areas than under the proposed project, and Park facilities would be of a smaller scale. New security lighting similar to that used under the proposed project and used by previous residents would be included as part of this alternative. The Single-Track Trails Alternative would not affect any scenic vistas. Although this alternative would have less of an impact on visual resources than the proposed project, it would still result in a significant and unavoidable visual impact.

Transportation and Circulation

Construction of trails and recreational facilities under the Single-Track Trails Alternative would temporarily increase traffic on Garden Bar Road and Mears Drive during construction. Maintenance traffic on Garden Bar Road would increase slightly after the Spears Ranch portion of the Park was opened to the public. Automobile traffic associated with operation of the Park would also increase on both Garden Bar Road and Mears Drive; however, horse trailer and bus traffic on Garden Bar Road would not increase under this alternative. With implementation of road improvements described in the *Traffic Safety Study for Garden Bar Road* (Placer County 2007a) (Appendix C), traffic hazards on Garden Bar Road would be reduced to a less-than-significant level. Increases in traffic on Garden Bar Road under this alternative would be less than under the proposed project; however, neither alternative would result in the exceedance of a level of service (LOS) standard on any roadways in the project vicinity. The County would also pay a traffic impact fee to further reduce the impact of this alternative on area roadways. Adequate parking would be provided for Park users under this alternative with construction of the western parking area and expansion of the Didion Ranch parking area. Therefore, the Single-Track Trails Alternative would have a less-than-significant impact on transportation and circulation. For these reasons, the impacts of the Single-Track Trails Alternative on transportation and circulation would be slightly less than those of the proposed project.

Air Quality

Construction of trails and recreational facilities under the Single-Track Trails Alternative would temporarily increase concentrations of reactive organic gases (ROG), oxides of nitrogen (NO_x), and respirable particulate matter with an aerodynamic diameter of 10 micrometers or less (PM₁₀) in the project area. Construction under this alternative would also have the potential to temporarily increase the amount of diesel exhaust and fuel vapors in the project area. In addition, long-term operation (use and maintenance) of the Park as part of this alternative would cause an increase in ROG, NO_x, or PM₁₀. There is a slight possibility that ground-disturbing activities under this alternative would also expose areas containing asbestos. Mitigation would be included to address this issue, as necessary. However, this alternative would include fewer construction-related emissions associated with improvements to Garden Bar Road, larger parking areas, and wider trails. The Single-Track Trails Alternative would have a less-than-significant impact on air quality with implementation of mitigation. For these reasons, the impacts of the Single-Track Trails Alternative on air quality would be slightly less than those of the proposed project.

Noise

Construction of trails and recreational facilities under the Single-Track Trails Alternative would temporarily increase noise levels in the project area. Construction activities associated with this alternative would comply with

the requirements of the Placer County Noise Ordinance. The closest noise-sensitive receptors are approximately 800 feet away. There would be less construction-related noise impacts from construction of additional improvements along Garden Bar Road, larger parking areas, and wider trails under this alternative than under the proposed project. Long-term operation (use and maintenance) of the Park under the Single-Track Trails Alternative would result in noise impacts similar to the proposed project and would not cause a significant increase in noise levels in the project area. Therefore, this alternative would have a less-than-significant impact on noise levels in the project area. For these reasons, the Single-Track Trails Alternative would have slightly less of an impact than the proposed project on noise levels.

Soils, Geology, and Seismicity

Construction of recreational facilities under the Single-Track Trails Alternative would require some removal of vegetation and would result in soil disturbance and minor alterations to surface topography, which could result in erosion. However, this alternative would involve less removal of vegetation and a lesser amount of earthmoving activity for additional improvements to Garden Bar Road, larger parking areas, and wider trails. This alternative would include renovation of existing buildings on-site for human occupancy or use as a nature center, construction of bunkhouses, and construction of bridges that could be subject to ground shaking, liquefaction, and landslides. However, the project area is not located within an earthquake fault zone, and no structures for human occupancy would be placed across any fault traces. The County would obtain authorization for construction and operation activities from the Central Valley RWQCB and implement erosion and sediment control measures obtain to reduce impacts on geology, soils, and seismicity to a less-than-significant level. In addition, the Single-Track Trails Alternative would cause less long-term erosion along the trails associated with horses and mountain bikes. Impacts of this alternative on soils, geology, and seismicity would be less than significant. For these reasons, the Single-Track Trails Alternative would have slightly less of an impact on soils, geology, and seismicity than the proposed project.

Mineral Resources

The Single-Track Trails Alternative would not result in the loss of any known mineral resources, nor would it impede or interfere with the establishment or continuation of existing mineral extraction operations. It would not result in the loss of available known mineral resources of value to the region or residents of the state, and the area is not delineated as a locally important recovery site. The Single-Track Trails Alternative would not have an impact on mineral resources; therefore, the impacts of this alternative on mineral resources would be similar to those of the proposed project.

Hydrology and Water Quality

Implementation of the Single-Track Trails Alternative would include construction of up to two groundwater wells and septic system that could affect groundwater. Potential erosion from vegetation removal and construction could also affect water quality in the project area; however, this alternative would not include removal of vegetation and earthmoving activities for additional improvements to Garden Bar Road, larger parking areas, and wider trails. This alternative would comply with policies pertaining to water quality in the General Plan and would implement best management practices (BMPs). This alternative would also cause less long-term erosion along the trails associated with horses and mountain bikes. A grading and drainage plan would be prepared and implemented and the County would obtain a Transient Non-community Water System Permit to reduce these impacts to a less-than-significant level. Therefore, the Single-Track Trails Alternative would have a less-than-significant impact on water quality and hydrology in the project area. For these reasons, the Single-Track Trails Alternative would have slightly less of an impact on hydrology and water quality than the proposed project.

Recreation

The Single-Track Trails Alternative would provide new recreational opportunities in response to existing demand for more recreational opportunities in Placer County. However, because this alternative would not accommodate

equestrians and mountain bikes within the Spears Ranch portion of the Park, it would provide additional recreational opportunities only for hikers, which would result in substantially less benefit than the proposed project. This alternative would not increase the demand for parks or facilities, nor would it negatively affect existing recreational opportunities. The Single-Track Trails Alternative would have a beneficial impact on recreation, but it would provide substantially less of a benefit than the proposed project.

Public Services and Utilities

Implementation of the Single-Track Trails Alternative would not result in the need for a substantial increase in fire protection, police protection, schools, or other public facilities. The public services currently provided to the project area would be sufficient to accommodate use of the Park under this alternative. The Single-Track Trails Alternative would have components that would require electricity and communication, wastewater treatment, septic, and water supply systems. A septic system would be constructed under this alternative as under the proposed project. Under this alternative solid waste would be collected and disposed of by Auburn Placer Disposal Service. Because this alternative would not increase demand for public services and adequate services and utilities would be provided to accommodate Park users, the Single-Track Trails Alternative would have a less-than-significant impact on public services and utilities. The impacts of the Single-Track Trails Alternative on public services and utilities would be similar to those of the proposed project.

Hazardous Materials and Hazards

The Single-Track Trails Alternative would be located in an area of medium fire danger, as rated by the California Department of Forestry and Fire Protection (CalFire) (2007). There is the potential for fire to be caused by construction equipment or by Park users after construction (e.g., from discarded cigarette butts or campfires). The potential also exists for small amounts of hazardous materials to be released from construction equipment or during maintenance of the Park under this alternative. In addition, there is the potential for the public and/or construction workers to be exposed to hazardous materials and vector-borne diseases under this alternative. Because there would be less construction required under this Alternative, there would be fewer potential hazards related to construction compared to the proposed project. The Single-Track Trails Alternative would be constructed and operated consistent with the *Hidden Falls Regional Park Vegetation, Fuels, and Range Management Plan* (Placer County 2007b), and an accidental-spill prevention and response plan would be developed to reduce these impacts. The County would also coordinate with the Placer Mosquito and Vector Control District (Vector Control District), create a safety hazard plan, and conduct soil sampling as necessary to reduce these impacts. Because these measures would be taken, this alternative would have a less-than-significant impact on hazards and hazardous materials. For these reasons, the impacts of the Single-Track Trails Alternative on hazards and hazardous materials would be slightly less than those of the proposed project.

DISPERSED RECREATION ALTERNATIVE (ALTERNATIVE 3)

Under the Dispersed Recreation Alternative no recreational facilities would be constructed in the Spears Ranch portion of the Park, but the entire Park would be open to the public. The Park would be multiple-use under this alternative with hiking, biking, and equestrian uses allowed, but recreation would be dispersed throughout the Park and would not be limited to designated trails and recreational facilities. Under this alternative a gravel parking area would be provided in the Spears Ranch portion of the Park and the paved parking area would be expanded on the Didion Ranch portion of the Park. No motorized access would be provided beyond designated parking areas. Access to the Park for automobiles and horse trailers would be provided via Garden Bar Road and Mears Drive and associated road improvements would be implemented along Garden Bar Road.

Land Use and Agricultural Resources

The Dispersed Recreation Alternative would be consistent with the General Plan and the Placer County Zoning Ordinance. This alternative would not divide an established community, nor would it affect timber resources or

operations. Grazing on the property would be allowed to continue, and the property is not currently used for any other agricultural uses. This alternative would not interfere with any surrounding land uses. This alternative would also be consistent with the *Draft Placer County Conservation Plan: Western Placer County*. Because the Dispersed Recreation Alternative would not conflict with any land use plans in the project area and grazing would be allowed to continue on the property, it would have a less-than-significant impact on land use, planning, and agricultural resources. The impacts of the Dispersed Recreation Alternative on land use, planning, and agricultural resources would be similar to those of the proposed project.

Population, Employment, and Housing

The Dispersed Recreation Alternative would not involve construction of new homes or businesses. This alternative would not displace any existing housing, nor would it result in the disruption or division of an established community. No recreational facilities would be constructed as part of this alternative, and no new permanent jobs would be created. Therefore, this alternative would require fewer workers than the proposed project and would have no effect on the local workforce. This alternative would have no effect on population, employment, or housing. The impacts of the Dispersed Recreation Alternative on population, employment, and housing would be similar to those of the proposed project.

Biological Resources

With implementation of mitigation, the Dispersed Recreation Alternative would not substantially affect any threatened or endangered species. This alternative would have minor effects on Coon Creek, Deadman Creek, and other unnamed drainages within the Park. The Dispersed Recreation Alternative may require removal of a few large trees at the parking areas and would have the potential to introduce invasive weeds. The potential for introducing invasive weeds would be higher under this alternative than under the proposed project because horses and trail users would access a larger area of the Park and would not be limited to trail corridors. However, invasive weeds currently exist throughout much of the Park. The biological impacts related to trail construction would be avoided under this alternative; however, there would be more dispersed impacts on biological resources because there would be no formal trails for Park users to follow. As a result, a considerable number of informal, volunteer trails could be created by Park users. Such trails would be uncontrolled and could encroach into sensitive areas. In addition, similar to the proposed project, this alternative would include impacts on trees and drainages from improvements to Garden Bar Road to accommodate additional automobiles and horse trailers. This alternative would include mitigation to reduce impacts on special-status species, oak woodland, and waters of the United States; however, it would be more difficult to mitigate effects under this alternative because of the dispersed nature of the impacts. For these reasons, the impacts of the Dispersed Recreation Alternative on biological resources would be greater than those of the proposed project.

Cultural Resources

There are nine potentially significant cultural resources and one significant cultural resource within the Spears Ranch portion of the Park. The Dispersed Recreation Alternative would include mitigation measures to reduce impacts on known and yet-to-be-discovered cultural resources. Implementation of mitigation measures would reduce impacts on yet-to-discovered cultural resources; however, impacts on known cultural resources would be greater under this alternative because Park users would access more of the Park and may come into contact with cultural resources more frequently. For these reasons, the impacts of the Dispersed Recreation Alternative on cultural resources would be greater than those of the proposed project.

Visual Resources

The Dispersed Recreation Alternative would not introduce new facilities into the landscape. This alternative would also avoid removing trees more than 6 inches dbh to the extent possible, thus minimizing visible canopy reduction. New security lighting similar to that used under the proposed project and similar to lighting used by previous residents would be included under this alternative. Improvements would result in temporary and

permanent changes to the visual character of Garden Bar Road similar to the proposed project. These changes would alter the visual character of the road. Although the Dispersed Recreation Alternative would not affect any scenic vistas, this alternative would have a significant impact on the visual character of Garden Bar Road. Revegetating and restoring disturbed areas to minimize visual quality and protecting oak woodlands would reduce the visual impact, but not to a less-than-significant level. Therefore, the Dispersed Recreation Alternative would have a significant and unavoidable visual impact. For these reasons, the impacts of the Dispersed Recreation Alternative on visual resources would be similar to those of the proposed project would be less than significant.

Transportation and Circulation

The Dispersed Recreation Alternative would not include traffic associated with construction of recreational facilities, but it would include construction traffic related to Garden Bar Road improvements and the Didion Ranch parking area expansion. This alternative would cause an increase in traffic on Garden Bar Road and Mears Drive as a result of operation of the Park; however, because no formal facilities would be provided in the Spears Ranch portion of the Park, this alternative is expected to generate less demand and less traffic than the proposed project. Road improvements described in the *Traffic Safety Study for Garden Bar Road* (Placer County 2007a) (Appendix C) would be constructed under this alternative. A gravel parking area would be provided for Park users under this alternative, but paved parking would not be provided in the Spears Ranch portion of the Park. For these reasons, the impacts of the Dispersed Recreation Alternative on transportation and circulation would be slightly less than those of the proposed project.

Air Quality

The Dispersed Recreation Alternative would include improvements to Garden Bar Road but not construction of recreational facilities within the Park. Therefore, this alternative would temporarily increase concentrations of ROG, NO_x, PM₁₀, diesel exhaust, and fuel vapors in the project area, but construction-related emissions would be less under this alternative than under the proposed project. Long-term operation (use and maintenance) of the Park as part of this alternative would also cause an increase in ROG, NO_x, or PM₁₀. Construction of road improvements under this alternative could expose areas containing asbestos. Mitigation would be included to address this issue, as necessary. With implementation of this mitigation, this alternative would have a less-than-significant impact on air quality. For these reasons, the impacts of the Dispersed Recreation Alternative on air quality would be less than those of the proposed project.

Noise

Construction of road improvements along Garden Bar Road would temporarily increase noise levels in the project area; however, there would be no noise associated with construction of trails or other recreational facilities under this alternative. Construction activities would comply with the requirements of the Placer County Noise Ordinance, and the closest noise-sensitive receptor is approximately 800 feet away. Long-term operation (use and maintenance) of the Park under the Dispersed Recreation Alternative would cause a significant increase in noise levels in the project area; however, limiting project-related traffic to less sensitive hours would reduce this impact to less than significant. The Dispersed Recreation Alternative would have a similar impact on noise compared to the proposed project on noise levels.

Soils, Geology, and Seismicity

Construction of road improvements under the Dispersed Recreation Alternative would require removal of vegetation and would result in soil disturbance and minor alterations to surface topography that could result in erosion. This alternative would include vegetation removal and earthmoving activities for improvements to Garden Bar Road, but not vegetation removal for construction of trails and other recreational facilities. Construction-related impacts of the Dispersed Recreation Alternative on geology and soils would be less than those of the proposed project. However, operation-related impacts on geology and soils under this alternative would be greater because volunteer trails and foot traffic would occur over a larger area of the Park causing more

widespread erosion. In addition, volunteer trails could be created in steep areas or areas of high erosion, which would cause more long-term erosion than with the proposed project. The project area is not located within an earthquake fault zone, and no structures for human occupancy would be placed across any fault traces. Impacts of the Dispersed Recreation Alternative on soils, geology, and seismicity would be potentially significant. The County would obtain authorization for construction and operation activities from the Central Valley RWQCB, implement erosion and sediment control measures, and obtain and implement seismic engineering design recommendations to reduce impacts on geology, soils, and seismicity to a less-than-significant level. The Dispersed Recreation Alternative would have more of an impact on soils, geology, and seismicity than the proposed project.

Mineral Resources

The Dispersed Recreation Alternative would not result in the loss of any known mineral resources, nor would it impede or interfere with the establishment or continuation of existing mineral extraction operations. It would not result in the loss of available known mineral resources that would be of value to the region or residents of the state, and the area is not delineated as a locally important recovery site. The impacts of the Dispersed Recreation Alternative on mineral resources would be similar to those of the proposed project.

Hydrology and Water Quality

Implementation of the Dispersed Recreation Alternative would not include construction of any groundwater wells or septic systems that could affect groundwater. Potential erosion from vegetation removal and construction could affect water quality in the project area; however, this alternative would avoid vegetation removal and earthmoving activities associated with construction of trails and other facilities. Although construction-related erosion would be less under this alternative, operation-related erosion would be greater and more widespread. The Dispersed Recreation Alternative would comply with General Plan policies pertaining to water quality, and BMPs would be implemented to reduce these impacts. However, because of the dispersed nature of the impacts, it would be more difficult to minimize erosion under this alternative. Therefore, the Dispersed Recreation Alternative would have a potentially significant impact on hydrology and water quality and would have more of an impact on hydrology and water quality than the proposed project.

Public Services and Utilities

Implementation of the Dispersed Recreation Alternative would not result in the need for a substantial increase in fire protection, police protection, schools, or other public facilities. The public services currently provided to the project area would be sufficient to accommodate the proposed Park. The Dispersed Recreation Alternative would not include components that would require electricity and communication, wastewater treatment, or water supply systems, and a septic system would not be constructed under this alternative. Under the Dispersed Recreation Alternative solid waste would be collected and disposed of by Auburn Placer Disposal Service. Therefore, this alternative would have a less-than-significant impact on public services and utilities. For these reasons, the impacts of the Dispersed Recreation Alternative on public services and utilities would be less than those of the proposed project.

Recreation

The Dispersed Recreation Alternative would provide new recreational opportunities in response to existing demand for more recreational opportunities in Placer County. Like the proposed project, this alternative would accommodate hikers, equestrians, and mountain bikers. However, the lack of preconstructed trails would make the Park less accessible to Park users, including those with disabilities, and less attractive to many users. Without new facilities, users would not be able to easily reach much of the Spears Ranch portion of the Park that is more distant from the trails within the Didion Ranch portion of the Park. Therefore, this alternative would provide substantially fewer recreational opportunities than the proposed project. This alternative would not increase demand for more parks or facilities, nor would it negatively affect existing recreational opportunities. The

Dispersed Recreation Alternative would have a beneficial impact on recreation, but it would provide substantially less of a benefit than the proposed project.

Hazardous Materials and Hazards

The Dispersed Recreation Alternative would be located in an area of medium fire danger, as rated by CalFire (2007). There is the potential for fire to be caused by construction equipment or by Park users after construction (e.g., from discarded cigarette butts). Under this alternative the potential for wildfire, compared to the proposed project, would be slightly less during construction but slightly greater during operation because Park users would access more of the Park in areas where vegetation has not been maintained. The potential also exists for small amounts of hazardous materials to be released from construction equipment under this alternative or during maintenance of the Park under this alternative. In addition, there is the potential for the public and/or construction workers to be exposed to hazardous materials and vector-borne diseases under this alternative. Because there would be less construction required under this Alternative, there would be fewer potential hazards related to construction compared to the proposed project. The Dispersed Recreation Alternative would be constructed and operated consistent with the *Hidden Falls Regional Park Vegetation, Fuels, and Range Management Plan* (Placer County 2007b), and an accidental-spill prevention and response plan would be developed to reduce these impacts. The County would also coordinate with the Vector Control District, create a safety hazard plan, and conduct soils sampling as necessary to reduce these impacts. Because these measures would be taken, this alternative would have a less-than-significant impact on hazards and hazardous materials. The impacts of the Dispersed Recreation Alternative on hazards and hazardous materials would be similar to those of the proposed project.

REDUCED ACCESS ALTERNATIVE (ALTERNATIVE 4)

Under the Reduced Access Alternative, the proposed natural-surface multiple-use trails and related recreational amenities would be constructed as described for the proposed project; however, no public access to the Park would be provided via Garden Bar Road. Automobile, equestrian, and bus access would continue to be provided via Mears Drive and the existing Didion Ranch parking area would be expanded to accommodate increased use. Garden Bar Road would continue to be used by County staff for maintenance and for emergency vehicle access. Impacts of the Reduced Access Alternative are described below by resource topic.

Land Use and Agricultural Resources

The Reduced Access Alternative would be consistent with the General Plan and the Placer County Zoning Ordinance. This alternative would not divide an established community, nor would it affect timber resources or operations. Grazing would be allowed to continue on the property, but no other agricultural uses would be allowed. This alternative would not interfere with surrounding land uses. This alternative would also be consistent with the *Draft Placer County Conservation Plan: Western Placer County*. Because the Reduced Access Alternative would not conflict with any land use plans in the project area and grazing would be allowed to continue, it would have a less-than-significant impact on land use, planning, and agricultural resources. The impacts of the Reduced Access Alternative on land use, planning, and agricultural resources would be similar to those of the proposed project.

Population, Employment, and Housing

The Reduced Access Alternative would not involve construction of new homes or businesses. This alternative would not displace any existing housing, nor would it result in disruption or division of an established community. The proposed trails and facilities would be constructed primarily with mechanized construction techniques and only one permanent job would be created by this alternative. Therefore, construction and operation of this alternative would require few workers and would have very little effect on the local workforce. This alternative would have no effect on population, employment, or housing. The impacts of the Reduced Access Alternative on population, employment, and housing would be similar to those of the proposed project.

Biological Resources

With implementation of mitigation, the Reduced Access Alternative would not substantially affect any threatened or endangered species. This alternative would have minor effects on Coon Creek, Deadman Creek, and other unnamed drainages within the Park. The Reduced Access Alternative would require the removal of vegetation, including some trees. Because this alternative would not require improvements along Garden Bar Road to accommodate public access, there would be no tree removal or impacts to biological resources along Garden Bar Road. Less vegetation would be removed for construction of a parking area at the western end of the Park; however, some additional vegetation would be removed with expansion of the Didion Ranch parking area. If access is only provided via Mears Drive, the Didion Ranch parking area would need to be expanded beyond the proposed expansion under the proposed project to accommodate the increase in use. This alternative would include mitigation to reduce impacts on special-status species, oak woodlands, and waters of the United States to a less-than-significant level. For these reasons, the impacts of the Reduced Access Alternative on biological resources would be less than those associated with the proposed project.

Cultural Resources

Nine potentially significant cultural resources and one significant cultural resource are located within the Spears Ranch portion of the Park. The Reduced Access Alternative would include mitigation measures to reduce impacts on known and yet-to-be-discovered cultural resources. With implementation of these mitigation measures, this alternative would have a less-than-significant impact on cultural resources. The impacts of the Reduced Access Alternative on cultural resources would be similar to those of the proposed project.

Visual Resources

The Reduced Access Alternative would introduce new physical elements into the landscape; however, there would be limited views of the trail system and recreational facilities from off-site locations. For this alternative, no changes would be made to Garden Bar Road. Construction of the project facilities under this alternative would minimize the removal of trees greater than 6 inches in dbh, thus minimizing visible canopy reduction, and would incorporate the use of natural colors and materials into Park facilities to be consistent with the natural character of the Park. In addition, no vegetation would be removed for construction of a parking area at the western end of the Park and the Garden Bar Road improvements as there would be for the proposed project. New security lighting similar to that used under the proposed project and by previous residents would be included as part of this alternative. The Reduced Access Alternative would not affect any scenic vistas. Therefore, this alternative would have a less-than-significant impact on visual resources. For these reasons, the impacts of the Reduced Access Alternative on visual resources would be less than those of the proposed project.

Transportation and Circulation

Construction of trails and recreational facilities under the Reduced Access Alternative would temporarily increase traffic on Garden Bar Road during construction. Maintenance traffic on Garden Bar Road would also increase slightly after the Spears Ranch portion of the Park is opened to the public. However, no public access for automobile, equestrian, or bus traffic would be allowed via Garden Bar Road under this alternative. Therefore, the only increase in traffic on Garden Bar Road under this alternative would be a result of construction vehicles and increased maintenance traffic. No road improvements would be made on Garden Bar Road for this alternative. Access to both the Didion Ranch and Spears Ranch portions of the Park would be provided via the Mears Drive entrance, which would result in an increase in traffic on Mears Drive. Although the traffic would increase on Mears Drive, it is not expected that this increase would result in an exceedance of a LOS standard. The western parking area would not be constructed for this alternative; however, the Didion Ranch parking area would be expanded beyond the expansion proposed under the proposed project. Although this alternative would result in less traffic on Garden Bar Road, it would result in increased traffic on Mears Drive. Therefore, overall traffic

impacts of the Reduced Access Alternative on transportation and circulation would be on different roadways, but would be similar in volume to those of the proposed project.

Air Quality

Construction of trails and recreational facilities under the Reduced Access Alternative would temporarily increase concentrations of ROG, NO_x, PM₁₀, diesel exhaust, and fuel vapors in the project area. In addition, long-term operation (use and maintenance) of the Park as part of this alternative would cause an increase in ROG, NO_x, or PM₁₀. There is a slight possibility that ground-disturbing activities under this alternative would also expose areas containing asbestos. Mitigation would be included to address this issue, as necessary. However, this alternative would include fewer construction-related emissions associated with improvements to Garden Bar Road and the western parking area. The Reduced Access Alternative would have a less-than-significant impact on air quality with implementation of mitigation. For these reasons, the impacts of the Reduced Access Alternative on air quality would be less than those of the proposed project.

Noise

Construction of trails and recreational facilities under the Reduced Access Alternative would temporarily increase noise levels in the project area. Construction activities associated with this alternative would comply with the requirements of the Placer County Noise Ordinance. The closest noise-sensitive receptors are approximately 800 feet away. There would be less severe noise impacts from construction of improvements along Garden Bar Road and construction of the western parking area for this alternative than for the proposed project. Long-term operation (use and maintenance) of the Park under the Reduced Access Alternative would be similar to the proposed project and would not cause a significant increase in noise levels in the project area. Therefore, this alternative would have a less-than-significant impact on noise levels in the project area. For these reasons, the Reduced Access Alternative would have less of an impact than the proposed project on noise levels.

Soils, Geology, and Seismicity

Construction of recreational facilities under the Reduced Access Alternative would require some removal of vegetation and would result in soil disturbance and minor alterations to surface topography, which could result in erosion. However, this alternative would involve less removal of vegetation and a lesser amount of earthmoving activity for improvements to Garden Bar Road and the western parking area. This alternative would include renovation of existing buildings on-site for human occupancy or use as a nature center and construction of bridges and bunkhouses that could be subject to ground shaking, liquefaction, and landslides. However, the project area is not located within an earthquake fault zone, and no structures for human occupancy would be placed across any fault traces. The County would obtain authorization for construction and operation activities from the Central Valley RWQCB, implement erosion and sediment control measures, and obtain and implement seismic engineering design recommendations to reduce impacts on geology, soils, and seismicity to a less-than-significant level. Impacts of this alternative on soils, geology, and seismicity would be less than significant. For these reasons, the Reduced Access Alternative would have slightly less of an impact on soils, geology, and seismicity than the proposed project.

Mineral Resources

The Reduced Access Alternative would not result in the loss of any known mineral resources, nor would it impede or interfere with the establishment or continuation of existing mineral extraction operations. It would not result in the loss of available known mineral resources of value to the region or residents of the state, and the area is not delineated as a locally important recovery site. The Reduced Access Alternative would not have an impact on mineral resources; therefore, the impacts of this alternative on mineral resources would be similar to those of the proposed project.

Hydrology and Water Quality

Implementation of the Reduced Access Alternative would include construction of up to two groundwater wells and septic system that could affect groundwater. Potential erosion from vegetation removal and construction could also affect water quality in the project area; however, this alternative would not include removal of vegetation and earthmoving activities for improvements to Garden Bar Road or the western parking area. This alternative would comply with policies pertaining to water quality in the General Plan and would implement best management practices. A grading and drainage plan would be prepared and implemented and the County would obtain a Transient Non-community Water System Permit to reduce these impacts to a less-than-significant level. Therefore, the Reduced Access Alternative would have a less-than-significant impact on water quality and hydrology in the project area. For these reasons, the Reduced Access Alternative would have slightly less of an impact on hydrology and water quality than the proposed project.

Recreation

The Reduced Access Alternative would provide new recreational opportunities in response to existing demand for more recreational opportunities in Placer County similar to the proposed project. However, this alternative would provide no public automobile, horse trailer, or bus access to the western side of the Park for Park users, which would substantially reduce the new opportunities for recreation use of the Spears Ranch portion of the Park. Recreation users would be forced to access the Spears Ranch portion of the Park from the existing parking area and trails on the Didion Ranch portion of the Park. This alternative would not increase the demand for parks or facilities; however, the increased visitation could negatively affect existing recreational opportunities within the Didion Ranch portion of the Park. Without automobile access to the western portion of the Park, new recreation opportunities would be substantially reduced compared to the proposed project. The Reduced Access Alternative would have a beneficial impact on recreation, but it would provide substantially less of a benefit than the proposed project because of reduced access.

Public Services and Utilities

Implementation of the Reduced Access Alternative would not result in the need for a substantial increase in fire protection, police protection, schools, or other public facilities. The public services currently provided to the project area would be sufficient to accommodate use of the Park under this alternative. The Reduced Access Alternative would have components that would require electricity and communication, wastewater treatment, septic, and water supply systems. A septic system would be constructed under this alternative as for the proposed project. For this alternative solid waste would be collected and disposed of by Auburn Placer Disposal Service. Because this alternative would not increase demand for public services and adequate utilities would be provided to accommodate Park users, the Reduced Access Alternative would have a less-than-significant impact on public services and utilities. The impacts of the Reduced Access Alternative on public services and utilities would be similar to those of the proposed project.

Hazardous Materials and Hazards

The Reduced Access Alternative would be located in an area of medium fire danger, as rated by the California CalFire (2007). There is the potential for fire to be caused by construction equipment or by Park users after construction (e.g., from discarded cigarette butts or campfires). The potential also exists for small amounts of hazardous materials to be released from construction equipment or during maintenance of the Park under this alternative. In addition, there is the potential for the public and/or construction workers to be exposed to hazardous materials and vector-borne diseases under this alternative. Because there would be less construction required under this alternative for Garden Bar Road improvements, there would be fewer potential hazards related to construction compared to the proposed project. The Reduced Access Alternative would be constructed and operated consistent with the *Hidden Falls Regional Park Vegetation, Fuels, and Range Management Plan* (Placer County 2007b), and an accidental-spill prevention and response plan would be developed to reduce these impacts.

The County would also coordinate with the Vector Control District and create a safety hazard plan to reduce these impacts. Because these measures would be taken, this alternative would have a less-than-significant impact on hazards and hazardous materials. For these reasons, the impacts of the Reduced Access Alternative on hazards and hazardous materials would be slightly less than those of the proposed project.

15.1.3 SUMMARY OF ALTERNATIVES ANALYSIS

A comparison of the proposed project, the No Project Alternative, the Single-Track Trails Alternative, the Dispersed Recreation Alternative, and the Reduced Access Alternative is presented in Table 15-1 below. This table shows the advantages and disadvantages of these alternatives relative to the proposed project.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The environmentally superior alternative would be the No Project Alternative; however, according to the State CEQA Guidelines, if the environmentally superior alternative is the No Project Alternative, an environmentally superior alternative must be selected from the other alternatives. The environmentally superior alternative among the other alternatives is the Reduced Access Alternative. The Reduced Access Alternative would be environmentally superior to the proposed project with regard to biological resources; visual resources; air quality; noise; soils, geology, and seismicity; hydrology and water quality; and hazardous materials and hazards. The Reduced Access Alternative would be superior to the Single-Track Trails Alternative with regard to visual resources, and the Dispersed Recreation Alternative with regard to visual resources; biological resources; cultural resources; soils, geology, and seismicity; and hydrology and water quality.

15.2 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

CEQA Section 21100(b)(2)(A) provides that an EIR shall include a detailed statement setting forth “[i]n a separate section...[a]ny significant effect on the environment that cannot be avoided if the project is implemented.” Section 15126.2(b) of the State CEQA Guidelines requires that an EIR describe any significant impacts, including those that can be mitigated but not reduced to a level of insignificance. Chapters 4.0 through 14.0 of this EIR provide descriptions of the potential environmental effects of the proposed project for all applicable environmental topic areas, as well as mitigation measures to mitigate project effects to the extent feasible. Cumulative impacts of the proposed project are discussed in Section 15.5 below. Implementation of the proposed mitigation measures would reduce all of the identified project-related significant impacts to less-than-significant levels, except for Impact 7-3: Long-Term Changes in Visual Resources Associated with the Improvements to Garden Bar Road. Mitigation Measure 7-1: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts, would reduce this impact, but not to a less-than-significant level. Because of the number of trees that could be removed and the time required for tree plantings to reach a similar size and screening ability to existing trees, there is no feasible mitigation available to fully mitigate this impact to visual resources. Therefore, the proposed project would result in a significant and unavoidable effect on visual resources.

**Table 15-1
Summary of Alternatives Analysis**

Issue Area	Proposed Project	No Project (Alternative 1)		Single-Track Trails (Alternative 2)		Dispersed Recreation Alternative (Alternative 3)		Reduced Access Alternative (Alternative 4)	
		No impact	Star	Less than significant	Star	Less than significant	Star	Less than significant	Star
Land Use and Agricultural Resources	Less than significant	No impact	□	Less than significant	★	Less than significant	★	Less than significant	★
Population, Employment, and Housing	No impact	No impact	★	No impact	★	No impact	★	No impact	★
Biological Resources	Less than significant	No impact	□	Less than significant	□	Less than significant	■	Less than significant	□
Cultural Resources	Less than significant	No impact	□	Less than significant	★	Less than significant	■	Less than significant	★
Visual Resources	Significant and Unavoidable	No impact	□	Significant and Unavoidable	□	Significant and Unavoidable	★	Less than significant	□
Transportation and Circulation	Less than significant	No impact	□	Less than significant	□	Less than significant	□	Less than significant	★
Air Quality	Less than significant	No impact	□	Less than significant	□	Less than significant	□	Less than significant	□
Noise	Less than significant	No impact	□	Less than significant	□	Less than significant	★	Less than significant	□
Soils, Geology, and Seismicity	Less than significant	No impact	□	Less than significant	□	Less than significant	□	Less than significant	□
Mineral Resources	No impact	No impact	★	No impact	★	No impact	★	No impact	★
Hydrology and Water Quality	Less than significant	No impact	□	Less than significant	□	Less than significant	■	Less than significant	□
Public Services and Utilities	Less than significant	No impact	□	Less than significant	★	Less than significant	□	Less than significant	★
Recreation	Beneficial impact	Less than significant	■	Beneficial impact, but substantially reduced	■	Beneficial impact, but substantially reduced	■	Beneficial impact, but substantially reduced	■
Hazardous Materials and Hazards	Less than significant	No impact	□	Less than significant	□	Less than significant	★	Less than significant	□

Key:

- Proposed project environmentally advantageous over the alternative
 - Alternative is environmentally advantageous compared to the proposed project
 - ★ No clear environmental advantage exists between the alternative and the proposed project
- Source: Data provided by EDAW in 2008

15.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Section 21100(b)(2)(B) provides that an EIR shall include a detailed statement setting forth “[i]n a separate section... [a]ny significant effect on the environment that would be irreversible if the project is implemented.” State CEQA Guidelines Section 15126.2(c) provides the following guidance for an analysis of significant irreversible changes of a project:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible because a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Mechanical construction techniques would be used to construct the proposed trail system and recreational facilities such as parking areas, picnic areas, restrooms, and bridges across Coon Creek and other drainages. In addition, the proposed project would commit future generations to similar uses to some extent. The proposed project would provide access to a rural area that has been inaccessible to recreational users and other members of the public. This could be considered a secondary effect of the proposed project. However, all potential effects of the proposed project for all applicable environmental issue areas are analyzed in this EIR. Therefore, this analysis assumes that no additional effects related to project development would occur that are not evaluated in other sections of this EIR.

Implementing any of the alternatives would require irretrievable commitments of both renewable and nonrenewable energy and material resources for construction of the proposed trail system and related project facilities. As described in Chapter 3.0, “Project Description,” these activities would require use of construction equipment that use petroleum fuels, such as gasoline and diesel. This temporary expenditure of energy would occur over the short term and would not substantially increase the overall demand for petroleum fuels, electricity, or natural gas. Therefore, none of the alternatives would result in a commitment of a significant amount of nonrenewable resources.

Resources in the form of construction materials and labor, fuels, and other energy sources for vehicles and equipment would also be committed with the implementation of all the other alternatives except the No Project Alternative.

15.4 GROWTH-INDUCING EFFECTS

CEQA Section 21100(b)(5) specifies that the growth-inducing impacts of a project must be addressed in an EIR. Section 15126.2(d) of the State CEQA Guidelines states that a proposed project is growth-inducing if it could “foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” Direct growth inducement would result if a project involved (for example) the construction of new housing. Indirect growth inducement would result if a project established substantial new permanent employment opportunities (e.g., new commercial, industrial, or governmental enterprises), involved a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services, or removed an obstacle to housing development. Examples of growth-inducing actions include extending water, wastewater, fire, or other types of services in areas not previously served; extending transportation routes into previously undeveloped areas; and establishing major new employment opportunities.

The proposed project would involve construction of a multiple-use trail system and other recreational facilities within the undeveloped, open space, recreational setting of Placer County. Implementation of the proposed project would occur in phases (see Chapter 3.0, "Project Description"), and the work would be performed by one or more crews from the California Conservation Corps, licensed contractors, volunteers, and/or County staff. These activities would generate short-term employment opportunities; however, the work would be temporary and would occur over several years, with certain activities starting and stopping for shorter durations within that time period. Because of the limited number and type of new jobs that would be generated and the temporary nature of those jobs, it is anticipated that the new jobs would be filled using the existing local employment pool. Existing available housing in the region would easily accommodate any workers who relocate from outside the area, if needed. Existing County staff members would manage the Park and trail uses with assistance from local volunteers and organized recreation groups. Therefore, this alternative would require few permanent workers and would have very little effect on the local workforce. For these reasons, indirect growth-inducing impacts resulting from implementation of the proposed project would be less than significant.

The Spears Ranch portion of the Park was purchased by the Placer Legacy Program to create a regional park with an emphasis on passive and outdoor recreation uses. This property would be managed by the County for open space, natural resources values, and outdoor recreational uses. The proposed project would be consistent with the zoning of the project area. Construction and operation (i.e., use and maintenance) of the proposed Park would not involve construction of housing. The status of the property as a contiguous natural preserve extinguishes the potential of up to 20 divisible residential parcels under current zoning. Some of the public and private services and utilities that currently serve the property would need to be altered to accommodate the Park facilities; however, no new services or utilities would be constructed with more capacity than needed for uses currently being proposed. The proposed project would also include improvements to the existing access road within the Park and to Garden Bar Road, which would improve access to the project area. However, many additional road improvements would need to occur and other requirements (e.g., water and wastewater facilities and capacity, compliance with the General Plan and Placer County Zoning Ordinance) would need to be met for any further development to occur along Garden Bar Road. Therefore, the project would not result in direct growth-inducing effects, and this impact would be less than significant.

A slight increase in economic growth may be realized from the proposed project. Construction of the proposed Park would increase the number and capacity of regional parks in Placer County, which could draw people to recreate in the project area from elsewhere in the county and region. By stimulating visitation for recreational activities, the proposed Park is also expected to result in a slight increase in related recreational spending levels. This is anticipated to lead to a minor, long-term increase in local economic activity. Such economic benefits would likely be concentrated in the sectors of the local business community that serve recreationists, specifically trail users. However, there would be no entrance fee to the Park, so no direct economic growth would result from the project. Effects on the local economy would be minimal, resulting in no significant indirect growth-inducing effects.

15.5 CUMULATIVE IMPACTS

Section 15130 of the State CEQA Guidelines requires that an EIR discuss cumulative impacts of a project when the project's incremental effect is "cumulatively considerable." According to Section 15065, "Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, other current projects, and probable future projects as defined in Section 15130." Sections 15130 and 15355 of the State CEQA Guidelines both stress cumulative impacts in the context of closely related projects and from projects causing related impacts.

The term "considerable" is subject to interpretation. The standards used herein to determine whether an effect is considerable are that either the impact of the proposed project would contribute in any manner to the existing significant cumulative impact, or the cumulative impact would exceed an established threshold of significance when the proposed project's incremental effects are combined with similar effects from other projects.

State CEQA Guidelines Section 15130(b) directs the crafting of an adequate discussion of cumulative impacts:

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

A cumulative analysis may employ either of two methods for evaluating cumulative impacts; this EIR uses the list method in accordance with Section 15130(b)(1)(A) of the State CEQA Guidelines, which allows the lead agency to consider “past, present, and probable future projects producing related or cumulative impacts...”

The environmental influences of past projects and present projects that have been implemented already exist as a part of current conditions in the project area. Therefore, the contributions of past and present projects to environmental conditions are adequately captured in the description of the existing settings within each resource chapter (Chapters 4.0 through 14.0) and need not be specifically listed here. This cumulative impact analysis focuses on the potential cumulative physical changes to the existing setting that could occur as a result of a combination of this proposed trail project and probable future projects.

15.5.1 OTHER RELEVANT PROJECTS

POTENTIAL ADJOINING PROJECTS

Didion Ranch Portion of Hidden Falls Regional Park (Existing Project)

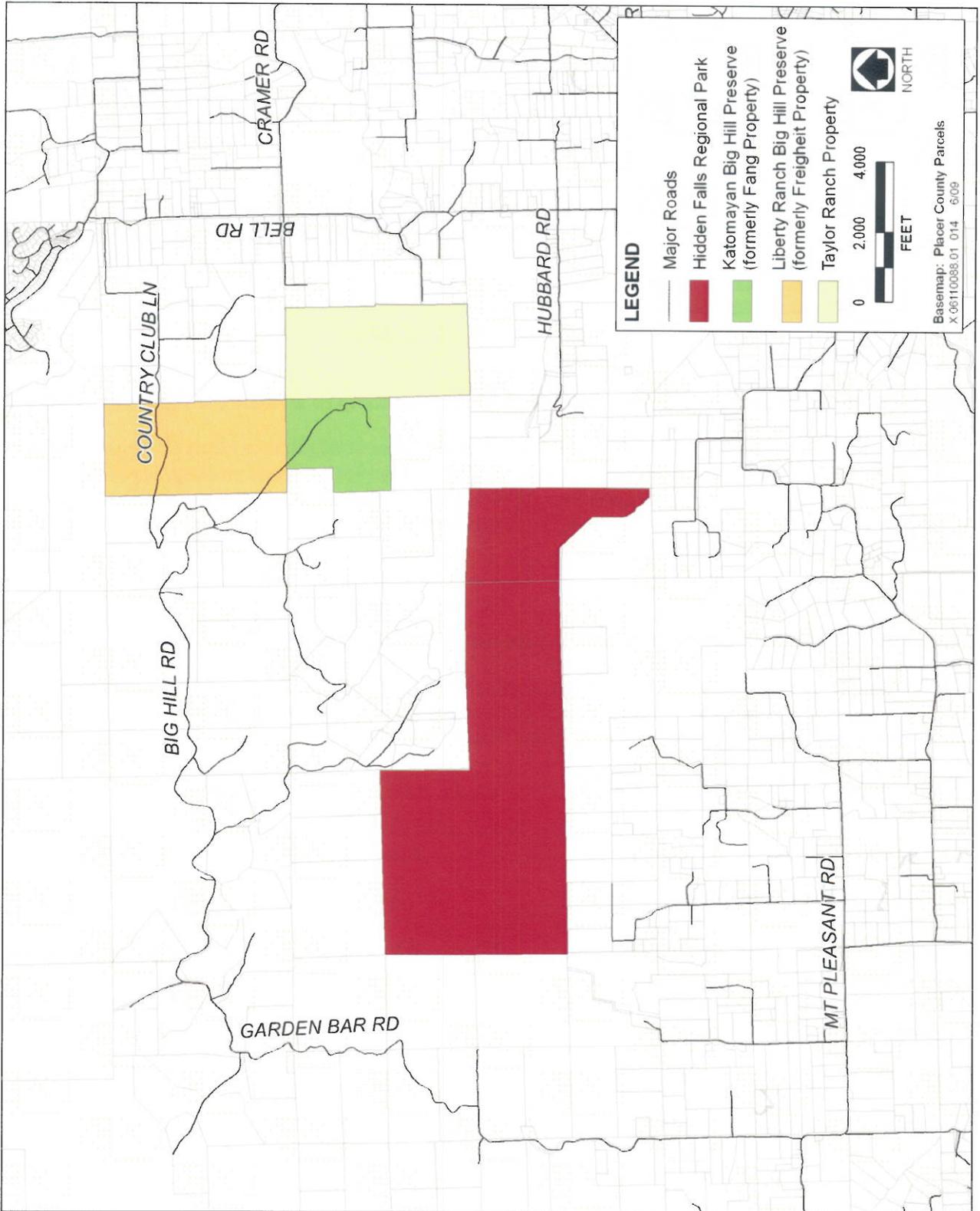
The Placer Legacy Program purchased the Didion Ranch portion of the Park in November 2004. The Didion Ranch property is approximately 221 acres and is adjacent to the Spears Ranch portion of the Park that is the subject of this EIR. An initial study/mitigated negative declaration was adopted for the Didion Ranch portion of the Park in 2004. This portion of the Park is now open to the general public from sunrise to sunset year-round. Used for passive recreation, it includes approximately 7 miles of multiple-use trails, a small picnic area, and a parking area. There is parking for approximately 50 cars and five trucks and trailers. Access to this portion of the Park is provided via Mears Drive. If the proposed project is implemented, access between the Spears Ranch and Didion Ranch portions of the Park would be provided via trail.

Liberty Ranch Big Hill Preserve (formerly Freiheit Property) (Future Project)

The approximately 320-acre Freiheit property is located approximately 2 miles northeast of the Park (Exhibit 15-1). The Placer Land Trust has acquired a conservation easement across this property. Terms of the conservation easement stipulate the offer of dedication of a public trail easement generally running from the southeast to the northwest corners of the property, and the potential exists to connect it to the proposed Park via trail in the future. Identification and recordation of the trail easement must be completed by 2012. However, there is no timeline for accommodation of a public access connection to the trail easement. General public vehicle staging is not anticipated at the Liberty Ranch Big Hill Preserve property. It is unknown when trail construction would begin on the Liberty Ranch Big Hill Preserve; however, a separate environmental analysis would need to be conducted for those facilities prior to construction.

Katomayan Big Hill Preserve (formerly Fang Property) (Future Project)

The Katomayan Big Hill Preserve is located approximately 0.7 mile northeast of the proposed Park (Exhibit 15-1). This 160-acre property borders the southern boundary of the Liberty Ranch Big Hill Preserve and the western border of the Taylor Ranch property (described below). This property was purchased by Placer Land Trust, and



Source: Data provided by Placer County in 2007

Potential Adjoining Projects WP

Exhibit 15-1

the potential exists to connect it to the proposed Park and the Liberty Ranch Big Hill Preserve via trail in the future. General public staging facilities are not anticipated for the Katomayan Big Hill Preserve property. Park amenities such as bench rests, picnic areas, and/or a restroom facility may be located within the property in conjunction with the trail. It is unknown when construction of trails or recreational facilities would begin on this property; a separate environmental analysis would need to be conducted for such facilities.

Taylor Ranch Property (Future Project)

Similar to the Katomayan Big Hill Preserve, the Taylor Ranch property has been purchased by Placer Land Trust (Exhibit 15-1). This 320-acre parcel is located approximately 1 mile northeast of the Park. The potential exists to connect this property to the Park and other surrounding properties via trail in the future. General public staging facilities are not anticipated for the Taylor Ranch property. Park amenities such as bench rests, picnic areas, and/or a restroom facility may be located within the property in conjunction with the trail. It is unknown when construction on trails or recreational facilities would begin on this property; a separate environmental analysis would need to be conducted for such facilities.

Sierra Nevada Conservancy Grant #G0733008 (Action Leading to a Potential Future Project)

On March 13, 2008, the Sierra Nevada Conservancy authorized Grant #G0733008 to Placer County to facilitate the development of a public trail connection between the Park and the Taylor Ranch property. Specifically, the grant will fund physical reconnaissance and flagging of potential trail alignments across intermediate parcels and the detailed design and cost estimation of trail, bridges, and associated amenities. The grant does not fund acquisition of property either in easement or fee.

OTHER PROJECTS IN PLACER COUNTY

Taylor Ranch Bird Sanctuary and Nature Reserve (Existing Project)

The Taylor Ranch Bird Sanctuary and Nature Reserve is a passive recreation park that offers nature study and interpretation, trail use, and family picnic areas. This reserve is approximately 90 acres and is located in Penryn, approximately 12 miles from the project area (Placer County 2006). This reserve is open to the public.

Griffith Quarry Park (Existing Project)

Griffith Quarry Park is a passive recreation park in Penryn, approximately 14 miles from the project area. Griffith Park provides picnic areas, trails, and a county museum and is open to the public (Placer County 2006).

15.5.2 CUMULATIVE IMPACTS

Cumulative impacts of the proposed project are evaluated separately for each environmental topic area addressed in this EIR. Within each topic area, the cumulative impact analysis focuses on the potential cumulative physical changes to the existing conditions that could occur as a result of a combination of the proposed project and probable future projects described above.

LAND USE AND AGRICULTURAL RESOURCES

Chapter 4.0 identifies the effects of the proposed project on land use, planning, and agricultural resources. The proposed project would be consistent with the land uses and zoning of the project area, including the goals and policies of the General Plan. Trail construction is being considered for the Liberty Ranch Big Hill Preserve, Katomayan Big Hill Preserve, and Taylor properties northeast of the Park, and the proposed project would be consistent with the future land uses of those surrounding properties. In addition, grazing would be allowed to continue as part of the proposed project. Therefore, the proposed project, either alone or combined with other

projects, would not have a significant cumulative effect on land use, planning, or agricultural resources. The proposed project would not contribute to a significant cumulative effect on land use, planning, or agricultural resources.

SOILS, GEOLOGY, AND SEISMICITY

Chapter 5.0 identifies the effects of the proposed project on soils, geology, and seismicity. Disturbance of topsoil and removal of vegetation during construction of the proposed project would increase the potential for wind and water erosion. The proposed project could include renovation of existing buildings on-site for human occupancy and construction of bridges and bunkhouses that could be subject to ground shaking, liquefaction, and landslides. Disturbance of naturally occurring asbestos fibers could also create a health hazard. These impacts on soils, geology, and seismicity in the project area are considered potentially significant and could be cumulatively considerable.

Mitigation of impacts of the proposed project would consist of obtaining authorization for construction and operation with the Central Valley RWQCB and implementing erosion and sediment control measures, obtaining and implementing seismic engineering design recommendations, and preparing and implementing an asbestos dust control plan, if needed. Because the proposed project would implement site-specific mitigation consistent with the Central Valley RWQCB program, the incremental effect of the proposed project is not cumulatively considerable when considered with other past, present, and reasonably foreseeable projects. The proposed project would not contribute to a significant cumulative effect on soils, geology, or seismicity.

CULTURAL RESOURCES

Chapter 6.0 identifies the effects of the proposed project on cultural resources. The proposed project has the potential to affect known cultural resources and yet-to-be-discovered subsurface cultural remains or human interments. The impacts of the proposed project on cultural resources in the project area are considered potentially significant and could be cumulatively considerable.

Mitigation of impacts of the proposed project includes modifying construction plans to avoid potentially significant cultural resources, and halting construction immediately and notifying a qualified professional archaeologist of any discovery of cultural materials or human interments. The archaeologist would determine whether the resource is potentially significant as per the California Register of Historical Resources and would develop appropriate mitigation. If a Native American burial is discovered, Sections 7050.5 and 7052 of the California Health and Safety Code and Section 5097 of the California Public Resources Code would be complied with to ensure that the site is properly protected.

Because the proposed project would implement site-specific mitigation consistent with the California Health and Safety Code and the California Public Resources Code, the incremental effect of the proposed project would not be cumulatively considerable when considered with other past, present, and reasonably foreseeable projects. Therefore, the proposed project would not contribute to a significant cumulative effect on cultural resources.

VISUAL RESOURCES

Chapter 7.0 identifies the effects of the proposed project on visual resources. The proposed project would not be visible from any scenic vistas or scenic highways. Project features would incorporate the use of natural colors and materials to the extent possible so that they would blend with the surrounding environment. Views of trails and recreational facilities from the surrounding areas would be limited. The proposed project would introduce some new security lighting on the buildings on-site; however, the lighting would be similar to lighting that has been used by the previous resident and low-wattage lighting would be used. Road improvements along Garden Bar Road would be visible to nearby residents and would change the visual character of the road. The impacts of the proposed project on visual resources along Garden Bar Road are considered significant and would be cumulatively considerable.

Revegetating temporarily disturbed areas to minimize visual quality impacts and protecting oak woodlands would reduce the visual impact, but not to a less-than-significant level. Because the project’s effects would not be reduced to a less-than-significant level, the proposed project’s contribution to a cumulative effect on visual resources would be considerable. Therefore, the proposed project would contribute to a significant and unavoidable cumulative effect on visual resources.

TRANSPORTATION AND CIRCULATION

Chapter 8.0 identifies the effects of the proposed project on transportation and circulation. The impacts of developing the proposed project have also been considered within the context of long-term future traffic conditions in this area of the county. This analysis accounts for future regional traffic growth, as projected from review of historic traffic count records on roadways in the project vicinity.

The County Department of Public Works has collected daily traffic volume counts for rural roads, including Garden Bar Road and Mt. Pleasant Road, since 1971. Table 15-2 provides a general indication of changes in traffic volumes between 1971 and 2007. These data, along with the new traffic counts made for the proposed project, have been used through regression analysis to estimate the volume of traffic likely to occur on roads in the project vicinity in the year 2027 (Table 15-2).

Table 15-2 Background Traffic Growth						
Road	Post Mile	Location	Weekday Daily Volume			
			1971	1978	2007	2027
Garden Bar Road	2.42	North of Mt. Pleasant Road	191	–	285	500
	1.14	South of Mt. Pleasant Road	–	632	885	1,110
Mt. Pleasant Road	0.002	West of Garden Bar Road	–	266	385	540
	2.10	East of Garden Bar Road	–	361	910	1,125

Source: Data provided by KD Anderson & Associates in 2008

These daily traffic volumes have been employed to interpolate future weekend traffic volumes and weekday peak-hour intersection turning volumes without the proposed project, as shown in Exhibit 15-2.

As noted in Table 15-3, with and without the proposed project, the volume of traffic on most county roads would remain within the LOS C threshold identified in the General Plan. Current peak-hour volumes for intersections were adjusted to future intersection volumes based on the relative growth rates implied by daily traffic volumes using methods described in the Transportation Research Board’s National Cooperative Highway Research Program Report 255, *Highway Traffic Data for Urbanized Area Project Planning and Design*. Exhibit 15-3 presents “Year 2027 plus Project” traffic volumes that were developed by superimposing project trips onto the existing traffic volumes. As noted in Table 15-4, all intersections would continue to operate at a LOS that meets the County’s minimum standards (i.e., LOS C or better). In addition, the County would pay a traffic impact fee to the Capital Improvement Program in accordance with Section 15.28.010 of the Placer County Code to further offset any impacts of the project on area roadways.

**Table 15-3
Year 2027 Cumulative Daily Traffic Volumes and Levels of Service**

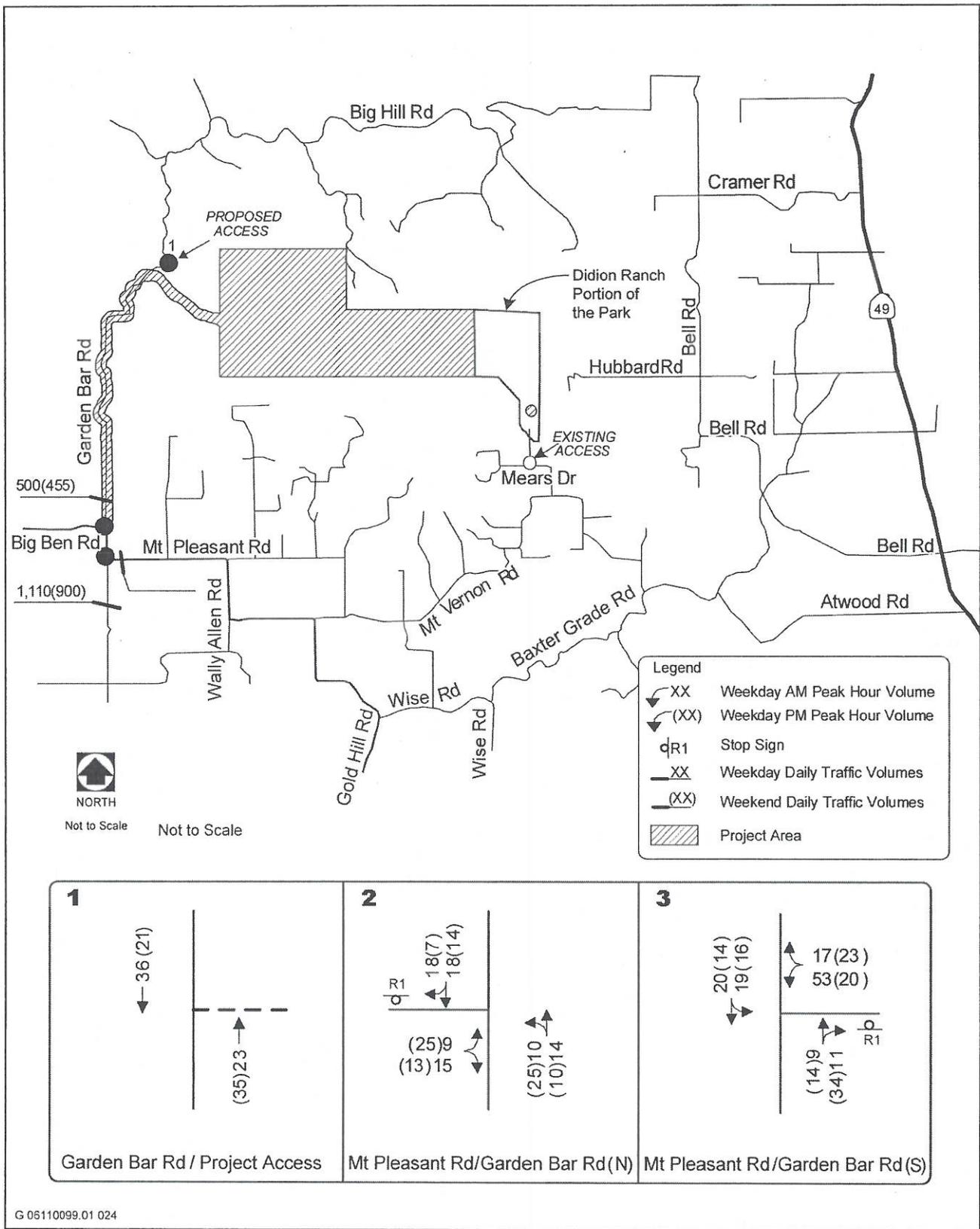
Road	From	To	Class	Weekday				Weekend					
				2027		2027 Plus Project		2027		2027 Plus Project			
				Daily Volume	LOS	Daily Volume Project	Total	LOS	Daily Volume	LOS	Daily Volume Project	Total	
Garden Bar Road (N)	Mt. Pleasant Road	Park Entrance	Mountainous Rural	500	A	256	756	B	455	A	460	915	B
Mt. Pleasant Road	Big Bend Road	Garden Bar Road (N)	Mountainous Rural	540	A	82	622	B	435	A	148	583	B
Mt. Pleasant Road	Garden Bar Road (S)	Wally Allen Road	Mountainous Rural	1,125	B	90	1,215	C	880	B	162	1,042	B
Garden Bar Road (S)	Mt. Pleasant Road	Wise Road	Mountainous Rural	1,110	B	84	1,194	B-C	900	B	152	1,052	B

Notes: LOS = level of service; N = north; S = south
Source: Data provided by KD Anderson & Associates in 2008

**Table 15-4
Cumulative (Year 2027) Intersection LOS**

Intersection	Control	Weekday								Traffic Signal Warrants Met?			
		A.M. Peak Hour (7-9 a.m.)				P.M. Peak Hour (4-6 p.m.)				A.M. Peak Hour	P.M. Peak Hour		
		Existing	Existing Plus Project	Existing	Existing Plus Project	Existing	Existing Plus Project	Existing	Existing Plus Project				
Garden Bar Road/ Access SB left turn WB left+right turn	WB Stop	LOS	Average Delay (seconds per vehicle)	LOS	Average Delay (seconds per vehicle)	LOS	Average Delay (seconds per vehicle)	LOS	Average Delay (seconds per vehicle)	LOS	Average Delay (seconds per vehicle)	No	No
Mt Pleasant Road/ Garden Bar Road (N) EB left turn SB left+right turn	SB Stop	A	7.3	A	7.3	A	7.4	A	7.4	A	7.4	No*	No
Mt Pleasant Road/ Garden Bar Road (S) EB left turn NB left+right turn	NB Stop	A	7.4	A	7.4	A	7.3	A	7.3	A	7.4	No*	No

Notes: EB = eastbound; LOS = level of service; N = north; NB = northbound; S = south; SB = southbound; WB = westbound
Source: Data provided by KD Anderson & Associates in 2008

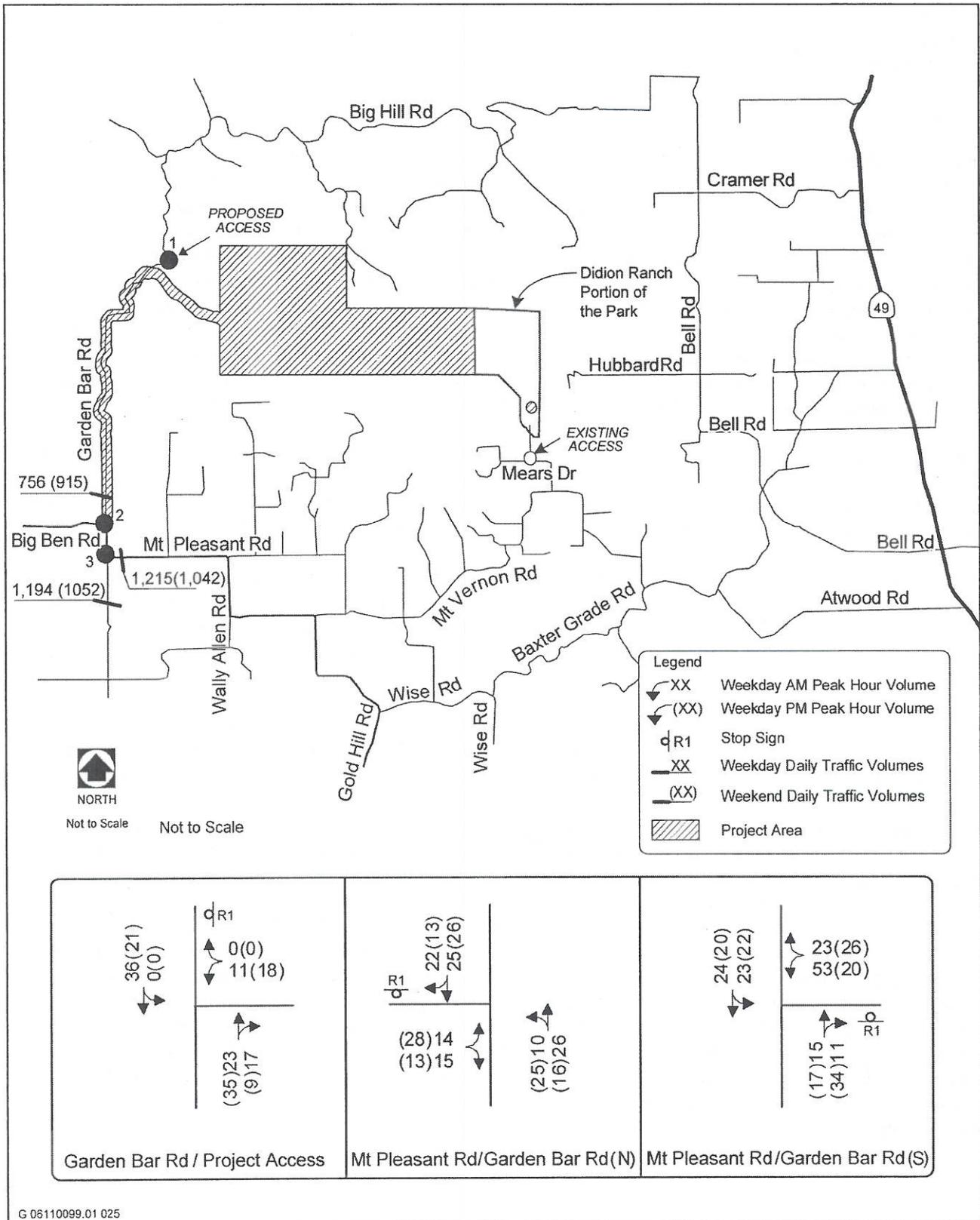


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Source: KD Anderson & Associates in 2008

Daily Traffic Volumes without Proposed Project

Exhibit 15-2



G 06110099.01 025

Source: KD Anderson & Associates in 2008

Daily Traffic Volumes Year 2027 Plus Proposed Project

Exhibit 15-3

As shown above, the proposed project would not have a cumulatively considerable effect on transportation and circulation when considered with other past, present, and reasonably foreseeable projects. The proposed project would not contribute to a significant cumulative effect on transportation or circulation.

AIR QUALITY

Chapter 9.0 identifies the effects of the proposed project on air quality. The proposed project would result in construction-related effects on air quality because construction of project facilities would generate criteria pollutants such as NO_x, ROG, and PM₁₀. All construction activities within the air basin would contribute to current air quality violations similar to those of the proposed project. Based on air quality modeling conducted, emissions of ROG and NO_x associated with project operation would not exceed PCAPCD's cumulative significance threshold of 10 lb/day. In addition, PCAPCD relies, to a certain degree, on land use designations contained in general plan documents applicable to its jurisdiction. PCAPCD refers to the contents of approved general plans to forecast, inventory, and allocate regional emissions from land use and development-related sources. These emissions budgets are used in statewide air quality attainment planning efforts. Because the proposed project is consistent with the land use designations contained in the General Plan, emissions associated with the proposed land uses would have been accounted for in regional air quality planning efforts.

The air basin is in nonattainment status; however, the air quality effects of the proposed project would be minimal and temporary. Because air quality impacts associated with the proposed project would be minimal and it is assumed that other projects in the area would use mitigation as necessary to reduce their impact on air quality, the project's incremental contribution to the significant cumulative effect is not cumulatively considerable.

GHG emissions generated during construction and operation of the proposed project would be primarily in the form of CO₂. CO₂ and other GHGs persist in the atmosphere for a much longer period of time than criteria air pollutants. New long-term emissions of GHGs associated with operation of the expanded Park would be generated by vehicle trips by Park visitors. No stationary sources of GHG emissions would be associated with the project.

For several reasons, it would be too speculative to determine whether the total operational GHG emissions generated by the proposed project would be new emissions. It is unknown whether anticipated visitors to the Park would otherwise seek similar recreational opportunities at other existing parks in the region if the new trails and Park facilities were not to be developed. Also, if the same individuals would use other parks, it is unknown whether they would travel to more-distant recreation areas, resulting in increased vehicle miles traveled and associated GHG emissions. It is conceivable that construction of the trail and the recreational facilities at the Park would reduce recreational-related vehicle miles traveled, given that it is less than 10 miles from Auburn and 15 miles from Lincoln, two major population centers in the region. Furthermore, it is also unknown whether Park visitors generate more or less GHG emissions than when they are engaged in nonrecreational activities (e.g., staying at home, shopping). Thus, it is not certain whether the long-term net change in GHG emissions associated with the proposed project would be negative or positive. Nonetheless, the amount of the net change would be nominal because the project would not directly represent an increase in the state's population by providing additional permanent residences, nor would it represent an expansion of the state's economy by providing a considerable number of new jobs. Additionally, Park features such as multiple access points, use of low-flow toilets, low-maintenance trail and recreation areas, and revegetation projects would serve to reduce GHG emissions. Therefore, any contribution by the proposed project to a net increase in GHG emissions would be less than considerable. This cumulative impact would be less than significant.

NOISE

Short-Term Construction-Generated Noise

Chapter 10.0 identifies the effects of the proposed project on noise. Noise is a localized occurrence and attenuates with distance. Therefore, only cumulative development projects in the direct project vicinity would have the potential to add to anticipated project-generated noise.

As discussed in Impact 10-1 in Chapter 10.0, depending on the operations conducted for the project's construction, individual equipment noise levels could range from 79 A-weighted decibels (dBA) to 91 dBA at a distance of 50 feet. Construction operations that occur between the hours of 6 a.m. and 8 p.m., Monday through Friday, during daylight savings time and between 7 a.m. and 8 p.m. during standard time are exempt from the applicable standards. However, noise levels caused by construction activities that occur during more sensitive night and evening hours may result in speech interference and increased sleep disruption to occupants of the nearby residences. Furthermore, if other nearby projects were to be constructed at the same time as the project, the proposed project and other related projects could combine to result in a short-term, significant cumulative impact.

Construction of the proposed project and nearby related projects would result in a short-term increase in traffic on the local area's roadway network, assuming that construction schedules are coincident. Residences along these roadways would be most affected by construction traffic noise because these roads provide immediate access to the project area. Daily off-site construction traffic related directly to the proposed project would include approximately four vans and 10–15 other worker/delivery vehicles related to construction.

Project-related construction activities and increases in traffic would be temporary, and according to the project description (see Chapter 3.0, "Project Description"), noise-generating construction activities would not occur during the more noise-sensitive hours (i.e., before 6 a.m. and after 8 p.m.) and therefore would be exempt from applicable noise standards. Thus, the project would not make a cumulatively considerable contribution to the short-term ambient noise level.

Long-Term Stationary-Source and Area-Source Noise

As discussed in Chapter 10.0, Impact 10-2, the proposed project would not include new or expanded stationary on-site noise sources. Nearby land uses do not include stationary and area sources that would generate a substantial amount of operational noise. Area noise related to maintenance activities and recreational use would occur under the proposed project. However, no exceedance of noise standards would occur. Occasional noise from overnight camping and hunting would be temporary and would not exceed any noise standards. Furthermore, no new or potential area noise sources are adjacent to the project area. Therefore, the project would not make a cumulatively considerable contribution to area-source noise.

Long-Term Transportation Noise

As discussed in Chapter 10.0, Impact 10-3, the proposed project would increase traffic noise levels on affected roadways. The Federal Highway Administration traffic noise prediction model was used to calculate traffic noise levels along affected roadways for traffic conditions in the year 2027 with implementation of the proposed project (refer to Table 15-5). The modeling is based on the trip distribution estimates presented in Chapter 8.0, "Transportation and Circulation." Input data used in the model included average daily traffic levels for nearby area roadways, fleet mixes (percentages of automobiles, medium-duty trucks, and heavy-duty trucks during daytime, evening, and nighttime hours), vehicle speeds, ground attenuation factors, roadway grades, and roadway widths.

Table 15-5 summarizes the net change in average daily traffic volumes and in modeled traffic noise levels from cumulative no-project to plus-project conditions to determine the contribution of the proposed project. Implementation of the proposed project would result in noise level increases of less than 3 dBA along Garden Bar Road and 1.3 dBA along Mt. Pleasant Road (refer to Table 15-5), which may be perceptible to the human ear.

However, with implementation of Mitigation Measure 10-1, traffic noise levels would be reduced below 3 dBA and therefore below significance thresholds identified in Chapter 10.0, "Noise," (60 dBA, 3-dBA increase). Thus, traffic associated with the long-term operation of the proposed project would not result in a perceptible (e.g., 3-dBA or greater) increase in noise levels along affected local roadways or highways or an exceedance of Placer County standards for transportation noise sources (60 dBA). Therefore, the proposed project and related projects would not contribute significantly to cumulative traffic noise.

**Table 15-5
Comparison of Modeled Cumulative and Cumulative Plus Project Vehicular Traffic Noise Levels**

Roadway Segment and Location	CNEL (dBA) 50 Feet from Centerline of Near Travel Lane		
	Cumulative	Cumulative Plus Project	Net Change
Weekday			
Garden Bar Road, north of Mt. Pleasant Road	54.6	56.4	1.8
Garden Bar Road, south of Mt. Pleasant Road	59.1	59.4	0.3
Mt. Pleasant Road, west of Garden Bar Road	57.6	58.2	0.6
Mt. Pleasant Road, east of Garden Bar Road	60.8	61.1	0.3
Weekend			
Garden Bar Road, north of Mt. Pleasant Road	54.2	57.2	3.0
Garden Bar Road, south of Mt. Pleasant Road	58.1	58.8	0.7
Mt. Pleasant Road, west of Garden Bar Road	56.7	58.0	1.3
Mt. Pleasant Road, east of Garden Bar Road	59.7	60.5	0.8

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibels. Traffic noise levels were modeled using the Federal Highway Administration traffic noise model (FHWA 1988) based on traffic volumes obtained from the traffic report prepared for this project (Chapter 8.0, "Transportation and Circulation"). Calculated noise levels do not consider any shielding or reflection of noise by existing structures, vegetation, or terrain features; or noise contribution from other sources. See modeling results in Appendix E for further detail.
Source: Modeling performed by EDAW in 2008.

HYDROLOGY AND WATER QUALITY

Chapter 11.0 identifies the effects of the proposed project on hydrology and water quality. The proposed project could result in temporary discharges of sediment and other contaminants into ephemeral drainages and Coon Creek in the project area. Installation of an on-site septic system could cause a change in the quality of the groundwater in the project area, and implementation of the proposed project could cause impacts on groundwater supply because of the installation of up to two groundwater wells to be used as a source for drinking water and restrooms. These impacts on water quality and hydrology are considered potentially significant. The contribution of the proposed project to cumulative effects on water quality and hydrology in the project area could be cumulatively considerable.

As mentioned above under "Soils, Geology, and Seismicity," mitigation of impacts of the proposed project would include obtaining authorization for construction and operation with the Central Valley RWQCB and implementing erosion and sediment control measures. Mitigation would also include preparing and implementing a grading and drainage plan and the County will obtain a Transient Non-community Water System Permit. Because the proposed project would implement site-specific mitigation consistent with the Central Valley RWQCB program and County permits, the incremental effect of the proposed project is not cumulatively considerable when considered with other past, present, and reasonably foreseeable projects. The proposed project would not contribute to a significant cumulative effect on water quality or hydrology.

BIOLOGICAL RESOURCES

Chapter 12.0 identifies the effects of the proposed project on biological resources. Other known cumulative projects in the project vicinity are future parks in which the greatest potential for adverse effects on special-status species would consist of habitat disturbance related to construction and passive recreation. These impacts on biological resources are considered potentially significant. The contribution of the proposed project to cumulative effects on biological resources in the project area would be cumulatively considerable.

Mitigation of impacts of the proposed project consist of establishing buffers around sensitive resources, conducting preconstruction surveys, preserving oak woodland habitat within the project area, paying in-lieu fees for oak woodland preservation consistent with the Placer County Tree Ordinance, and obtaining and complying with terms of applicable permits. The proposed project would implement site-specific mitigation consistent with regulations of the U.S. Fish and Wildlife Service, California Department of Fish and Game, and U.S. Army Corps of Engineers that would reduce these impacts to a less-than-significant level. Therefore, the incremental effect of the proposed project would not be cumulatively considerable when considered with other past, present, and reasonably foreseeable projects. This impact would be less than significant.

PUBLIC SERVICES AND UTILITIES

Chapter 13.0 identifies the effects of the proposed project on public services and utilities. Use of the proposed Park could increase the demand for emergency services in the project area; however, this increased demand would be small and would not result in the need for a significant increase in emergency services. The proposed project would include installation of up to two groundwater wells and septic system within the Park. Although soils in the project area exhibit limitations for the installation of a septic system, soil testing has identified suitable soils for a septic system. Therefore, the proposed project, either alone or combined with other projects, would not have a significant cumulative effect on public services or utilities. The proposed project would not contribute to a significant cumulative effect on public services or utilities.

HAZARDOUS MATERIALS AND HAZARDS

Chapter 14.0 identifies the effects of the proposed project on hazardous materials and hazards. Sparks from construction and maintenance equipment could generate fire risks in the project area, which has been identified as a medium fire hazard area (CalFire 2007), and Park users could generate fire risks (e.g., from discarded cigarette butts, campfires). The proposed project also has the potential to expose people to vector-related hazards and expose workers to hazardous materials during facility construction or maintenance. These impacts are potentially significant and could be cumulatively considerable.

However, the County would continue to use the *Hidden Falls Regional Park Vegetation, Fuels and Range Management Plan* as a working guide to reduce the risk of fire in the project area and would continue to work with CalFire to reduce the fire hazard within the Park. Fire reduction measures may include grazing, creating fuel breaks, and manual removal of excess vegetation. An accidental-spill prevention and response plan would be implemented, employees handling hazardous materials would be trained in safety measures, and hazardous materials would be stored in a designated staging area. A safety hazard plan would also be prepared and implemented to ensure construction workers are not exposed to hazards. In addition, as mentioned above under "Soils, Geology, and Seismicity" and "Hydrology and Water Quality," the project would obtain authorization for construction and operation with the Central Valley RWQCB and implement erosion and sediment control measures. Because the proposed project would implement this site-specific mitigation, the incremental effect of the proposed project is not cumulatively considerable when considered with other past, present, and reasonably foreseeable projects. The proposed project would not contribute to a significant cumulative effect on hazardous materials and hazards.

16.0 REPORT PREPARERS

16.1 PLACER COUNTY, DEPARTMENT OF FACILITY SERVICES

Albert Richie.....Deputy Director
Andy Fisher Project Manager
Sandy Spurgeon..... Project Manager

16.2 EDAW, INC — PRIME CONSULTANT

Curtis E. Alling, AICP..... Principal-in-Charge
Debra Bishop..... Project Manager
Stephanie Rasmussen Assistant Project Manager
Matt Jacobs..... Environmental Analyst
John Hope..... Environmental Analyst
Thomas Leeman Senior Wildlife Biologist
Tracy Walker..... Wildlife Biologist
Petra Unger..... Senior Botanist
Sarah Bennett Regulatory Biologist/Botanist
Mark Bibbo..... Botanist
Chris Fitzer Senior Fisheries Biologist
Dave Epstein..... Fisheries Biologist
Brian Ludwig..... Senior Archaeologist
Loren Huddleston Archaeologist
Richard Deis Archaeologist
Angel Tomes Architectural Historian
Honey Walters..... Senior Air Quality and Noise Specialist
Poonam Boparai Air Quality Specialist
Jake Weirich Noise Specialist
Ted Daum Hydrologist
Phil Hendricks Landscape Architect
Gregory Oakes..... Landscape Architect
Julie Nichols Editor
Phi Ngo..... GIS Specialist
Lisa Clement..... GIS Specialist
Amber Giffin Document Production Specialist
Deborah Jew Document Production Specialist
Gayiety Lane Document Production Specialist
Roni Olaizola..... Document Production Specialist

16.3 KD ANDERSON—TRAFFIC ENGINEERING CONSULTANT

Ken Anderson.....Principal Engineer

16.4 PSOMAS—CIVIL ENGINEERING SUBCONSULTANT

Brian G. Wright.....Senior Project Engineer

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17.1 REFERENCES

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CHAPTER 16.0—REPORT PREPARERS

None.

17.2 PERSONS CONSULTED

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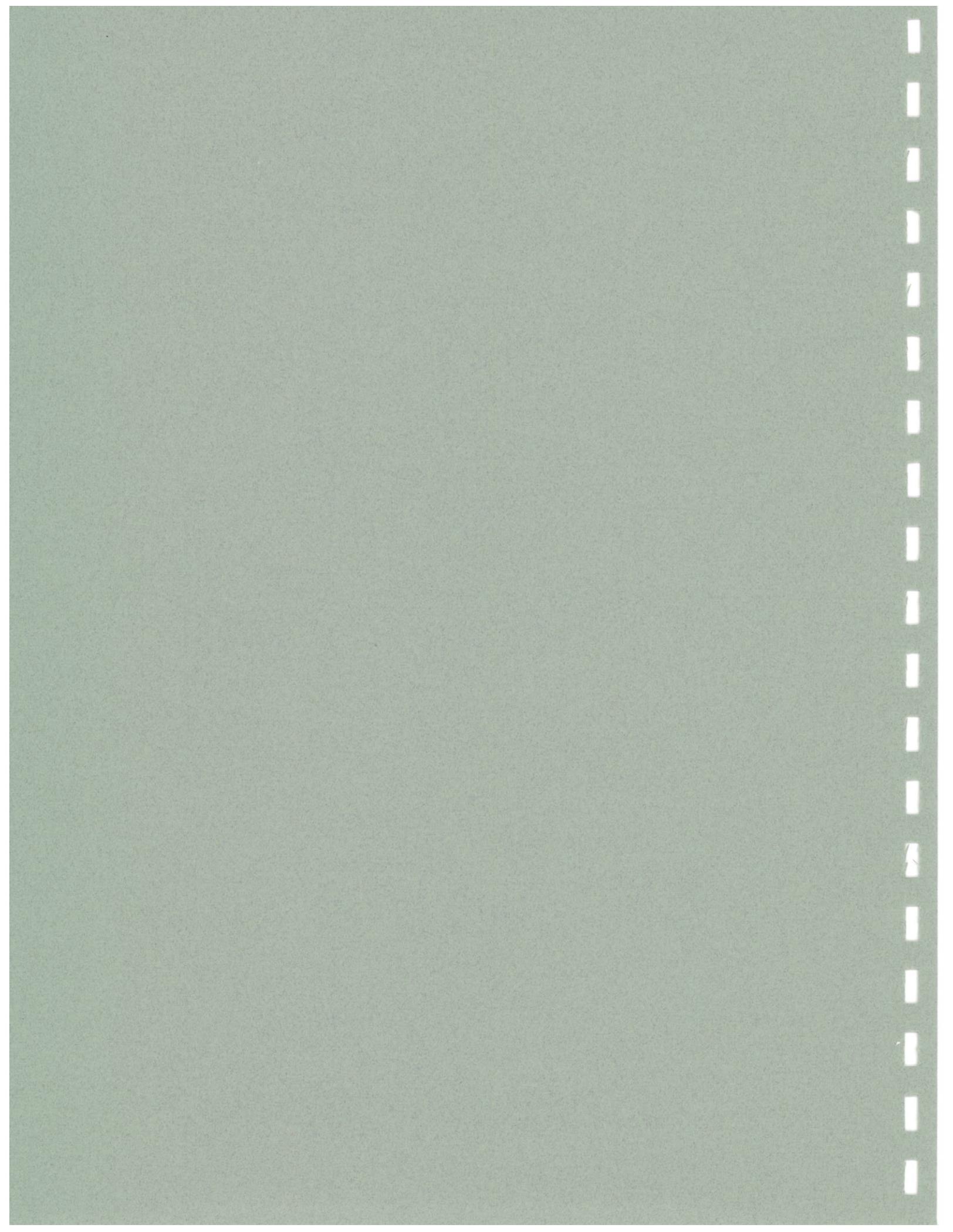
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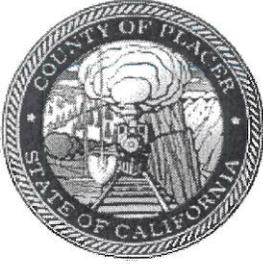
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APPENDIX A

Notice of Preparation





COUNTY OF PLACER
Community Development Resource Agency

John Marin, Agency Director

**ENVIRONMENTAL
COORDINATION
SERVICES**

Gina Langford, Coordinator

DATE: June 15, 2007

TO: Interested Parties

SUBJECT: **Notice of Preparation of an Environmental Impact Report for Hidden Falls Regional Park (PEIR T20070444)**

REVIEW PERIOD: **June 15, 2007 – July 16, 2007**

Placer County will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified above in accordance with the California Environmental Quality Act (CEQA), Section 15082. The purpose of the Notice of Preparation (NOP) is to provide responsible agencies and interested persons with sufficient information in order to make meaningful responses as to the scope and content of the EIR. Your timely comments will ensure an appropriate level of environmental review for the project.

Project Description/Location: Hidden Falls Regional Park is approximately 1,182 acres in the Sierra Nevada foothills, which consists of the properties formerly known as Spears Ranch (961 acres) and Didion Ranch (221 acres). The project site is situated along Coon Creek and is south of the Bear River. Garden Bar Road is located to the west; Mt. Vernon and Mt. Pleasant Roads are to the south; and Bell and Hubbard Roads are to the east.

For more information regarding the project, please contact Andy Fischer, Senior Planner, (530)889-6819 or email: afisher@placer.ca.gov

A copy of the 10-page NOP is available for review at the Auburn Library, Placer County Community Development Resource Agency, and County website:

<http://www.placer.ca.gov/Home/CommunityDevelopment/EnvCoordSvcs/EnvDocs/EIR.aspx>

Scoping Meeting: The Lead Agency will hold a public Scoping Meeting to receive oral comments on Thursday, June 28, 2007, 6:30 pm in the Planning Commission Hearing Room, Community Development Resource Center, located at 3091 County Center Drive, Auburn.

NOP Comment Period: Written comments should be submitted at the earliest possible date, but not later than 5:00 pm on July 16, 2007 to Maywan Krach, Environmental Coordination Services, Community Development Resource Agency, 3091 County Center Drive, Suite 190, Auburn, CA 95603, (530)745-3132, fax (530)745-3003, or cdraecs@placer.ca.gov

PURPOSE OF THE NOTICE OF PREPARATION

Placer County, as the Lead Agency, will prepare an Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA) for the proposed Hidden Falls Regional Park Project (proposed project). In accordance with Section 15082 of the CEQA Guidelines, Placer County has prepared this Notice of Preparation (NOP), which is intended to solicit comments from public agencies and other interested parties on the scope and content of the information to be addressed in the EIR for this project.

Once a decision is made to prepare an EIR, the lead agency must prepare a NOP to inform all responsible and trustee agencies (agencies) that an EIR will be prepared (CEQA Guidelines Section 15082). The NOP is designed to provide stakeholders with sufficient information describing the proposed project and its potential environmental effects to enable agencies and the public to make a meaningful response related to the scope and content of information to be included in the EIR.

The purpose of this notice is twofold:

- (1) to solicit input, by July 16, 2007, from interested individuals, groups, and agencies about the desired content and scope of the draft EIR to be prepared by Placer County for the proposed project, and
- (2) to announce a public scoping meeting on the proposed project, to be held at 6:30 p.m. on June 28, 2007, at the Planning Commission Hearing Room, Community Development Resource Center, located at 3091 County Center Drive, Auburn.

PROJECT DESCRIPTION

CEQA defines a “project” as any activity directly undertaken by a public agency that “may cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment” (Public Resources Code Section 21065). Public Resources Code Section 21151(a) specifies that a local agency must prepare an EIR on any project that it proposes to carry out or approve that may have a significant impact on the environment. It has been determined that the proposed Hidden Falls Regional Park Project may result in significant environmental impacts, and therefore, Placer County will prepare an EIR on the proposed project. A description of the proposed project is provided below.

PROJECT LOCATION

The proposed project is located between North Auburn and the City of Lincoln in Placer County, approximately 40 miles northeast of Sacramento. Hidden Falls Regional Park is approximately 1,182 acres in the Sierra Nevada foothills, which consists of the properties formerly known as Spears Ranch (961 acres) and Didion Ranch (221 acres) (Exhibits 1 and 2). The project site is situated along Coon Creek and is south of the Bear River. Garden Bar Road is located to the west; Mt. Vernon and Mt. Pleasant Roads are to the south; and Bell and Hubbard Roads are to the east.

PROJECT BACKGROUND AND HISTORY

On December 23, 2003, Placer County acquired the 961-acre Spears Ranch, and on November 5, 2004, Placer County acquired the 221-acre Didion Ranch through the Placer Legacy Open Space and Agricultural Conservation Program (Placer Legacy) for park and open space purposes. Placer Legacy was created in 2000 to implement the goals and policies of the Placer County General Plan and to allow the community to retain its unique natural heritage, minimize conflicts between conservation and economic development, and enhance the prosperity of current and future residents. In September 2004, a mitigated negative declaration was adopted for the Didion Ranch portion of the park; therefore, the environmental review process has been completed for the Didion Ranch site. Thus, this EIR will focus on the Spears Ranch (961 acres) portion of the park.

PROJECT COMPONENTS

The proposed project would include many different features and uses of the proposed park. Specific features and uses that are being considered for the proposed park are as follows:

TRAIL SYSTEM / MISCELLANEOUS PASSIVE RECREATION FACILITIES

- ▶ approximately 12 miles of new unpaved trails in addition to 10 miles of existing ranch roads for hikers, bikers, and equestrians, including bridge crossings over Coon Creek, Deadman Creek, and ephemerals to support the trail network and connections to the existing trail system within the Didion Ranch portion of the park (Exhibit 3);
- ▶ trail/bridge connections to other public trails in proximity to the Hidden Falls Regional Park Property (in addition to the trail network constructed on site);
- ▶ no more than two permanent restroom facilities and associated septic/water systems in addition to existing facilities and septic systems;
- ▶ portable and/or pit type restroom facilities as required to accommodate authorized uses;
- ▶ emergency access bridge over Coon Creek;
- ▶ fire suppression amenities;
- ▶ equestrian facilities;
- ▶ picnic facilities including covered pavilions;
- ▶ benches and rest areas throughout the park;
- ▶ hunting as a management tool;
- ▶ improvements to facilitate public access to viewing areas;
- ▶ fitness/ropes course(s);
- ▶ disc golf;
- ▶ drinking fountains;
- ▶ holding organized events;
- ▶ interpretive programs including signage, displays, and/or guided tours; and
- ▶ other facilities and activities consistent with Placer Legacy Open Space and Agricultural Preservation Program goals and objectives.

VEHICLE ACCESS AND PARKING

A traffic study is required to determine the level of vehicle access that may be permitted to the project site via Garden Bar Road. Depending on the outcome of the study, any or all of the following public access options may be incorporated into the proposed project:

- ▶ public access to the site through the 221-acre site via the trail system currently existing on the Didion Ranch portion of the park; only maintenance/emergency vehicles would be allowed to enter the site beyond the existing parking lot on the 221-acre site (While it is anticipated that some level of public vehicle access to the westerly portion of the site via Garden Bar Road will be necessary to accommodate expected use demand, public vehicle access may be limited to the facilities at the 221 acre site during initial phases of development of the westerly 961 acres of the park);
- ▶ a parking/staging/drop-off area along Garden Bar Road near the existing service entrance road; pedestrian/equestrian access to the site would be permitted along the existing service road/easement;
- ▶ a parking/staging area on-site near the westerly property boundary with associated access road from Garden Bar Road; vehicle traffic would be allowed on-site, but regulated per the findings of the traffic study.

In addition, the following options are being considered for parking:

- ▶ a surfaced parking lot to accommodate anticipated uses and a gravel equestrian parking area;
- ▶ a gravel overflow parking area; and
- ▶ a parking lot to accommodate a nature/conference center.

SIGNAGE / INTERPRETIVE PROGRAM

- ▶ directional signage would be placed along primary public access routes from both Auburn and Lincoln;
- ▶ directional and informational signage located at strategic locations throughout the Park; and
- ▶ a kiosk would be placed at each parking/staging area in addition to interpretive and directional signage and/or audio-visual displays at key points throughout the property.

EMERGENCY FACILITIES / VEHICLE ACCESS

- ▶ an emergency access bridge capable of supporting fire fighting equipment will be constructed over Coon Creek;
- ▶ existing low flow crossings along ranch roads would be improved and maintained across Coon Creek;
- ▶ a fuel load reduction/fire prevention plan would be prepared and implemented for the site; and
- ▶ a water storage tank/pond and hydrant assembly.

USE OF EXISTING RANCH HOUSE / EVENTS

- ▶ A variety of renovation and use options will be evaluated for the existing primary ranch house. Uses under consideration include conference facility, nature center, event facility, environmental education camp, and others.
- ▶ Group events such as cross country track meets, weddings, conferences, and educational field trips/camps will be evaluated in conjunction with the traffic study. The study will evaluate and define group events in the following categories:
 1. Group events that may be conducted as a regular use.
 2. Group events that should be regulated by separate event permit.

EDUCATIONAL FACILITIES / USES

Under the direction of the Placer County Department of Facility Services, any or all of the following may be evaluated:

- ▶ educational /agricultural / scouting camps may be conducted on-site;
- ▶ academic agricultural / ecological research projects;
- ▶ multi-day or overnight educational / agricultural / scouting camps may be conducted on-site subject to agreement and conditions determined by the County on a case-by-case basis;
- ▶ access for school programs such as cross-country training and track meets, and educational field trips that are consistent with passive recreation and education would be permitted; potential uses include renovation of the existing ranch house as a conference/nature center, caretaker residence, wedding facility, or camp facility; and
- ▶ the two existing site buildings to the southeast of the ranch house will be re-constructed for educational, maintenance, caretaker, or other uses.

MAINTENANCE FACILITIES

- ▶ maintenance yard – to be located in proximity to the ranch house and staging area. Yard would be used to store and maintain equipment including tractors, mowers, ATVs, and attachments;
- ▶ maintenance shop/barn – would be a new building or renovation of one or more of the existing buildings;
- ▶ an enclosed dumpster;
- ▶ maintenance yard lighting; and
- ▶ perimeter and cross fencing will have maintained access for maintenance vehicles.

FISHING / WILDLIFE / HABITAT RESTORATION

- ▶ designated fishing locations may be developed in coordination with Department of Fish and Game;
- ▶ fish passage amenities;
- ▶ fishing ponds may be developed in conjunction with the fuel load reduction/grazing plans and in coordination with Department of Fish and Game; and
- ▶ habitat restoration projects to include oak woodland, grassland, and riparian restoration/habitat enhancement.

FENCING

- ▶ perimeter fencing around the property would be maintained; and
- ▶ cross fencing and riparian/sensitive area exclusionary fencing may be constructed where appropriate throughout the property.

AGRICULTURE

Under the direction of the Placer County Department of Facility Services, any or all of the following may be conducted:

- ▶ continued agricultural activities, including grazing; and
- ▶ farm management practices (fence maintenance, irrigated pasture expansion, etc.);
- ▶ agricultural research projects by qualified institutions;
- ▶ agricultural education programs; and
- ▶ potential leases for grazing and/or growing.

FILM PRODUCTION/THEATRE

- ▶ film and theatre productions subject to approval by Placer County.

PROJECT ALTERNATIVES

The EIR will evaluate a range of alternatives in accordance with Section 15126.6 of the State CEQA Guidelines. The alternatives evaluation will consist of a qualitative and comparative analysis of several project alternatives, at a varying level of detail, including the “No Project” Alternative.

SCOPING

Scoping is an initial, essential, and critically important component of the proposed project. Scoping will help to identify the final range of actions, alternatives, site design options, environmental impacts to be evaluated, methods of assessment, and mitigation measures that will be analyzed in the EIR. The scoping process will help to eliminate from detailed study those issues that are not critical to the decision at hand. It is also an effective way to bring together and resolve the concerns of interested federal, state, and local agencies; specific stakeholder groups; and the general public.

As specified by the CEQA Guidelines, the NOP will be circulated for a 30-day review period. The 30-day NOP review and comment period begins **June 15, 2007** and ends **July 16, 2007**. Written responses can be submitted anytime during the NOP review period. Please include the name of a contact person for your agency, if applicable. All written public and agency comments should be directed to:

Maywan Krach
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603
fax 530-745-3003
cdraecs@placer.ca.gov

SCOPING MEETING

In accordance with Public Resources Code Section 21083.9, notice is hereby given that Placer County will conduct a scoping meeting on June 28, 2007 at 6:30 p.m. at the Planning Commission Hearing Room, Community Development Resource Center, located at 3091 County Center Drive, Auburn, California to accept oral comments on the environmental issues that should be addressed in the EIR.

AGENCY ROLES AND RESPONSIBILITIES

PLACER COUNTY

Placer County will serve as the lead agency for CEQA compliance and will coordinate with CEQA responsible and trustee agencies. As lead agency under CEQA, Placer County will be primarily responsible for conducting the environmental review process, including scoping, preparing appropriate environmental documentation, and obtaining required permits and other regulatory approvals. Following completion of the EIR, the Placer County Board of Supervisors will decide whether to certify and approve the EIR.

REQUIRED APPROVALS AND PERMITS

Permits and approvals would be required from the following federal, state, and local agencies for the construction of the proposed project:

- ▶ U.S. Army Corps of Engineers (USACE)
- ▶ Central Valley Regional Water Quality Control Board (RWQCB)
- ▶ California Department of Fish and Game (DFG)
- ▶ U.S. Fish and Wildlife Service (USFWS)
- ▶ County Community Development Resource Agency (CDRA) (Minor Use Permit)
- ▶ County Department of Public Works (encroachment permit for Garden Bar Road)
- ▶ County Environmental Health Division (sewage system evaluation and water system permit)

PROBABLE ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT

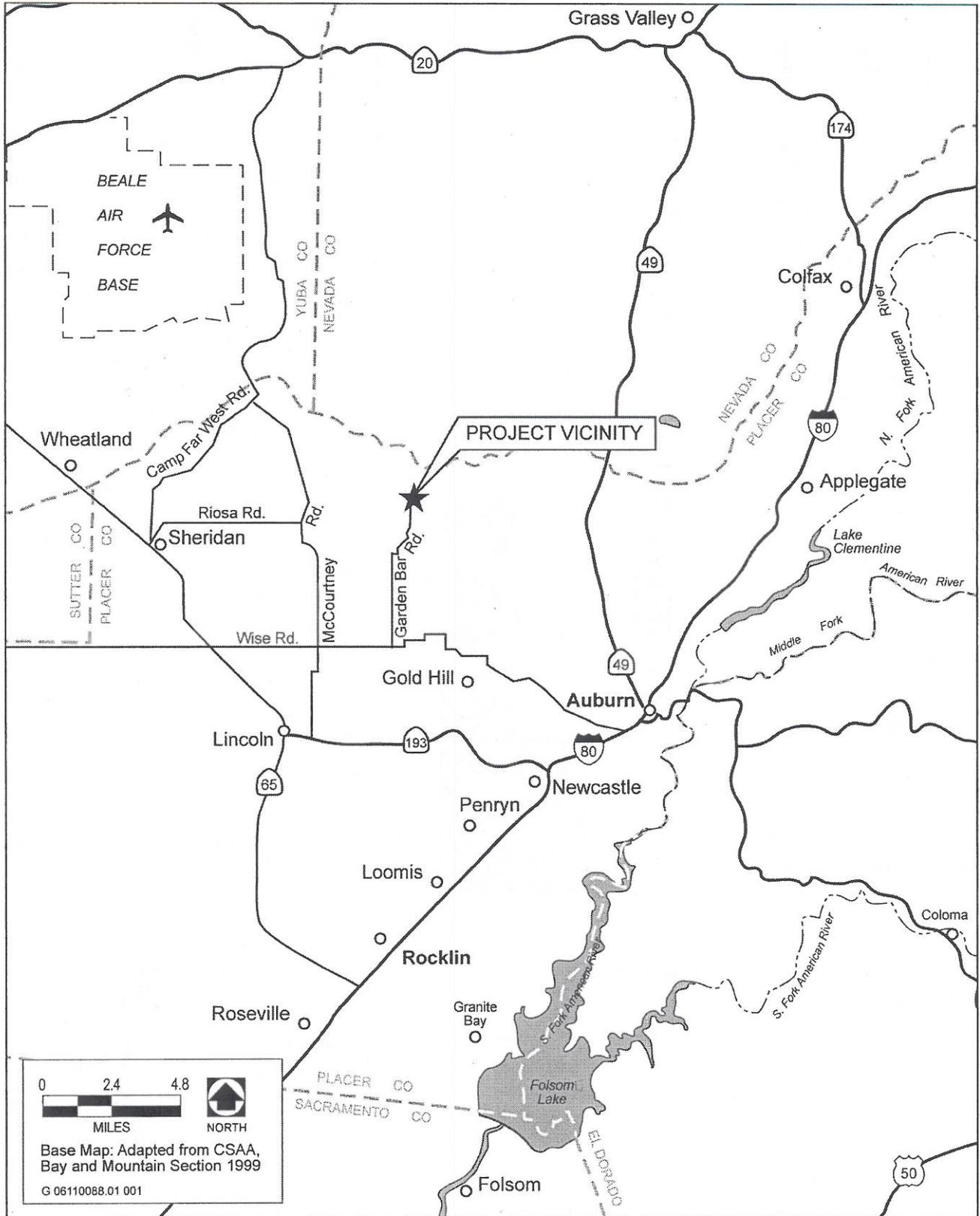
The EIR will analyze a broad range of environmental impacts associated with the implementation of the proposed project. Based on the environmental analysis previously conducted in Placer County's Initial Study (IS), Placer County has determined that the proposed project has the potential to result in environmental impacts on the following resources:

- ▶ Land Use and Planning
- ▶ Geology and Soils
- ▶ Hydrology and Water Quality
- ▶ Air Quality
- ▶ Traffic and Transportation
- ▶ Biological Resources
- ▶ Noise
- ▶ Public Services and Utilities
- ▶ Aesthetics and Visual Resources
- ▶ Cultural Resources
- ▶ Hazards and Hazardous Materials

Project-related impacts to the following resources were found to be absent, or at less-than-significant levels, and therefore, will not be carried forward for further analysis in the EIR:

- ▶ Energy and Mineral Resources
- ▶ Population and Housing

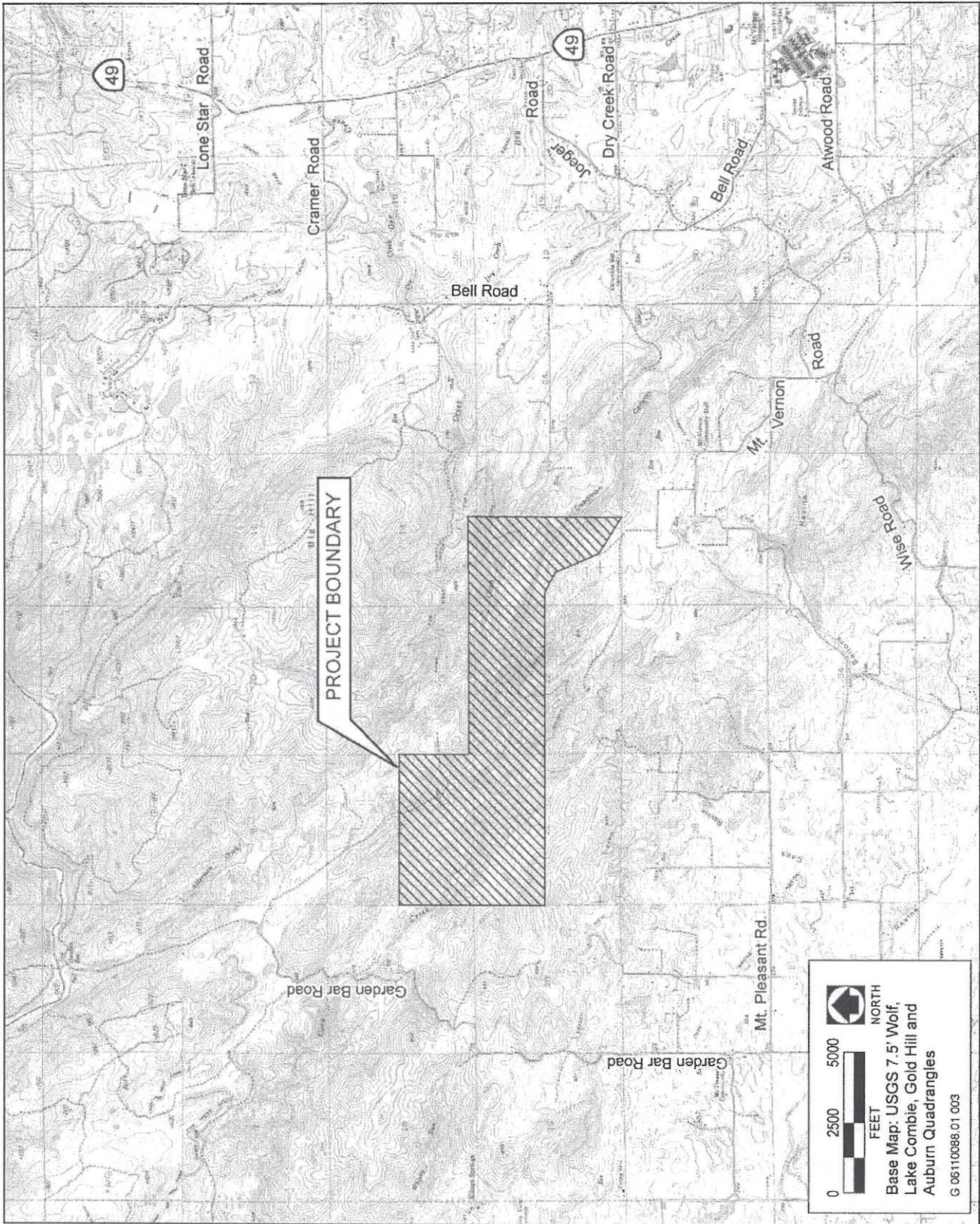
Your views and comments on how the project may affect the environment are welcomed. Please contact Andy Fisher if you have any questions about the environmental review process for the proposed Hidden Falls Regional Park Project.



Source: EDAW 2006

Project Vicinity Map

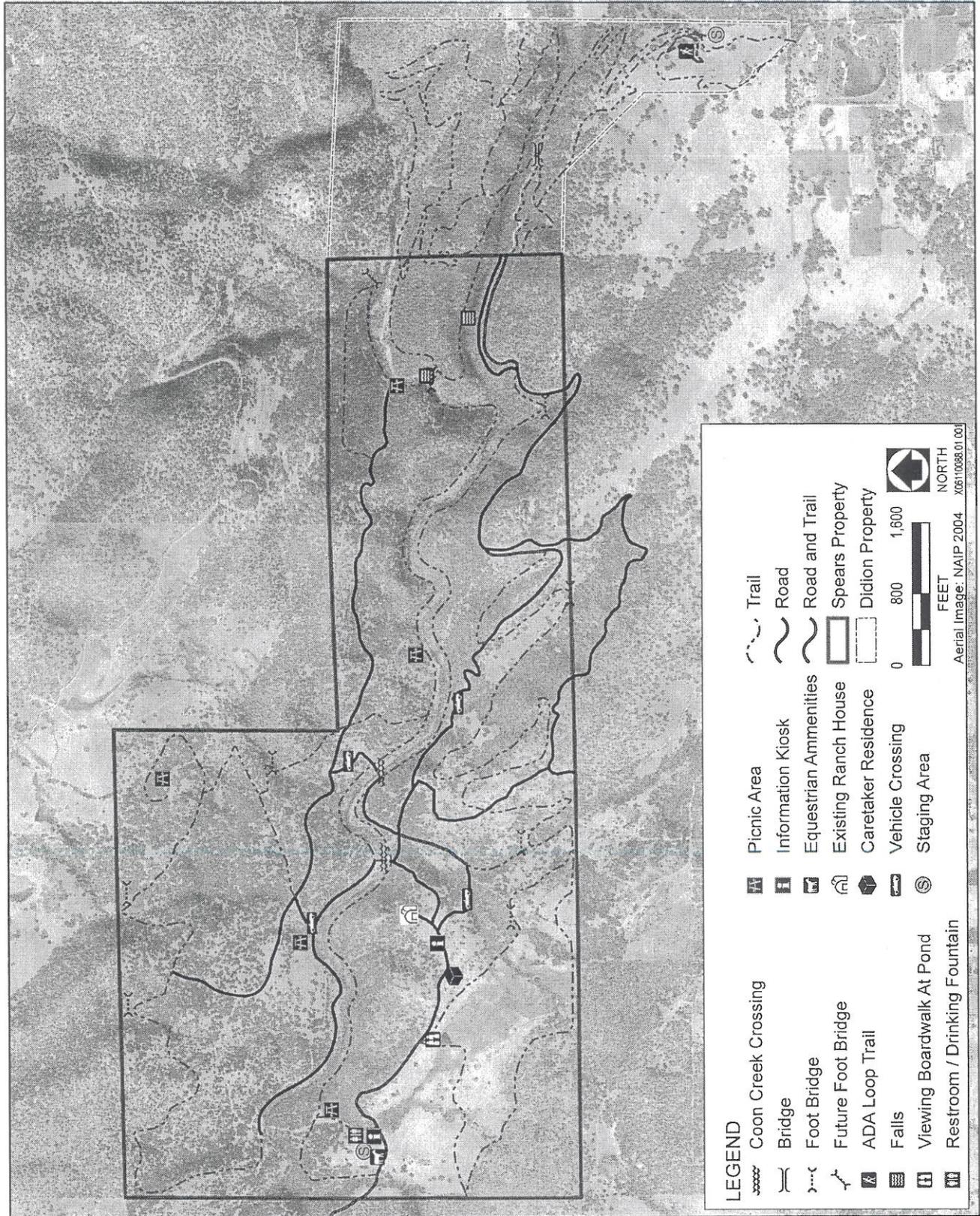
Exhibit 1



Source: EDAW 2007

Project Location Map

Exhibit 2



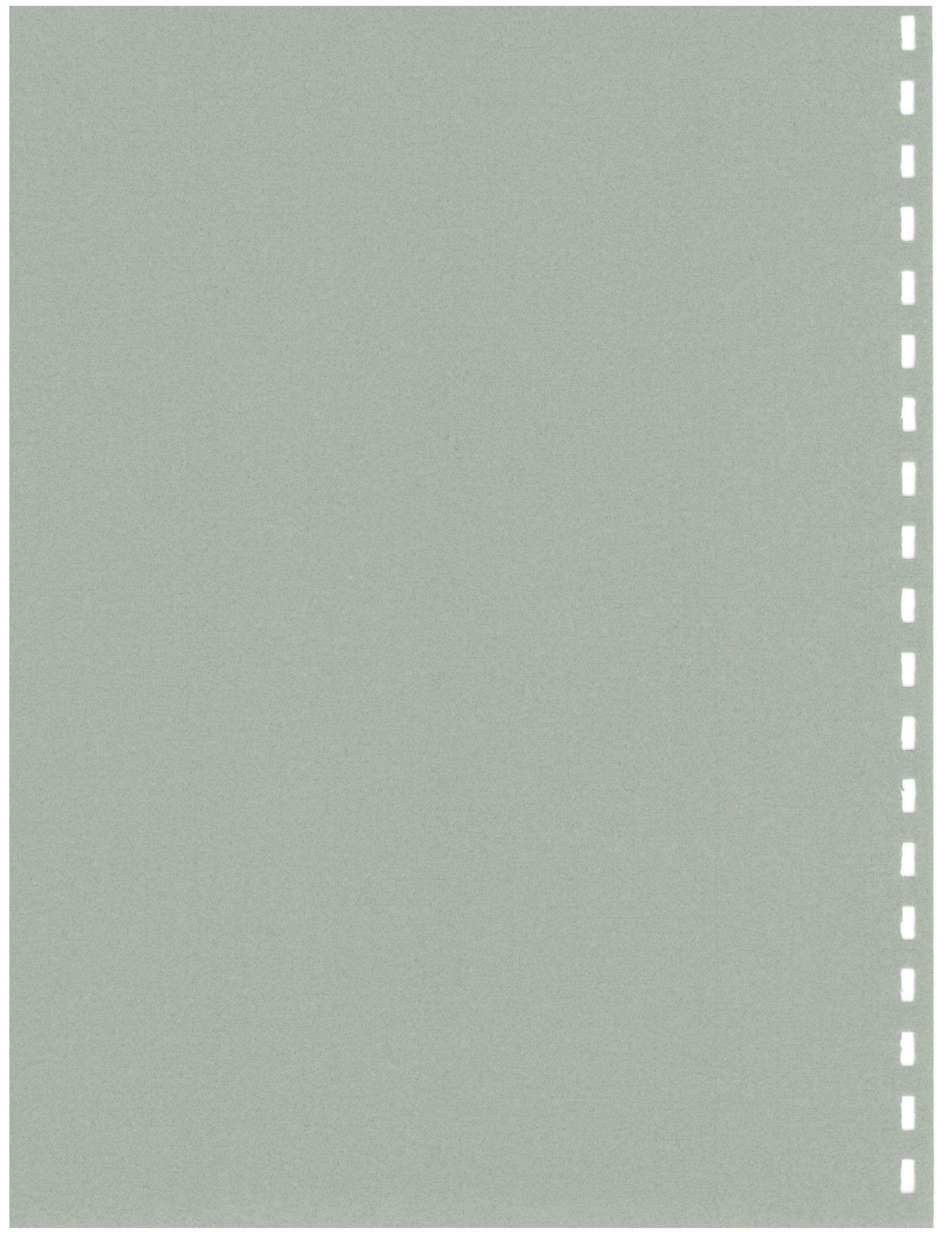
Source: Placer County 2006

Proposed Hidden Falls Project Features

Exhibit 3

APPENDIX B

Traffic Report



TRAFFIC IMPACT ANALYSIS
FOR
HIDDEN FALLS REGIONAL PARK ADDITION
Placer County, California

Prepared For:

EDAW
2022 J Street
Sacramento, CA 95811

Prepared By:

KD Anderson & Associates, Inc.
3853 Taylor Road, Suite G
Loomis, CA 95650
(916) 660-1555

April 23, 2008

Job No. 2630-26

Hidden Falls Park 4.23.08.rpt

**TRAFFIC IMPACT ANALYSIS FOR
HIDDEN FALLS REGIONAL PARK ADDITION
Placer County, CA**

TABLE OF CONTENTS

INTRODUCTION.....	1
Project Description	1
EXISTING SETTING	4
Study Area Circulation System - Roads	4
Study Area Circulation System – Intersections	5
Standard of Significance: Levels of Service Methodology.....	5
Daily Traffic Volumes.....	6
Existing Traffic Volumes and Intersection Levels of Service	7
Existing Daily Traffic Volumes and Levels of Service	8
Other Evaluation Criteria	11
Pedestrian / Bicycle / Equestrian Facilities.....	12
Transit Facilities.....	12
PROJECT IMPACTS	13
Project Characteristics	13
Planned Roadway Improvements.....	16
Existing Plus Project Traffic Conditions Levels of Service.....	17
Safety / Access Evaluation	22
Impacts to Alternative Transportation Modes	23
Mitigations for “Existing Plus Project” Impacts	23
CUMULATIVE IMPACTS	24
Year 2025 Cumulative Traffic Conditions	24
APPENDIX.....	30

April 23, 2008

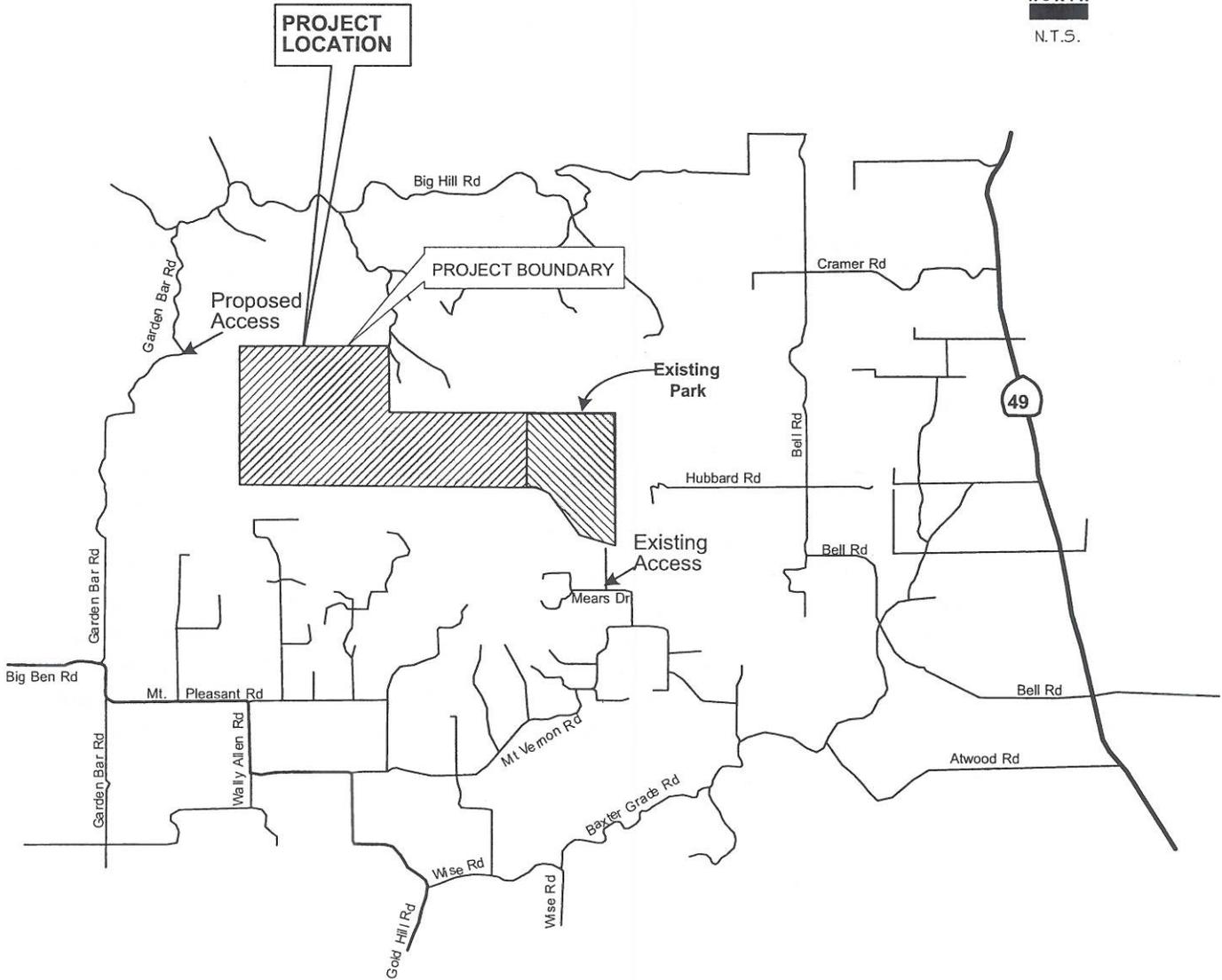
TRAFFIC IMPACT ANALYSIS FOR HIDDEN FALLS REGIONAL PARK ADDITION

INTRODUCTION

This report documents **KD Anderson & Associates'** assessment of traffic impacts associated with development of the **Hidden Falls Regional Park Addition** project in Placer County. This analysis is intended to quantify the traffic impacts of the project and address circulation and access in the vicinity of the project site within the context of both current and future background conditions.

Project Description

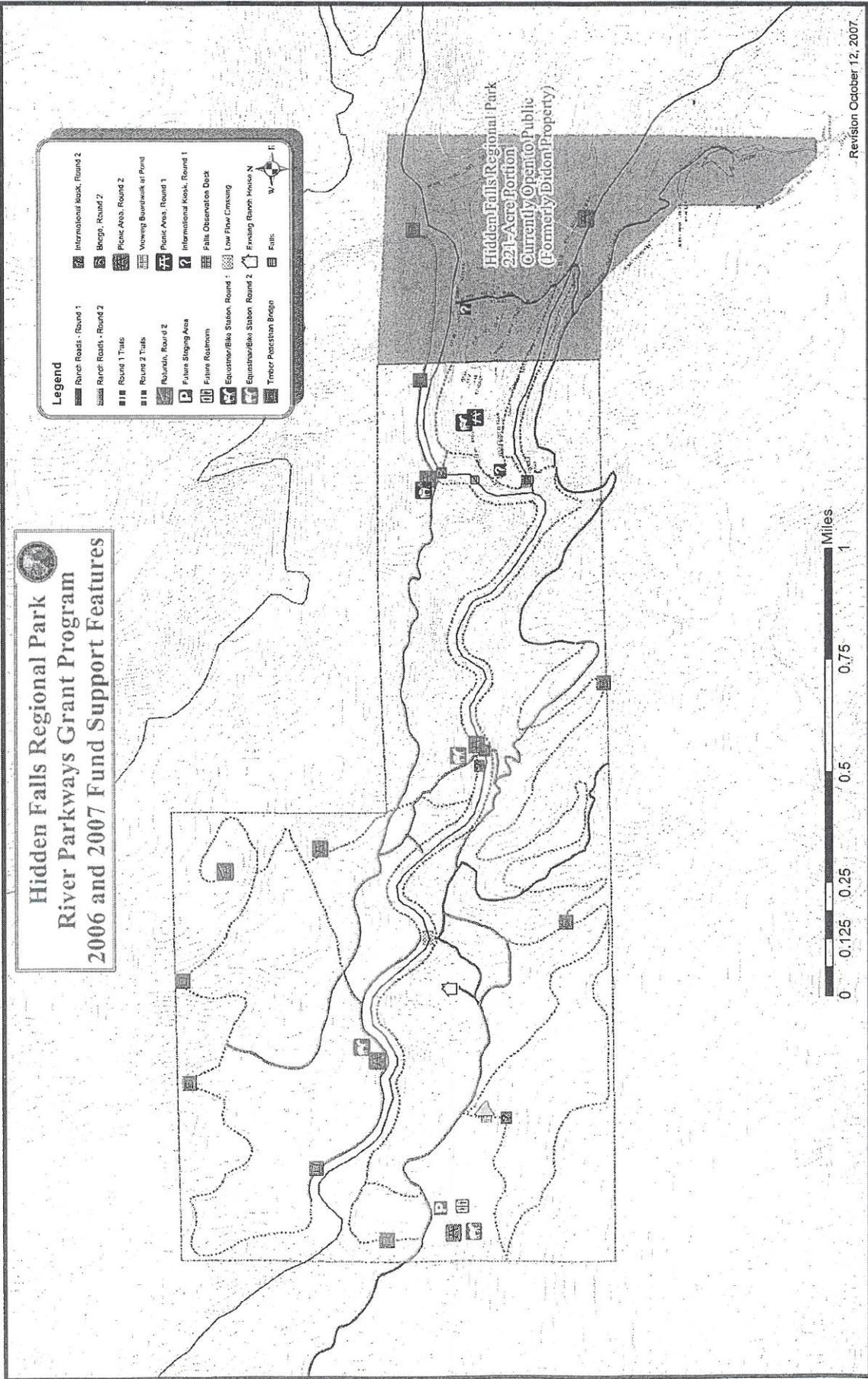
The Hidden Falls Regional Park Addition project proposes development of an 979 acre site to be added to the County's existing park west of the City of Auburn. The current park facilities are located off of Mears Drive in the area north of Mount Vernon Road. The park addition is generally located to the west between the existing facilities and Garden Bar Road, as shown in Figure 1. While the facilities in the project can be accessed via the roadways already serving the existing site, a new access to the project site will be created onto Garden Bar Road. The proposed project includes phased implementation of improvements to Garden Bar Road to support use of that road by the public. Regional access to the project will be via rural Placer County roads such as Mt Pleasant Road, Garden Bar Road and Mt Vernon Road, which link the site with SR 193 to the south and SR 49 to the east.



**Hidden Falls Regional Park
River Parkways Grant Program
2006 and 2007 Fund Support Features**

Legend

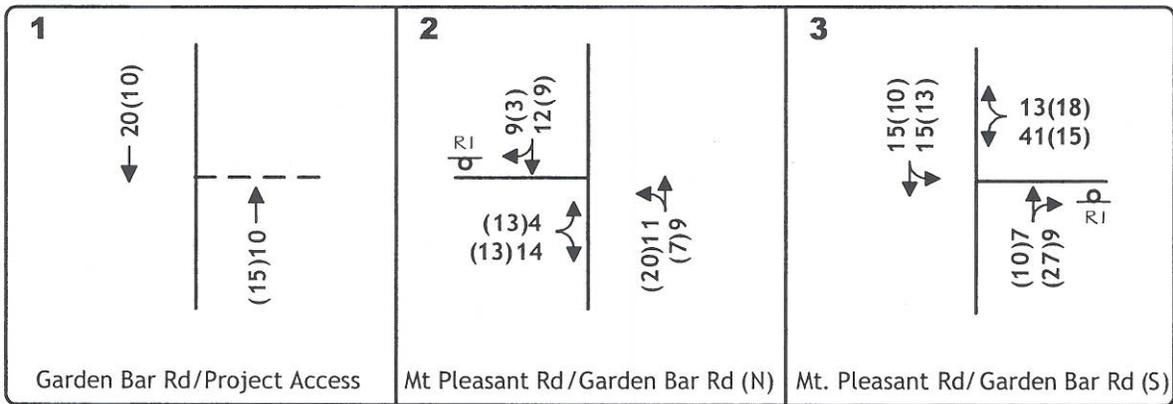
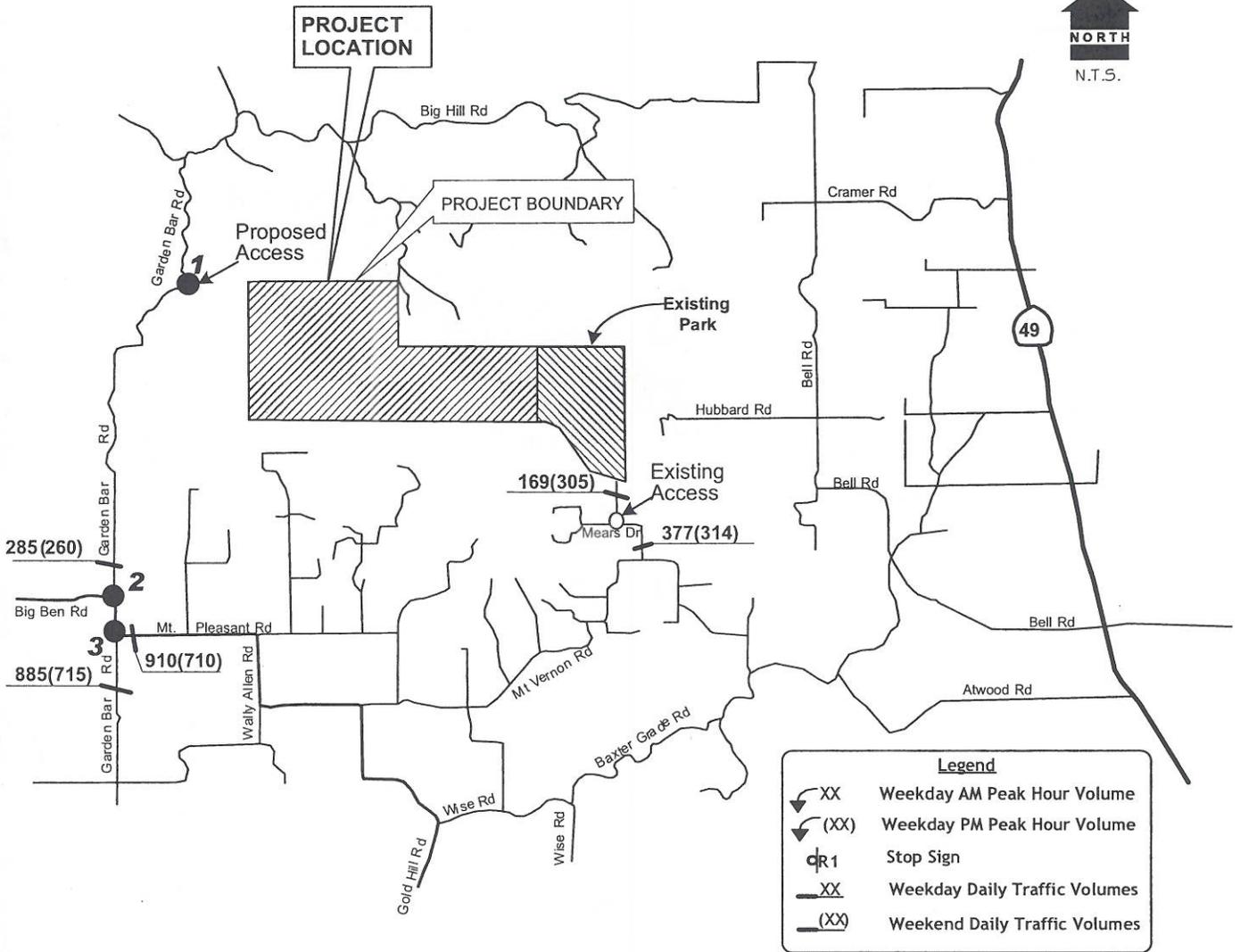
	River Road - Round 1		International Hook - Round 2
	River Road - Round 2		Bridge - Round 2
	Round 1 Trail		Picnic Area - Round 2
	Round 2 Trail		Viewing Stand/Deck at Pond
	Round 1 Round		Picnic Area - Round 1
	Future Staging Area		International Hook - Round 1
	Future Restroom		Falls Observation Deck
	Equestrian/Bike Station - Round 1		Low Flow Crossing
	Equestrian/Bike Station - Round 2		Fixing Bench House - N
	Timber Protection Bridge		Falls

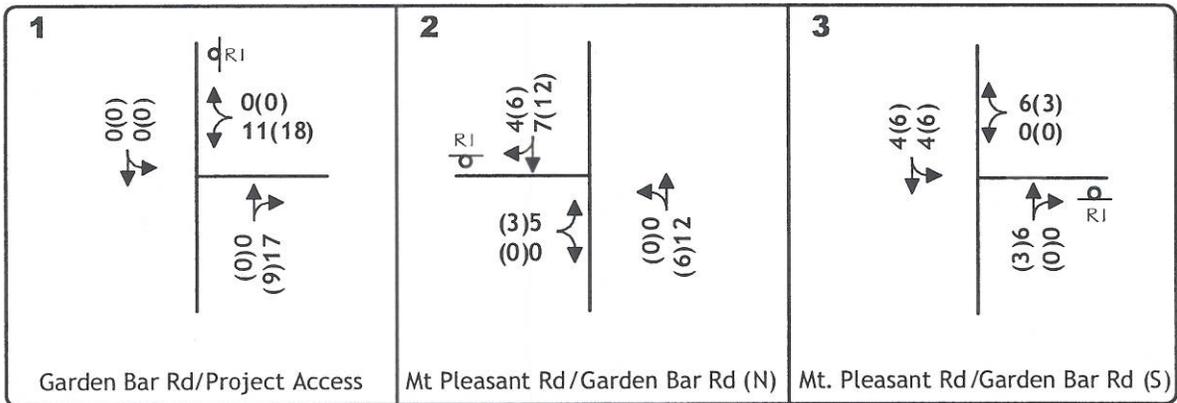
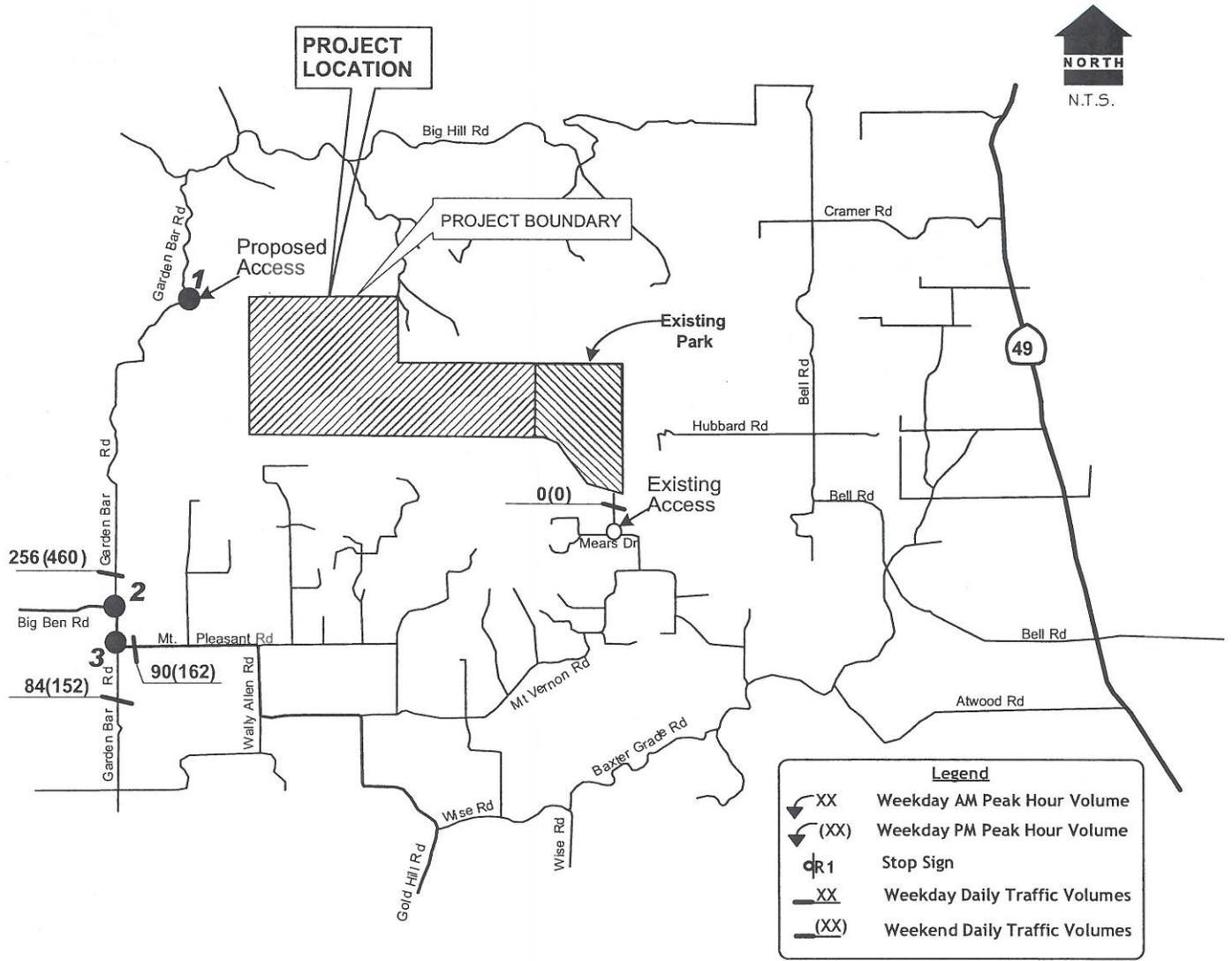


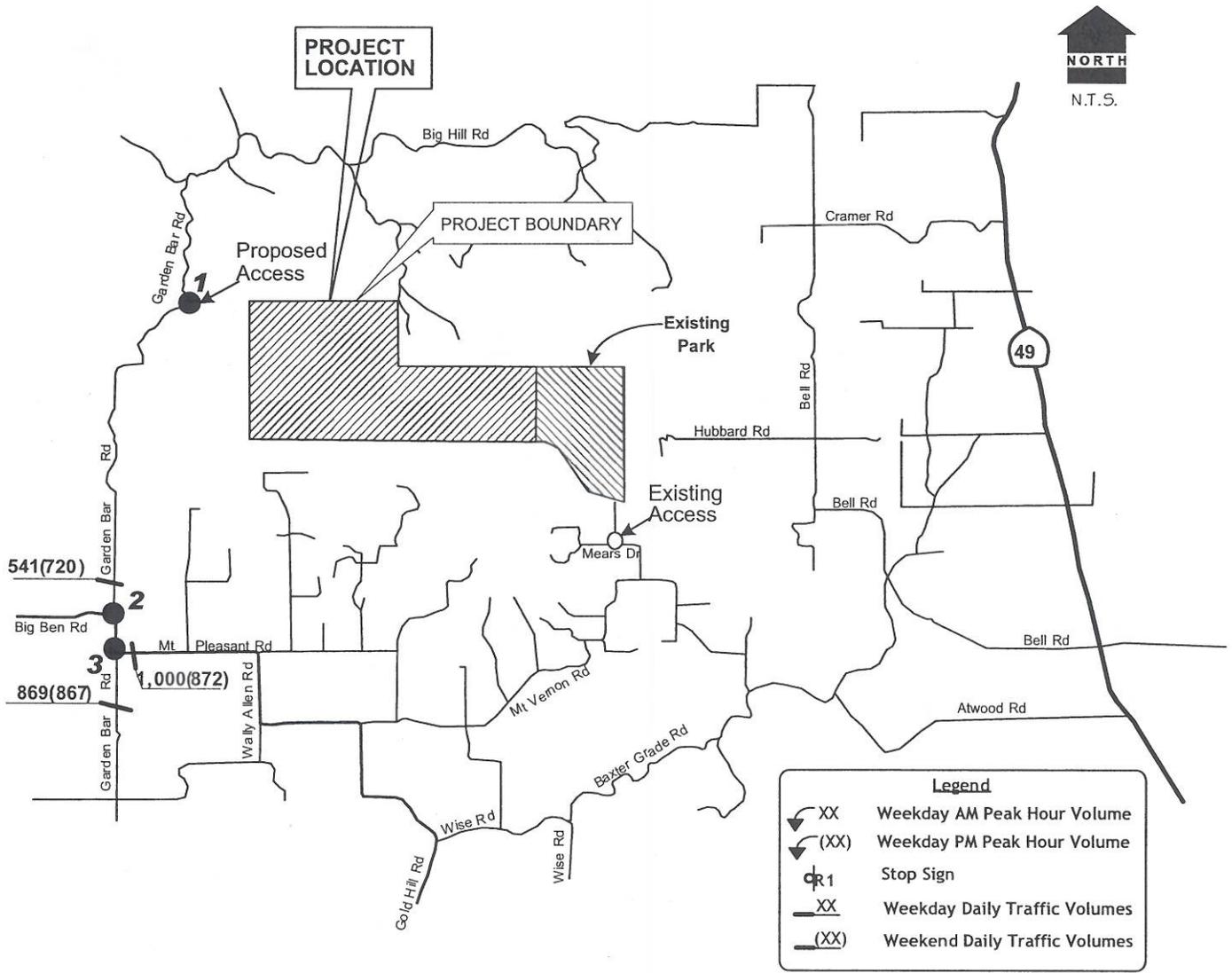
Revision October 12, 2007

SITE PLAN

figure 2



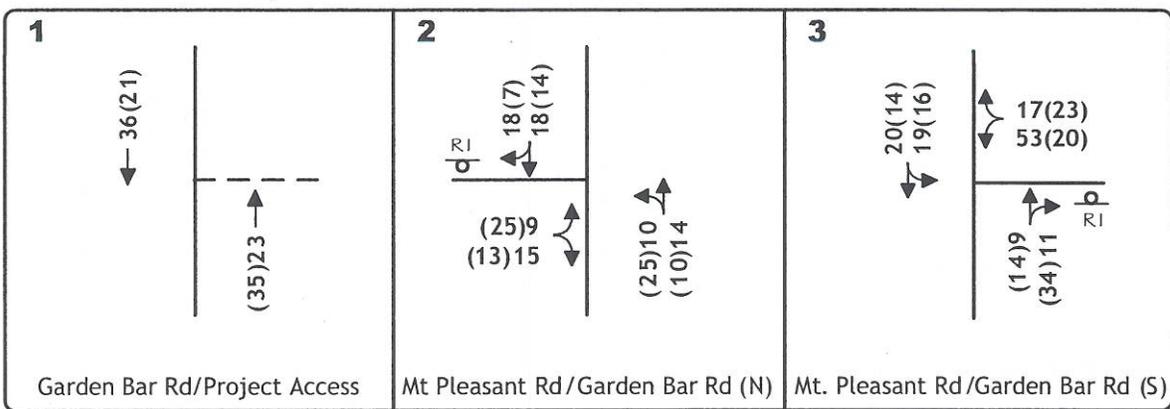
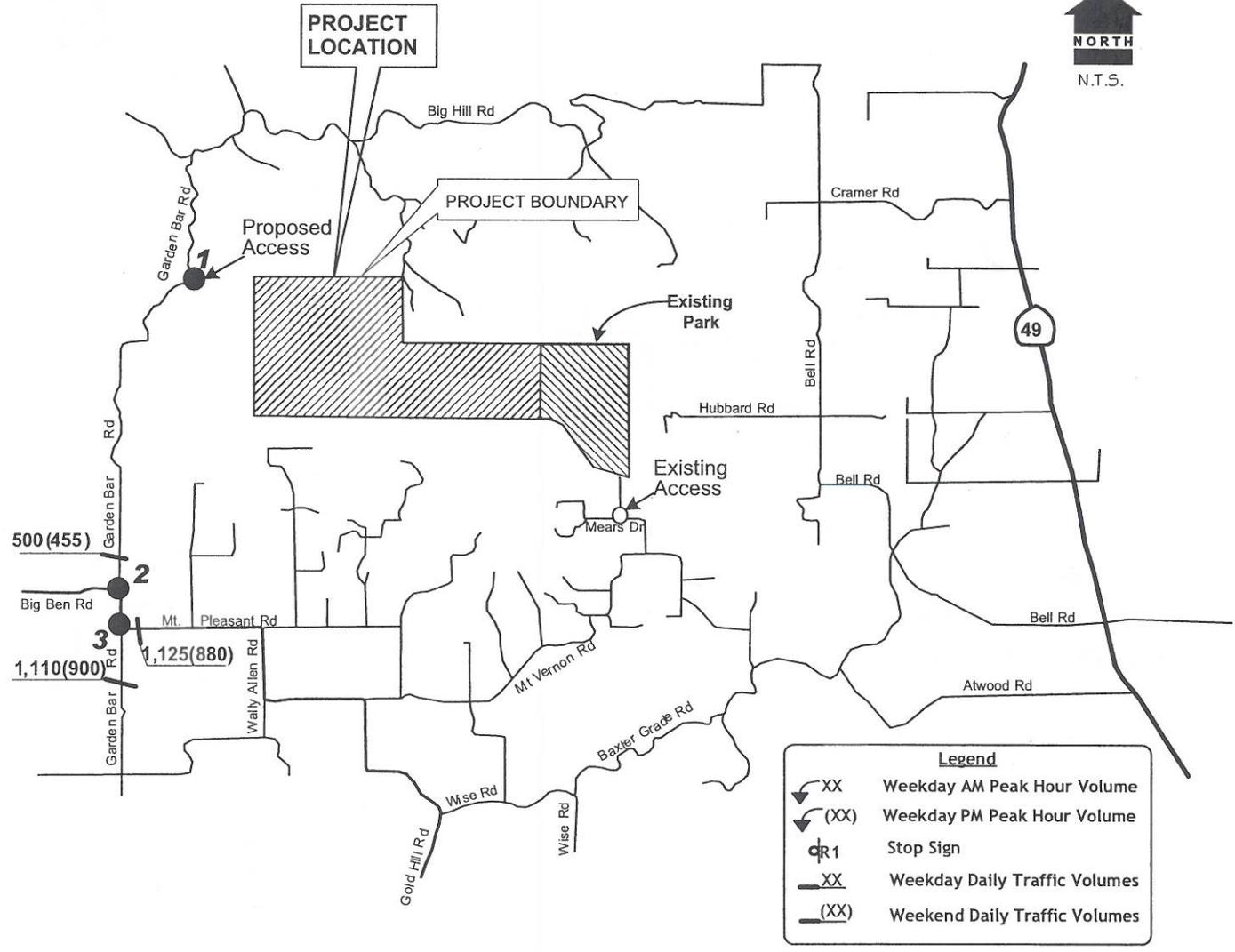




<p>1</p> <p>20(10) 0(0)</p> <p>d_{R1}</p> <p>0(0) 11(18)</p> <p>(15)10 (9)17</p> <p>Garden Bar Rd/Project Access</p>	<p>2</p> <p>13(9) 19(21)</p> <p>d_{R1}</p> <p>(16)10 (13)14</p> <p>(11)11 (15)21</p> <p>Mt Pleasant Rd/Garden Bar Rd (N)</p>	<p>3</p> <p>19(16) 19(19)</p> <p>19(21) 41(15)</p> <p>(13)13 (27)9</p> <p>p_{R1}</p> <p>Mt. Pleasant Rd/Garden Bar Rd (S)</p>
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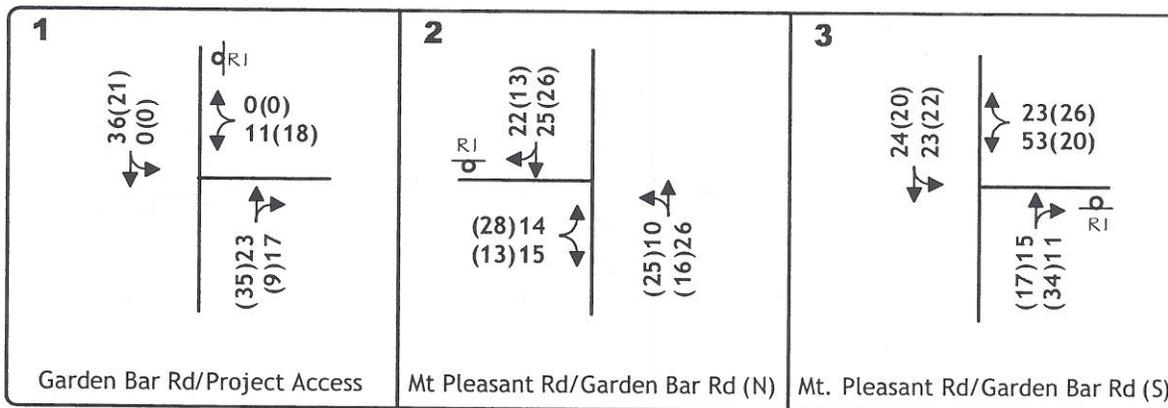
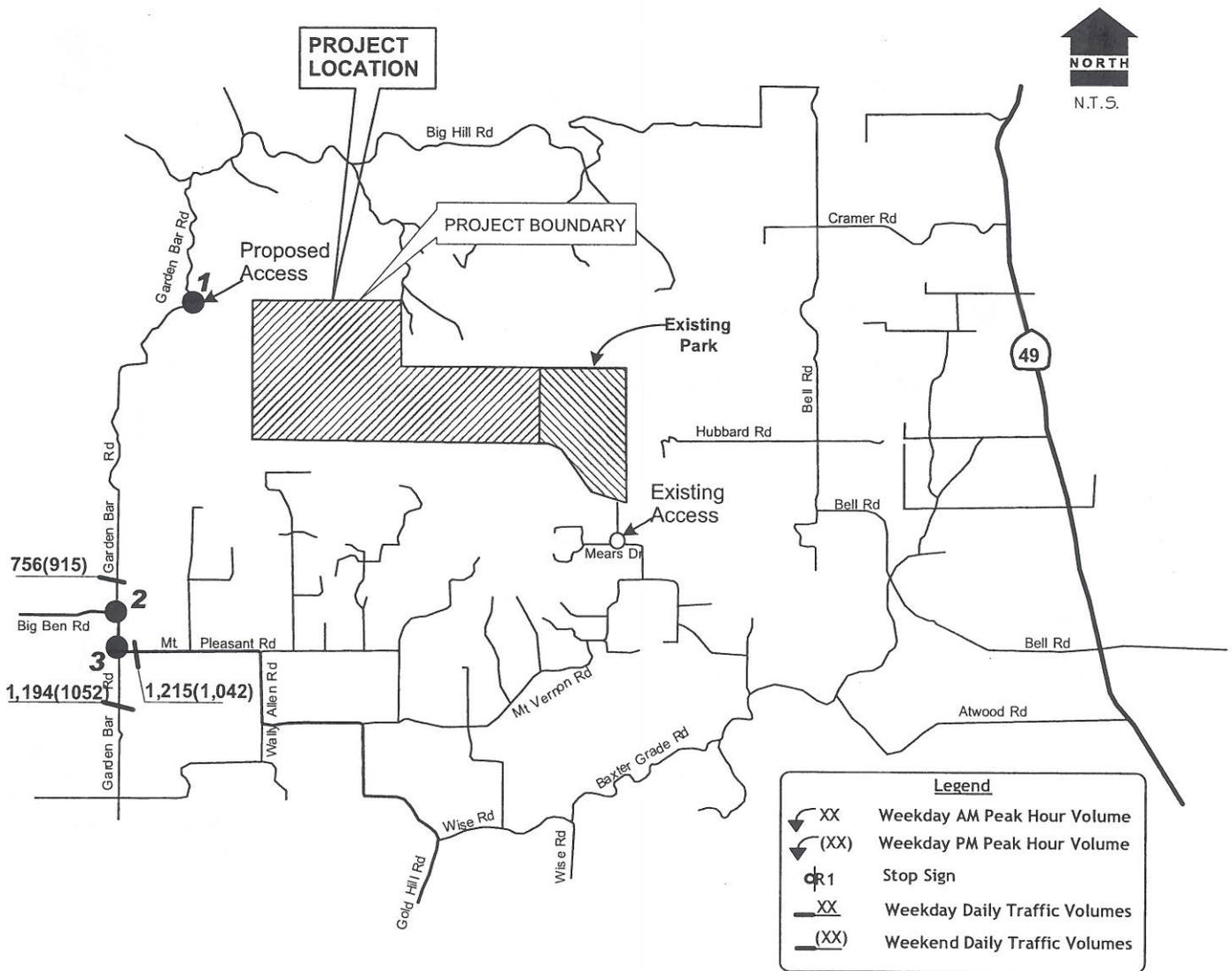
EXISTING PLUS PROJECT
 TRAFFIC VOLUMES
 AND LANE CONFIGURATIONS

figure 5



YEAR 2027 NO PROJECT
TRAFFIC VOLUMES
AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers



EXISTING SETTING

Regionally, the project site is served primarily by a series of rural Placer County roads which link the park with Lincoln to the west, Loomis and the Penryn – Horseshoe Bar area to the south and the Auburn area to the east. Regional roads such as Mt Pleasant Road, Garden Bar Road and Mt Vernon Road, Big Ben Road, Wise Road, Riosa Road, McCourtney Road, Fowler Road, Fruitvale Road, and Gold Hill Road will link the site with SR 65 to the west, SR 193 to the south and SR 49 to the east. Locally, the traffic using the site will use Mt Vernon Road and Mears Drive to reach the existing parking facilities that serve the existing portion of the park. The new park access off of Garden Bar Road can be reached via Mt Pleasant Road and Garden Bar Road.

Study Area Circulation System - Roads

Classification. Under the Placer County General Plan the roads in the study area range in functional class from Rural Arterials to Rural Collectors to local roads.

Rural Arterials

Wise Road from Mt Vernon Road to SR 65
McCourtney Road from the Lincoln city limits to Camp Far West Road

Rural Collectors

Fruitvale Road from McCourtney Road to Hungry Hollow Road
Mt Vernon Road from Joerger Road to Wise Road
Riosa Road from the Sutter County line to McCourtney Road
Fowler Road from SR 193 to Fruitvale Road

Local Roads

Mt Pleasant Road
Mears Drive
Garden Bar Road
Big Ben Road

Mt Pleasant Road is a local east-west road that extends for approximately three miles linking Big Ben Road and Mt Vernon Road. The alignment Mt Pleasant Road follows the rolling terrain of the foothills west of Auburn. The road itself is 20 to 22 feet wide with graveled shoulders of varying width. Placer County's adopted design standard for Mt Pleasant Road calls for 32 feet of pavement (traveled way and shoulders) within a 60 foot right of way with a design speed of 35 mph.

Mt Vernon Road is a Rural Collector road that extends easterly from an intersection on Wise Road for about 7 miles into the City of Auburn. Placer County's design standard for Mt. Vernon Road from Wise Road to Joerger Road calls for 32 feet of pavement (traveled way and shoulders) within a 60 foot right of way with a design speed of 35 mph.

Mears Drive is a local street that connects the existing portion of Hidden Falls Park with Mt. Vernon Road. This two lane road features 20 feet of pavement and limited shoulders. Placer County's adopted design standard for Mears Drive north of Mt Vernon Road calls for 32 feet of pavement (traveled way and shoulders) within a 60 foot right of way with a design speed of 30 mph.

Garden Bar Road is a local road that extends north from an intersection on Fruitvale Road across Mt Pleasant Road along the west side of the proposed project and for approximately three miles to the Nevada County line. The alignment and width of Garden Bar Road varies greatly along its length. In the area of the proposed project the road varies from approximately 15 to 20 feet in width. Shoulders are most often non-existent and horizontal curves with radii as short as 80 feet exist at various locations. Placer County's adopted design standard for Garden Bar Road for 32 feet of pavement (traveled way and shoulders) within a 60 foot right of way with a design speed of 35 mph.

Study Area Circulation System - Intersections

The quality of traffic flow is often governed by the operation of key intersections. The following intersections have been identified for evaluation in this study in consultation with Placer County staff.

The **Garden Bar Road (North) / Mt. Pleasant Road** intersection is a "tee" intersection controlled by a stop sign on the southbound Garden Bar Road approach. The intersection is located on a horizontal curve along Mt Pleasant Road. There are no turn lanes on Mt Pleasant Road at the northern Garden Bar Road intersection.

The **Garden Bar Road (South) / Mt Pleasant Road** intersection is a "tee" intersection controlled by a stop sign on the northbound Garden Bar Road approach. The intersection is located on a horizontal curve along Mt Pleasant Road. There are no turn lanes on Mt Pleasant Road at the southern Garden Bar Road intersection.

Standards of Significance: Levels of Service - Methodology

To assess the quality of existing traffic conditions and provide a basis for analyzing project impacts, Levels of Service were calculated at study area intersections and project driveways. "Level of Service" is a qualitative measure of traffic operating conditions whereby a letter grade "A" through "F", corresponding to progressively worsening operating conditions, is assigned to an intersection or roadway segment.

The Placer County General Plan governs development in this area of Placer County, and the Community Plan includes Level of Service goals. Policies 3.A.1. thru 3.A.16 under General Plan Goal 3.A are applicable.

According to the General Plan, the minimum level of service (LOS) on rural roadways and at intersections shall be shall be Level of Service C.

Table 1 presents general characteristics associated with each LOS grade.

**TABLE 1
LEVEL OF SERVICE DEFINITIONS**

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Volume / capacity (V/C) < 0.60	Little or no delay. Delay ≤ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. $0.60 \leq v/c < 0.70$	Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. $0.70 \leq V/C < 0.80$	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestions of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. $0.80 \leq V.C < 0.90$	Long traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). $0.90 \leq V/C < 1.00$	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. V/C > 1.00	Intersection often blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.

Sources: 2000 *Highway Capacity Manual*, Transportation Research Board (TRB) Special Report 209.

Methodology for LOS at Unsignalized Intersections. At unsignalized intersections the number of gaps in through traffic, gap acceptance time and corresponding delays for motorists waiting to turn are used for Level of Service analysis. Procedures used for calculating unsignalized intersection Level of Service are as presented the *Highway Capacity Manual, 2000 edition*.

Daily Traffic Volumes

The quality of traffic flow on Placer County roads can also be determined based on the daily traffic volumes and generalized Level of Service thresholds. The Placer County General Plan EIR presents generalized “planning level” daily volume thresholds that can be used to identify operating Levels of Service on streets and highways. These thresholds are re-printed in Table 2.

General Plan threshold do not specifically account for the condition of roads in terms of width and the availability of shoulders. For this analysis is has been assumed that in areas of Rolling and Mountainous terrain Level of Service thresholds could be influenced by these factors. To determine

applicable adjustments, LOS threshold tables employed by other counties were reviewed. The most applicable data is available from the Tuolumne County Transportation Commission (TCTC), and the thresholds employed by that agency specifically address the width of less than standard roads. Applying the adjustments made by TCTC, roads that are 18' wide would have thresholds that were 80% of standard, while the thresholds on roads with pavement width less than 18' would be 66% of standard. The effects of these adjustments are also noted in Table 2.

**TABLE 2
EVALUATION CRITERIA FOR ROADWAY SEGMENT LEVEL OF SERVICE**

Roadway Capacity Class	Maximum Daily Traffic Volume Per Lane Level of Service				
	A	B	C	D	E
1. Freeway – Level Terrain	6,300	10,620	13,680	17,740	18,000
2. Freeway – Rolling terrain	5,290	8,920	11,650	14,070	15,120
3. Freeway – Mountainous Terrain	3,400	5,740	7,490	9,040	9,720
4. Arterial – High Access Control	6,000	7,000	8,000	9,000	10,000
5. Arterial – Moderate Access Control	5,400	6,300	7,200	8,100	9,000
6. Arterial – Low Access Control	4,500	5,250	6,000	6,870	7,500
7. Rural 2-lane Highway – Level terrain	1,500	2,950	4,800	7,750	12,500
8. Rural 2-lane highway – Rolling terrain	800	2,100	3,800	5,700	10,500
<i>Rural 2-lane - Rolling ($\geq 18'$ of pavement)</i>	<i>640</i>	<i>1,680</i>	<i>3,040</i>	<i>4,560</i>	<i>8,400</i>
9. Rural 2-lane highway – Mountainous Terrain	400	1,200	2,100	3,400	7,000
<i>Rural 2 lane road - Mountainous ($\geq 18'$ of pavement)</i>	<i>320</i>	<i>960</i>	<i>1,680</i>	<i>2,720</i>	<i>5,600</i>
<i>Rural 2 lane road – Mountainous (<18 feet of pavement)</i>	<i>265</i>	<i>795</i>	<i>1,390</i>	<i>2,250</i>	<i>4,635</i>

Source: Placer County General Plan FEIR and KDA from TCTC guidelines

Existing Traffic Volumes and Intersection Levels of Service

This analysis addresses traffic conditions occurring during peak weekday hours. Peak hour traffic counts were conducted in April 2007 during the morning (i.e., 7:00 to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak hours. The highest one-hour volume observed during each two hour period was employed for this analysis. The results of these traffic counts are presented in Figure 3.

Table 3 presents current peak hour Level of Service at the study area intersections. As shown, all study intersections currently operate at LOS C or better.

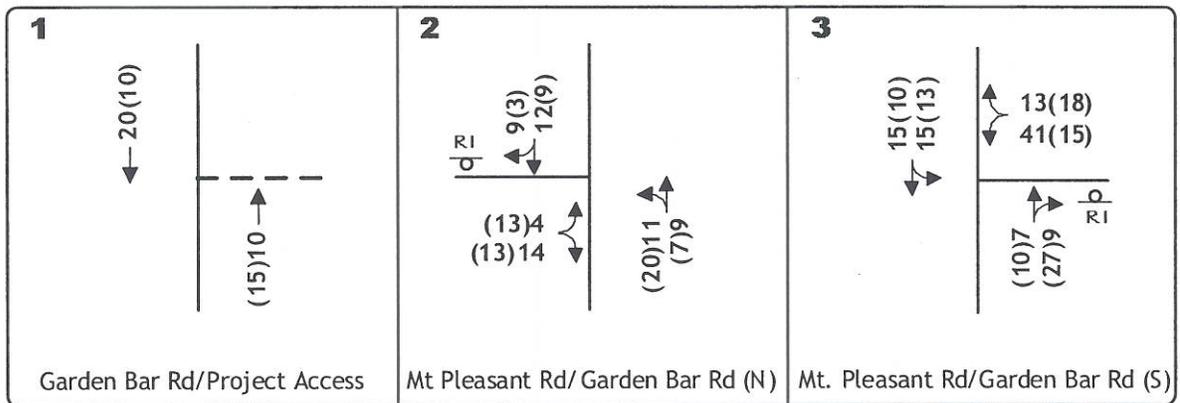
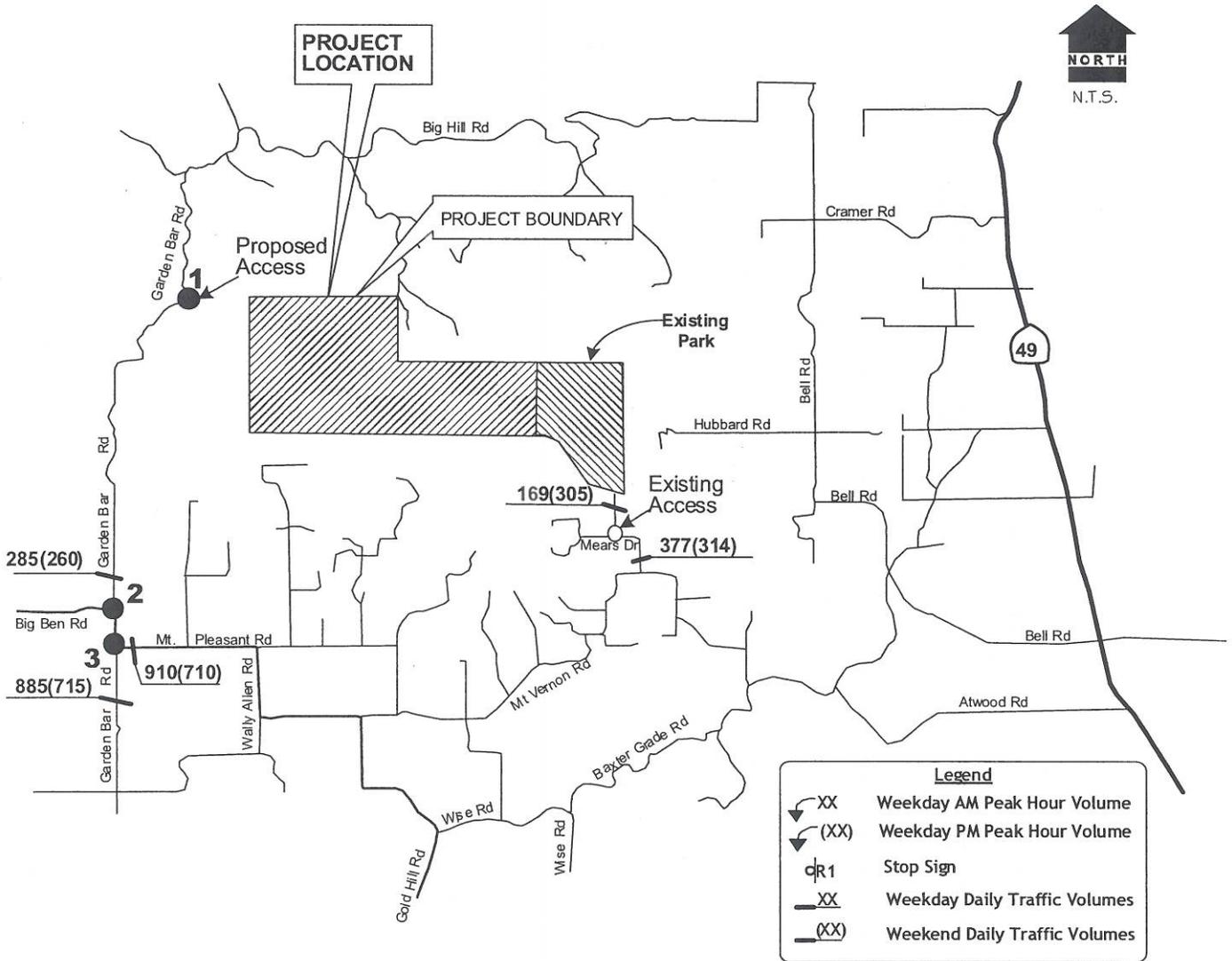
An additional measure of the quality of traffic flow is the extent to which the traffic volumes at these intersections meet warrants for signalization. None of the unsignalized study intersections carry volumes satisfying warrants during either the a.m. or p.m. peak hour. Based on this information, traffic signals are not judged to be needed at this time.

**TABLE 3
EXISTING INTERSECTION LEVEL OF SERVICE**

Intersection	Control	Weekday				Traffic Signal Warrants Met?	
		A.M. Peak Hour (7:00 to 9:00 a.m.)		P.M. Peak Hour (4:00 to 6:00 p.m.)		a.m. peak hour	p.m. peak hour
		LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)		
Mt Pleasant Road / Garden Bar Road (N) EB left turn SB left+right turn	SB Stop	A A	7.3 sec 8.7 sec	A A	7.3 sec 8.8 sec	No	No
Mt Pleasant Road / Garden Bar Road (S) EB left turn NB left+right turn	NB Stop	A A	7.4 sec 8.9 sec	A A	7.3 sec 8.7 sec	No	No

Existing Daily Traffic Volumes and Levels of Service

Current daily traffic volumes were counted on roads near the project in April 2007. Traffic counts were conducted over a seven day period and included both weekday and weekend volumes. The average volume for the five weekdays and the average of the two weekend days are reported in Table 4.



**TABLE 4
EXISTING DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE**

Road	From	To	Class	Pavement	Weekday		Weekend	
					Daily Volume	Level of Service	Daily Volume	Level of Service
Garden Bar Rd (N)	Mt Pleasant Rd	access	Mountainous Rural	<18'	285	B	260	A
Mt Pleasant Rd	Big Bend Rd	Garden Bar Rd (N)	Rolling Rural	>18'	375	A	310	A
Mt Pleasant Road	Garden Bar Rd (S)	Wally Allen Rd	Rolling Rural	>18'	910	B	710	B
Garden Bar Rd (S)	Mt Pleasant Road	Wise Rd	Rolling Rural	>18'	885	B	715	B
Mears Road	Mt Pleasant Road	Mears Place	Rolling Rural	>18'	377	A	314	A

Under the thresholds suggested by the Placer County General Plan with adjustments for roadway width as noted, the Level of Service on study area roads would range from LOS A to LOS B. This evaluation assumes the winding alignment of Garden Bar Road north of Mt. Pleasant Road should be classified as “mountainous”, while other area roads are in “rolling” terrain.

Other Evaluation Criteria

Left Turn Channelization. The American Association of State Transportation and Highway Officials (AASHTO) has identified guidelines for the installation of left turn lanes in their publication *A Policy on Geometric Design of Highways and Streets*. These guidelines, which are presented in their Exhibit 9-75 bases the need for a left turn lane on the volume of traffic on the mainline road and the relative percentage of that traffic that turns.

Left turn lanes rarely exist on local roads at intersections near the project. Current volumes at the Mt Pleasant Road / Garden Bar Road intersections fall below guidelines for left turn channelization.

Analysis of the need for left turn lanes at the project’s access on Garden Bar Road is a part of the impact evaluation. That evaluation will also consider the relationship between left turn access and sight distance along Garden Bar Road.

Minimum Sight Distance. Placer County has established minimum sight distance standards for intersections onto County roads. These standards generally conform to Caltrans requirements for corner sight distance and are summarized in Plate R-17 of the Placer County Design Standards. The minimum sight distance required for a 25 mph design is 250 feet and for a 35 mph design is 385 feet, while the required distance for 55 mph is 605 feet. The adopted Placer County design speed for Mt Pleasant Road is 35 mph. This suggests that sight distance of 385 feet (35 mph) should be provided. Development of a new access without adequate sight distance would constitute a potential safety impact.

Available sight distance was reviewed at key locations along the roads that will provide access to the project site. The sight distance at the two Garden Bar Road intersections on Mt Pleasant Road satisfies a 35 mph design.

Garden Bar Road Design Speed. Because much of Placer County’s rural circulation system has evolved over the years, there are many locations where roadways fail to meet current design standards for horizontal or vertical alignment, shoulder width, etc. On Garden Bar Road, the primary existing design deficiencies are pavement width and the length of the radius of various horizontal and vertical curves. Technically, bringing local roads up to current design standards would require consistently lengthening curve radii to 35 mph design. There are many locations on the current alignment of Garden Bar Road that do not meet this design speed, as acknowledged in the Psomas Engineering evaluation of the road.

Pedestrian / Bicycle / Equestrian Facilities

Dedicated pedestrian and bicycle facilities are limited in this area of Placer County. The Placer County Regional Bikeway Plan (2002) notes the location of existing and planned bicycle facilities in the incorporated and unincorporated areas of Placer County. There are no designated facilities in the immediate area of the proposed project.

The existing portion of Hidden Falls Regional Park provides trails that are used by equestrians, recreational bicyclists and pedestrians. However these users typically haul their horses or mountain bicycles to the site.

Transit Facilities

Placer County Transit provides bus service in Placer County but not to the immediate area of this project. The nearest local service is the Taylor Road shuttle which has a stop in Penryn and provides connections to other local and regional transit services. Dial-a-Ride service is available to residents in the area of the proposed project.

PROJECT IMPACTS

The impacts associated with the proposed project have been evaluated based on the amount of traffic generated and added to study area roads

Project Traffic Characteristics

The proposed project is expected to effect the local environment in two ways. First, use of the park will generate users who are expected to drive to the site, and automobile, truck and bus traffic will be added to the rural roads that provide access to the site. The amount and direction of project traffic is expressed in terms of the projects potential *Trip Generation and Distribution*. Secondly, the project will be accompanied by improvements to Garden Bar Road between the project access and Mt Pleasant Road.

Trip Generation. The amount of new traffic associated with development projects is typically forecasted using information developed from recognized national sources. The Institute of Transportation Engineers (ITE) publication *Trip Generation, 7th Edition* is a source recognized by Placer County and Caltrans.

ITE data for the category of Regional Parks was reviewed. The reference notes that a wide variety of facilities and activities can be found in regional parks, and as a result, trip generation rates vary greatly and statistical correlation is poor. Table 5 identifies the average daily trip generation rates reported by ITE, as well as the range of rates reported for the sample data. Review of this data suggests that the ITE sample was drawn for observation of active parks, such as Elk Grove Regional Park and Maidu Park in Roseville which provide facilities for organized active events (i.e., sports fields). These rates are not judged to be applicable to the proposed project.

**TABLE 5
TRIP GENERATION RATES**

Land Use	Quantity	Trip Generation					
		Weekday Daily			Saturday		
		Average	Low	High	Average	Low	High
Regional Park	Acre	4.57	0.92	39.07	5.65	1.88	43.04

To provide a greater understanding of probable park use traffic counts were conducted at the existing park access off of Mears Drive. These counts were made during January through March and represent varying conditions in terms of weather. The counts conducted in January reflect colder weather and intermittent rain. The counts made in March represent clear weather conditions. Because these mechanical counts are based on the number of axels across pneumatic hoses, trailers towed to the site would be registered as part of an additional vehicle. Thus these counts may overstate the actual vehicle count slightly.

**TABLE 6
TRAFFIC COUNTS AT EXISTING HIDDEN FALLS PARK ACCESS**

Date	Day of week	Daily Volume (in + out)	Peak Hour Volume (in+out)			
			AM		PM	
			(7:00 to 9:00)	Highest Hour	(4:00 to 6:00)	Highest Hour
1/17	Thursday	-			11	11
1/18	Friday	97	4	8	18	18
1/19	Saturday	206	-	14	-	47
1/20	Sunday	171	-	22	-	32
1/21	Monday	96	1	17	7	21
1/22	Tuesday	65	3	9	6	14
1/23	Wednesday	43	2	5	5	10
1/24	Thursday	38	3	3	1	10
1/25	Friday	38	1	6	3	10
1/26	Saturday	91	-	15	-	19
1/27	Sunday	48	-	8	-	8
1/28	Monday	77	2	19	4	11
1/29	Tuesday	32	3	4	1	9
1/30	Wednesday	68	6	9	7	9
2/28	Thursday	92	3	9	13	16
2/29	Friday	169	5	24	15	29
3/1	Saturday	193	-	22	-	31
3/2	Sunday	305	-	39	-	51
3/3	Monday	95	1	14	15	16
3/4	Tuesday	148	18	23	17	18
3/5	Wednesday	124	7	18	13	24
3/6	Thursday	76	7	11	8	13
Highest Observation	Weekday	169	18 (11 in 7 out)	24	18 (6 in 12 out)	29
Highest Observation	Weekend	305	-	39	-	51

As shown in Table 6, the highest daily volume observed on a weekday was a count of 169 vehicles in and out. The highest daily volume on a weekend totaled 305 vehicles. The highest volume observed during weekday peak hours was 18 vehicles during both the a.m. and p.m. peak hour.

Trips Associated with Regular Use. The potential increase in activity at the site due to

the new project will be based on factors such as the length of new trails available and the configuration of the trail system. It is expected that longer trails will result in participants spending more time on the trail. Park staff suggests that with the implementation of the project, overall park use could increase to 2 to 2½ times the existing usage.

For this analysis it has been assumed that the project will result in additional traffic that is equal to 1½ times the highest current observation. Thus, as noted in Table 7 the project will add 255 weekday and 460 weekend trips to the study area street system. During the weekday commute hours the project could add 28 trips in the a.m. peak hour and 27 trips in the p.m. peak hour. During the highest hour on a weekend the project could add 77 trips to the area street system

**TABLE 7
TRIP GENERATION FORECAST**

Land Use	Trip Generation							
	Weekday					Weekend		
	Daily	AM		PM		Daily	Peak Hour	
		In	Out	In	Out		In	Out
Hidden Falls Regional Park	255	17	11	9	18	460	35	42

Special Events. It is recognized that the park could host organized special events that would attract guests in numbers beyond those expected for regular public use. Such events could include equestrian groups, high school cross country, etc. Project proponents suggest that up to 200 persons could be at the site at one time for these events.

The amount of vehicular traffic associated with special events and the distribution of that traffic would vary based on the nature of the event. For example, local high school cross country meets could bring together several teams, with participants and spectators totaling up to 200 persons. However, high school students would likely be bussed to the site. As a result, a 200 person event of this type would likely be served by 6 to 8 busses and perhaps 12 to 20 automobiles. The trip generation for this event would be less than that forecast for regular use of the site.

Trip Distribution. Having determined the number of trips that are expected to be generated by the project, it is necessary to identify the directional distribution of project-generated traffic. Based on discussions with park staff we understand that today the park caters primarily to western Placer County residents living in an area bounded by SR 49 on the east, SR 65 on the west and Rocklin –Roseville urban area to the south.

2000 Census tract population information for the districts surrounding the park site were reviewed for use as a basis for suggesting the regional distribution of project trips. Excluding urbanized Roseville and Rocklin, the study area would include Lincoln-Sheridan, Loomis. Penryn-Horseshoe Bar, Newcastle-Ophir, Auburn and north Auburn.

**TABLE 8
TRIP DISTRIBUTION ASSUMPTIONS**

Direction	Destination	Routes	Percentage of total
Northwest	Sheridan	Big Ben Road to McCourtney Road	15%
West	Lincoln	Garden Bar Road to Wise Road	17%
Northeast	North Auburn	Mt Pleasant Road, Mt Vernon Road to Joerger Road	22%
East	Auburn	Mt Pleasant Road to Mt Vernon Road	13%
Southeast	Newcastle / Penryn	Mt Pleasant Road to Wise Road and Gold Hill Road	9%
Southwest	Loomis , Rocklin	Garden Bar Road, Fowler Road to SR 193	24%
Total			100%

Project Trip Assignment. The assignment of project trips to the study area street system will reflect the location of planned parking facilities and the travel time between those facilities and regional trips destinations. Because planned trails can be accessed from both the existing parking facilities off of Mears Drive and via the new parking off of Garden Bar Road, the trips attracted to the facilities may make use of both entrances. To present a “worst case” evaluation of the impacts of this project to Garden Bar Road, 100% of the new traffic has been assumed to use the new entrance under the “existing plus project” conditions. Figure 4 identifies the assignment of project traffic to the local street system via the Garden Bar Road access.

However, if the project proceeds in phases as anticipated, initial use of the new park may occur before Garden Bar Road access is developed. Under those conditions a portion of the trip generation would occur and all of the traffic increase would use Mears Drive.

Planned Roadway Improvements

Development of Hidden Falls Regional Park will be accompanied by phased improvements to Garden bar Road in the area north of Mt Pleasant Road to the proposed access. The extent of these improvements is described in the *Hidden Fall Regional Park Traffic Safety Study (2007)*.

Phased Improvements. Under the phased improvements program, public access via Garden Bar Road would initially be prohibited as no improvements to that road would have been made under Phase 1. Under Phase 2 Garden Bar Road would be improved to accommodate private automobiles and the access would be opened to the public. However, access for horse trailers would be prohibited, and vehicles with trailers would continue to use the Mears Drive access. Under Phase 3 vehicles with trailers would be permitted to use the Garden Bar Road staging area.

Phase 2 Work. The following improvements are part of Phase 2 work:

- An access road would be constructed between Garden Bar Road and the park property
- Garden Bar Road would be widened to an all weather 18 foot wide paved section
- Substandard vertical curves would be lengthened at five locations
- Warning signs would be installed at locations along Garden Bar Road to warn of tight radius curves that are not to be improved
- Guide signs directing the public to the park would be installed

Phase 3 Work. Under this phase Garden Bar Road would be subject to additional improvements:

- The road would be further widened to provide a minimum width of 20' all weather surface
- The horizontal alignment of the northern portion of the road would be improved to correct current deficiencies

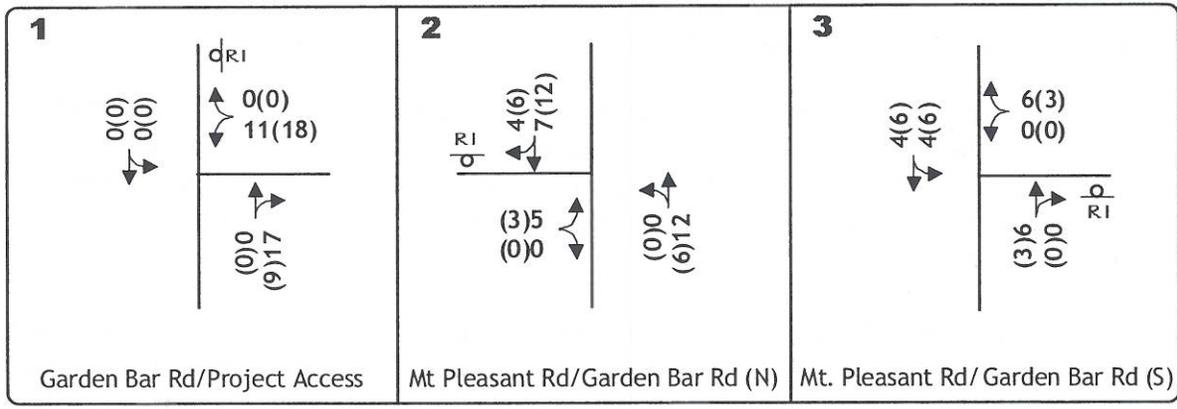
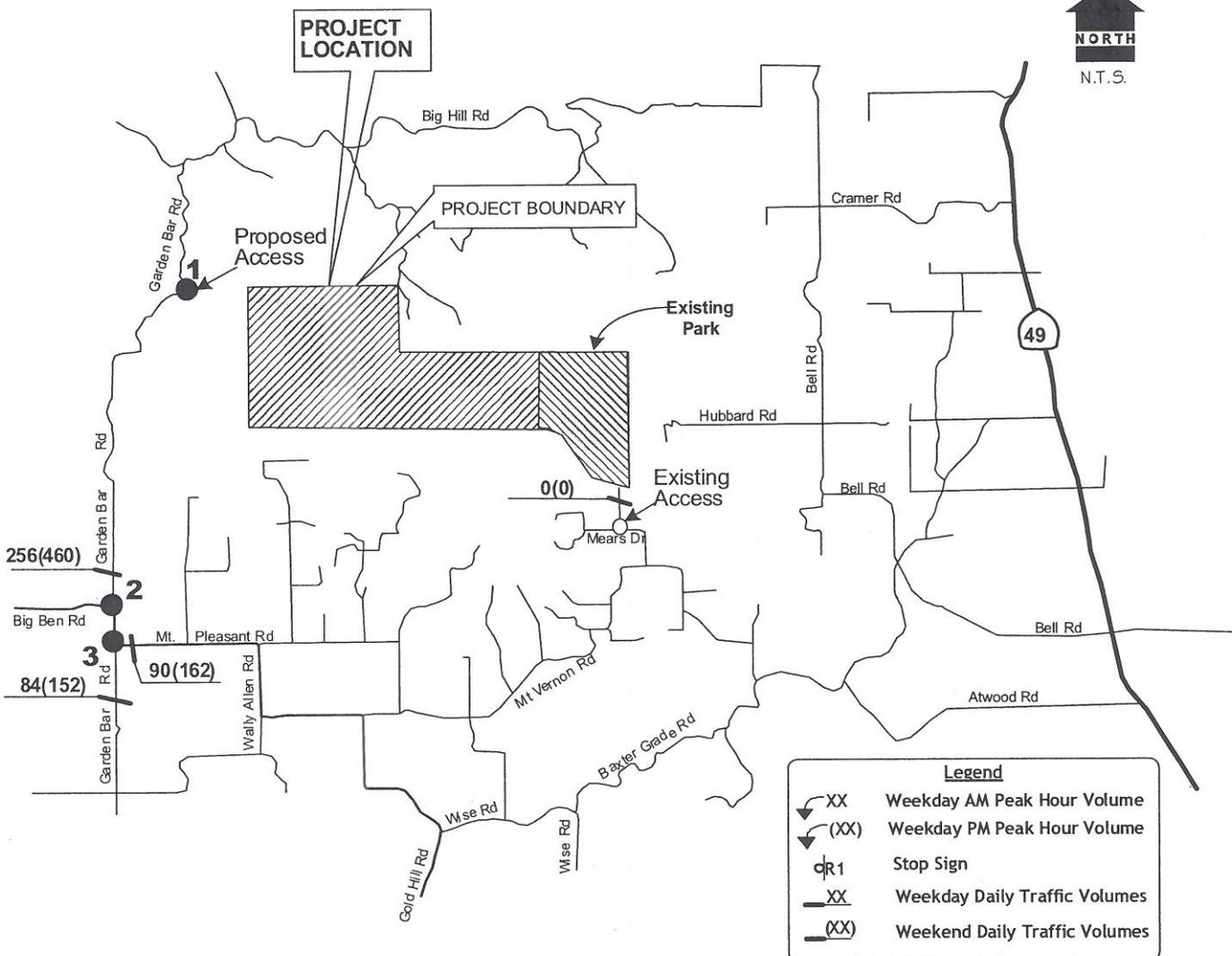
Existing Plus Project Traffic Conditions and Levels of Service

Figure 5 superimposes project trips onto the current background traffic volumes to create the "Existing plus Project" condition assuming all project traffic uses the Garden Bar Road access.

Intersection Level of Service. Table 9 identifies the Level of Service projected at the project's access onto Garden Bar Road and compares the existing and "plus project" Levels of Service at the other study intersections. As shown, while the average length of delays may increase slightly, the addition of project traffic will have a negligible effect on Levels of Service occurring during peak hours at study intersections. LOS "A" conditions will remain. Review of projected volumes reveals that the addition of project traffic does not result in any change to previous conclusions regarding the need for traffic signals.

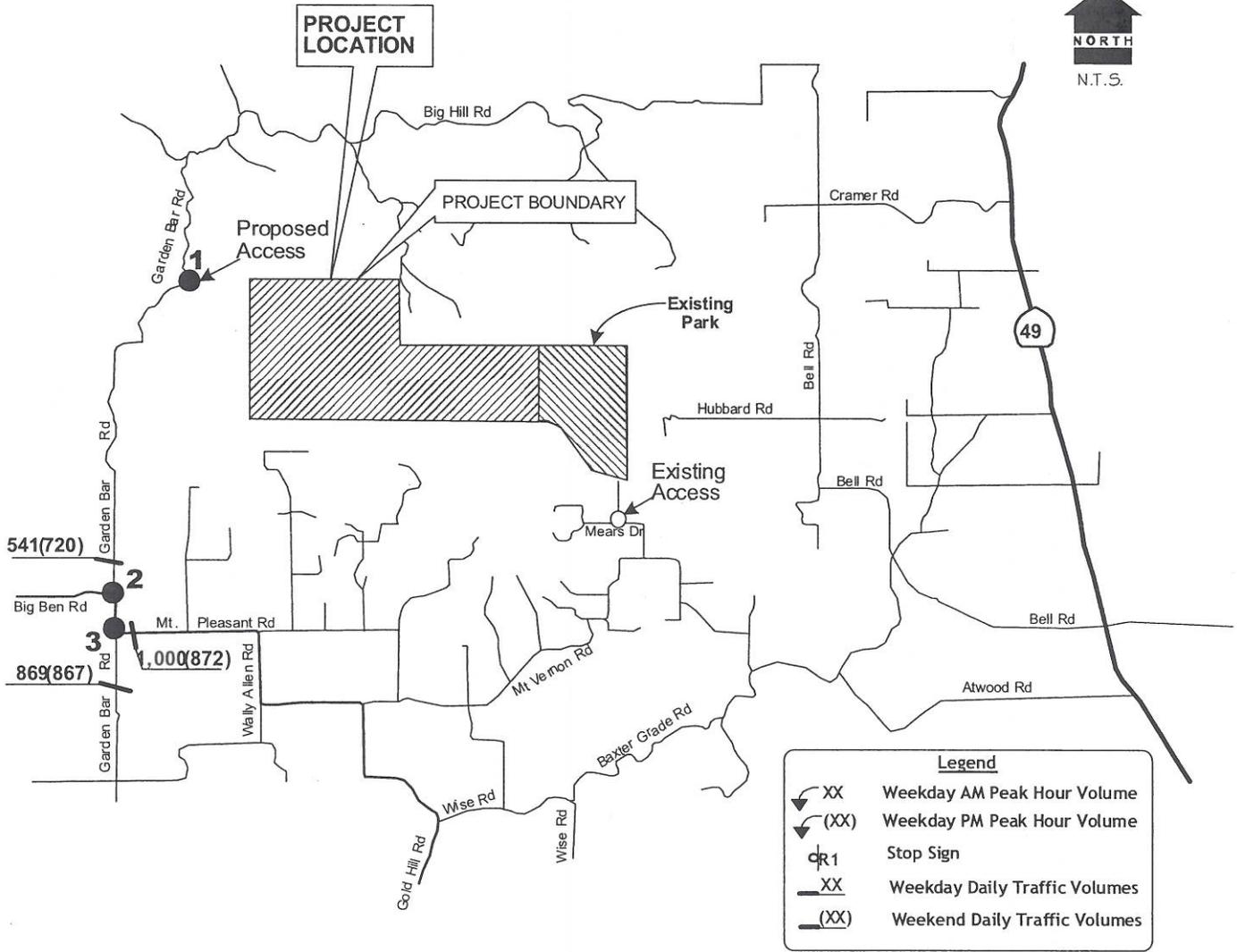
To provide a "worst case" assessment of Level of Service impacts, conditions accompanying the weekend peak hour of the facility were evaluated. This assessment was conducted by superimposing weekend peak hour traffic onto observed weekday a.m. traffic volumes. As summarized in the Appendix, study intersection Levels of Service remain at LOS A at this higher traffic volume level.

Existing Daily Traffic Volumes and Levels of Service. Table 10 identifies the daily traffic volumes added to study area roads if all the new traffic associated with the project chose to use Garden Bar Road access. As indicated, while "worse case" assumptions yield increases in traffic volumes that are similar in magnitude to current volume counts, resulting total volumes do not result in Levels of Service in excess of minimum Placer County standards (i.e., LOS C).



**PROJECT ONLY TRAFFIC VOLUMES
 AND LANE CONFIGURATIONS**

figure 4



1	2	3
Garden Bar Rd/Project Access	Mt Pleasant Rd/Garden Bar Rd (N)	Mt. Pleasant Rd/Garden Bar Rd (S)

**EXISTING PLUS PROJECT
TRAFFIC VOLUMES
AND LANE CONFIGURATIONS**

KD Anderson & Associates, Inc.
Transportation Engineers

**TABLE 9
EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE**

Intersection	Control	Weekday										Traffic Signal Warrants Met?			
		AM Peak Hour (7:00 to 9:00 a.m.)					PM Peak Hour (4:00 to 6:00 p.m.)					AM Peak Hour	PM Peak Hour		
		Existing Plus Project		Existing Plus Project		Existing Plus Project		Existing Plus Project		Existing Plus Project					
		LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)		
Garden Bar Rd / Access SB left turn WB left+right turn	WB Stop	-	-	-	-	-	-	-	-	-	-	-	No	No	
		A	8.8 sec	A	8.8 sec	A	8.8 sec	A	8.8 sec	A	8.8 sec	A	8.8 sec	No	No
Mt Pleasant Road / Garden Bar Road (N) EB left turn SB left+right turn	SB Stop	A	7.3 sec	A	7.3 sec	A	7.3 sec	A	7.3 sec	A	7.3 sec	A	7.3 sec	No*	No
		A	8.7 sec	A	8.8 sec	A	8.9 sec	No*	No						
Mt Pleasant Road / Garden Bar Road (S) EB left turn NB left+right turn	NB Stop	A	7.4 sec	A	7.4 sec	A	7.4 sec	A	7.3 sec	A	7.3 sec	A	7.3 sec	No*	No
		A	8.9 sec	A	9.1 sec	A	8.7 sec	A	8.7 sec	A	8.7 sec	A	8.8 sec	No*	No

**TABLE 10
EXISTING PLUS PROJECT DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE**

Road	From	To	Class	Weekday				Weekend							
				Existing		Existing Plus Project		Existing		Existing Plus Project					
				Daily Volume	LOS	Daily Volume	LOS	Daily Volume	LOS	Daily Volume	LOS				
<i>Project Access via Garden Bar Road</i>															
Garden Bar Rd (N)	Mt Pleasant Rd	access	Mountainous Rural	285	A	256	B	541	B	260	A	460	B	720	B
Mt Pleasant Rd	Big Bend Rd	Garden Bar Rd (N)	Mountainous Rural	375	A	82	B	457	B	310	A	148	B	458	B
Mt Pleasant Road	Garden Bar Rd (S)	Wally Allen Rd	Mountainous Rural	910	B	90	C	1,000	C	710	B	162	B	872	B
Garden Bar Rd (S)	Mt Pleasant Road	Wise Rd	Mountainous Rural	885	B	84	B	869	B	715	B	152	B	867	B
<i>Interim Access via Mears Drive Only</i>															
Mears Road	Mears Place	Mt. Vernon Road	Mountainous Rolling	377	A	255	A	632	A	314	A	460	A	774	B

Safety / Access Evaluation

Sight Distance at Project Access. The available sight distance at the proposed project access was determined through a field review and compared to applicable Placer County standards.

As noted earlier, the adopted design speed on Garden Bar Road is 35 mph. Under Placer County guidelines this speed requires sight distance of 385 feet (Plate 17). This requirement exceeds the minimum safe stopping sight distance established by Caltrans for 35 mph (250 feet).

The planned north access is located along a tight curve on Garden Bar Road. The existing curve (80' radius) is to be replaced by a longer curve (200' radius).

Design Standards for balance of Garden Bar Road. The planned improvements to Garden Bar Road are presented in the *Traffic Safety Study for Garden Bar Road*. The improvements are intended to provide a minimum 18' traveled way along with and horizontal and vertical curve radii that are applicable to 35 mph and 25 mph are planned in the areas south and north of station 46+00, respectively. While recognizing that the 25 mph design does not meet the County's requirements for a Rural Secondary Road, the Safety Study notes:

Due to the nature of the existing roadway the standard for a rural secondary roadway is not considered appropriate for this setting and would result in unnecessary widening of the existing road and change in character of the roadway given the existing and future use levels. The County Fire Department's requirement is an 18 ft wide all-weather surface (see Figure 4) and is considered appropriate for Phase 3.

The key safety issue to be considered in this situation is consistency with the conditions on the overall circulations system. Hypothetically, a safety problem would exit if portions of a street are designed to a substantially lower design speed that others and motorists are surprised to encounter reduced conditions. In this case, the results of the overall improvement program envisioned in the Safety Study will be consistent with the quality of traffic flow on the balance of Garden Bar Road north of Mt Pleasant Road.

Thus, while many features of the improvement project do not conform to adopted County standards for minimum horizontal and vertical curves, with proper signage development of the planned improvements would improve safety and not exacerbate existing hazards.

One location that is of concern is the site access onto Garden Bar Road itself. Even with improvements, the access is located on a tight curve and sight distance could be limited. Advance signing in both directions noting the presence of the park access should be part of the final improvements project, and the need for an all-way stop should be reviewed as construction plans are prepared.

Need for Left Turn Lane into the Project Site. With development of the project a limited number of left turns will be made into the site from Garden Bar Road, and the number of left turns at other study intersections will increase slightly. However, resulting traffic volume would fall below the

thresholds presented in AASHTO guidelines. Based on forecast volumes left turn lanes would not be required at either intersection.

Impacts to Alternative Transportation Modes

Development of the project could have a minor incremental impact on the demand for transit services in this area of Placer County. However, the demands associated with this project would not be sufficient to require creating fixed route service. While fixed route service is not available, available Dial-a-Ride service is available. Based on the relative demand and available services, the project's impacts to transit are not judged to be significant.

Development of the project may incrementally increase the number of pedestrians and bicyclists using rural Placer County roads. Due to the distances involved most bicycle and pedestrian travel in this area is recreational in nature, and these modes are not regular commute options. While the project will provide on-site opportunities for cyclists, the trails are suitable for mountain bikes, rather than road cycles. Thus, it is unlikely that cyclists wishing to use the project's trails would choose to ride to the site.

Mitigations for "Existing Plus Project" Impacts

With implementation of planned improvements, development of the project alone does not result in traffic conditions in excess of adopted Level of Service standards. Thus, no mitigation measures are immediately required to maintain County Level of Service standards.

Installation of the planned improvements will result in a local circulation system which is better than that which exists today and is commensurate with the overall flow of traffic on Garden Bar Road. Elements of the plan do not meet minimum Placer County standards for 35 mph design. Modifications to the plan to achieve 35 mph design could be considered, but development of larger radius horizontal and vertical curves would result in considerable disruption to the areas along the roadway and would require substantial right of way acquisition. At the traffic volume levels anticipated public safety will not be compromised by the project and additional improvements to mitigate safety issues are not needed.

CUMULATIVE IMPACTS

The impacts of developing the proposed project have also been considered within the context of long-term future traffic conditions in this area of Placer County. The cumulative analysis accounts for future regional traffic growth as projected from review of historic traffic count records on study area roads.

Year 2025 Cumulative Traffic Conditions

Traffic Volume Forecasts. Long term traffic volume forecasts developed from Placer County’s recently updated Year 2025 regional travel demand forecasting model and the SACOG regional traffic model were considered as possible bases for the cumulative analysis. However, review of the configuration of each traffic model revealed that each lacked the detail necessary to develop forecasts for roads such as Garden Bar Road and Mt Pleasant Road.

Historic Traffic Volume Records. Placer County Department of Public Works has intermittently collected daily traffic volume counts for rural roads. These counts go back as far as 1971 and provide a general indication of changes in traffic volumes over that time period. This data, along with the new traffic counts made for this study have been used through regression analysis to estimate the volume of traffic likely to occur on study area roads in the year 2027.

**TABLE 11
BACKGROUND TRAFFIC GROWTH**

Road	Post Mile	Location	Weekday Daily Volume			
			1971	1978	2007	2027
Garden Bar Rd	2.42	North of Mt. Pleasant Road	191	-	285	500
	1.14	South of Mt Pleasant Road	-	632	885	1,110
Mt Pleasant Rd	0.002	West of Garden Bar Road	-	266	385	540
	2.10	East of Garden Bar Road	-	361	910	1,125

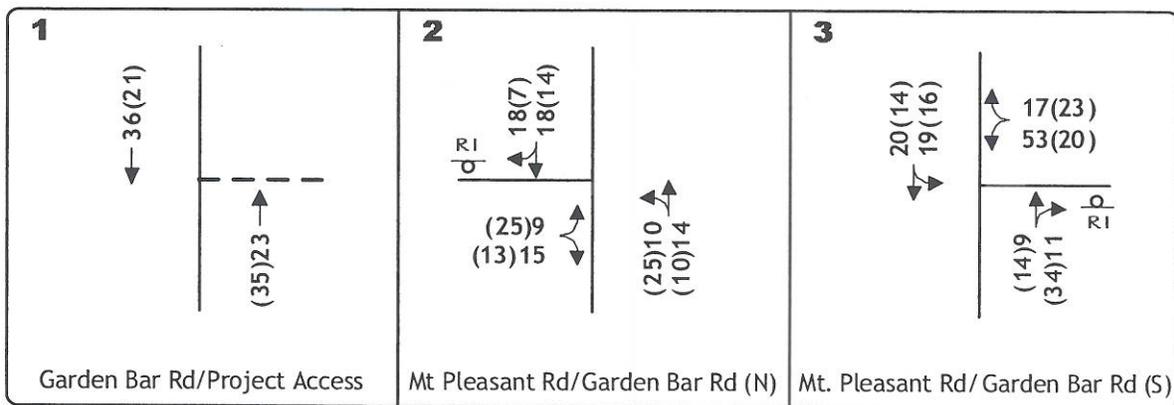
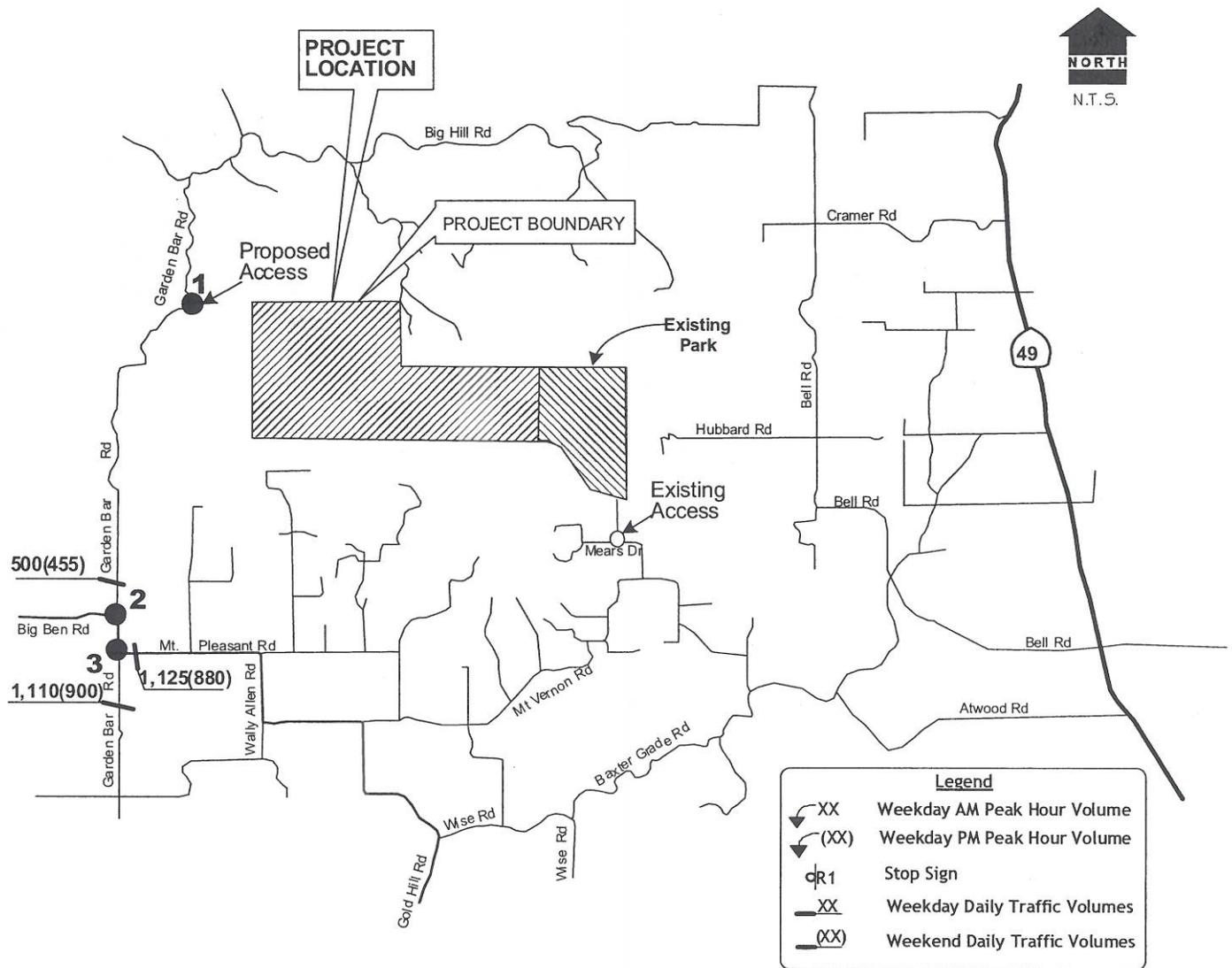
These daily traffic volumes have been employed to interpolate weekend traffic volumes and weekday peak hour intersection turning volumes, as noted in Figure 6.

Future Improvements. There are no roadway improvements contemplated in the immediate vicinity of Hidden Falls Park.

Cumulative Impacts to County Roads. As noted in Table 12, with and without the proposed project the volume of traffic on most County roads will remain within the LOS C threshold identified in the General Plan. Mitigations to address the capacity of these roads are not needed.

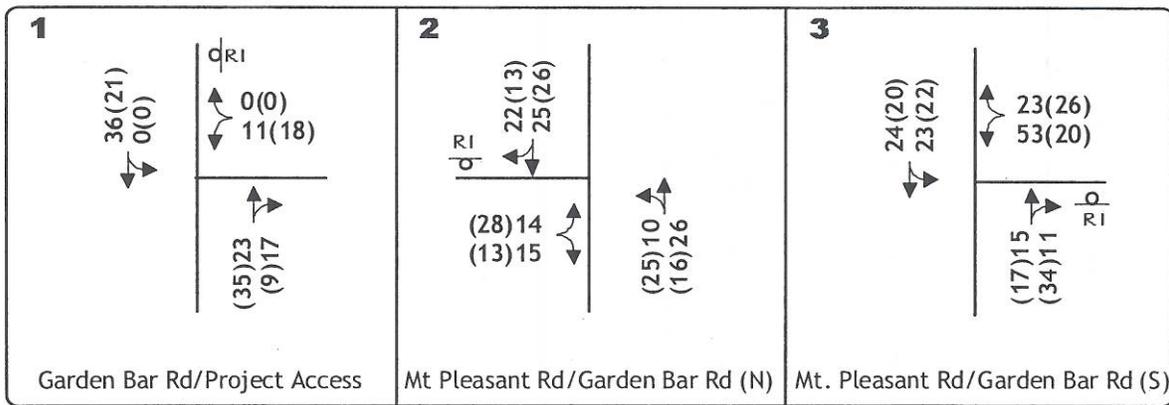
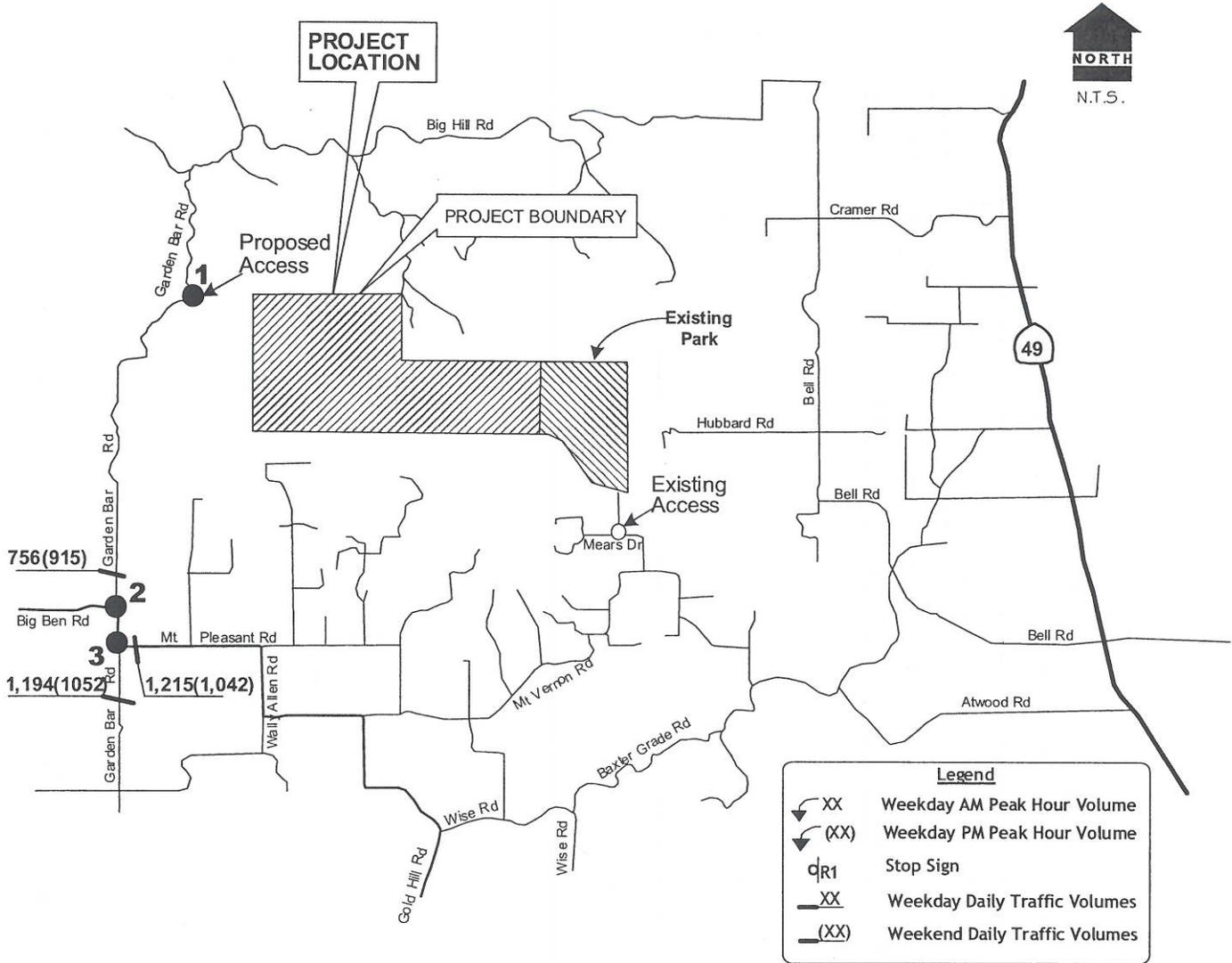
Peak Hour Intersection Levels of Service. Current peak hour volumes were adjusted to future intersection turning movement volumes based on the relative growth rates implied by daily traffic volumes using methods described in the Transportation Research Board's (TRB's) NCHRP Report 255, *Highway Traffic Data for Urbanized Area Project Planning and Design* (refer to Appendix). Figure 6 presents baseline year 2027 cumulative traffic volume forecasts, while Figure 7 presents "Year 2027 Plus Project" traffic volumes that were developed by superimposing project trip onto the background condition. As noted in Table 13 all intersections will continue to operate at a Level of Service that meets Placer County's minimum standards (i.e. LOS C or better).

Table 13 presents peak hour Levels of Service at study intersections. As shown, all study intersections will meet adopted Level of Service standards.



YEAR 2027 NO PROJECT
TRAFFIC VOLUMES
AND LANE CONFIGURATIONS

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**YEAR 2027 PLUS PROJECT
 TRAFFIC VOLUMES
 AND LANE CONFIGURATIONS**

**TABLE 12
YEAR 2027 CUMULATIVE DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE**

Road	From	To	Class	2027			2027 Plus Project			2027			Weekend		
				Daily Volume	Level of Service	Level of Service	Daily Volume Project	Daily Volume Total	Level of Service	Daily Volume Project	Daily Volume Total	Level of Service	Daily Volume Project	Daily Volume Total	Level of Service
Garden Bar Rd (N)	Mt Pleasant Rd	access	Mountainous Rural	500	A		256	756	B	455	A		460	915	B
Mt Pleasant Rd	Big Bend Rd	Garden Bar Rd (N)	Mountainous Rural	540	A		82	622	B	435	A		148	583	B
Mt Pleasant Road	Garden Bar Rd (S)	Wally Allen Rd	Mountainous Rural	1,125	B		90	1,215	C	880	B		162	1,042	B
Garden Bar Rd (S)	Mt Pleasant Road	Wise Rd	Mountainous Rural	1,110	B		84	1,194	B-C	900	B		152	1,052	B

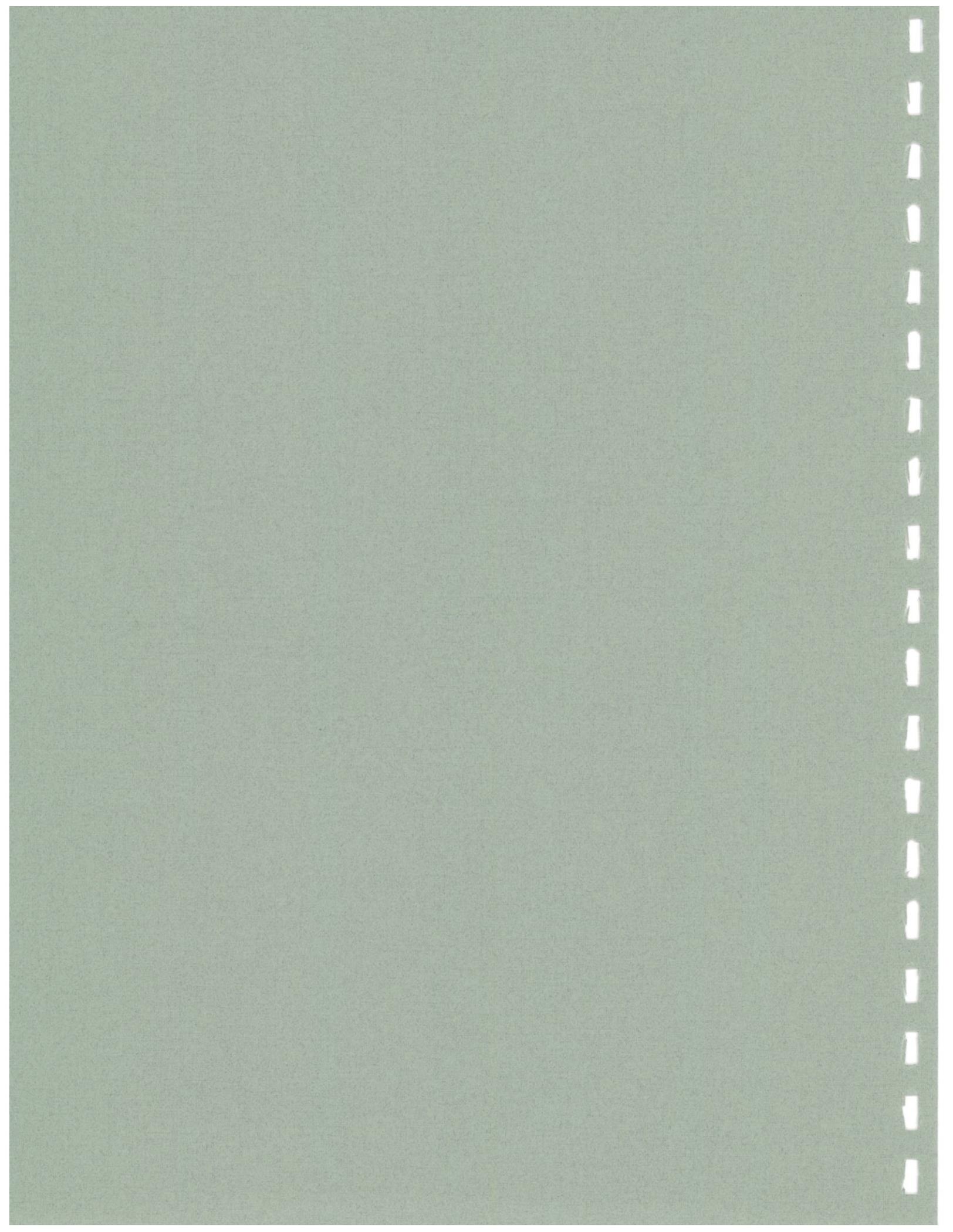
**TABLE 13
CUMULATIVE YEAR 2027 INTERSECTION LEVELS OF SERVICE**

Intersection	Control	Weekday										Traffic Signal Warrants Met?			
		AM Peak Hour (7:00 to 9:00 a.m.)					PM Peak Hour (4:00 to 6:00 p.m.)					AM Peak Hour	PM Peak Hour		
		Existing		Existing Plus Project			Existing		Existing Plus Project						
		LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)	LOS	Average Delay (sec's per vehicle)		
Garden Bar Rd / Access SB left turn WB left+right turn	WB Stop	-	-	-	-	-	-	-	-	-	-	-	No	No	
		A	9.0 sec	A	9.0 sec	A	9.0 sec	A	8.9 sec	A	8.9 sec	A	8.9 sec	No	No
Mt Pleasant Road / Garden Bar Road (N) EB left turn SB left+right turn	SB Stop	A	7.3 sec	A	7.3 sec	A	7.3 sec	A	7.4 sec	A	7.4 sec	A	7.4 sec	No*	No
		A	8.8 sec	A	8.9 sec	A	8.9 sec	A	9.0 sec	A	9.1 sec	A	9.1 sec	No*	No
Mt Pleasant Road / Garden Bar Road (S) EB left turn NB left+right turn	NB Stop	A	7.4 sec	A	7.4 sec	A	7.4 sec	A	7.3 sec	A	7.4 sec	A	7.4 sec	No*	No
		A	9.1 sec	A	9.3 sec	A	9.3 sec	A	8.8 sec	A	8.9 sec	A	8.9 sec	No*	No

APPENDIX

APPENDIX C

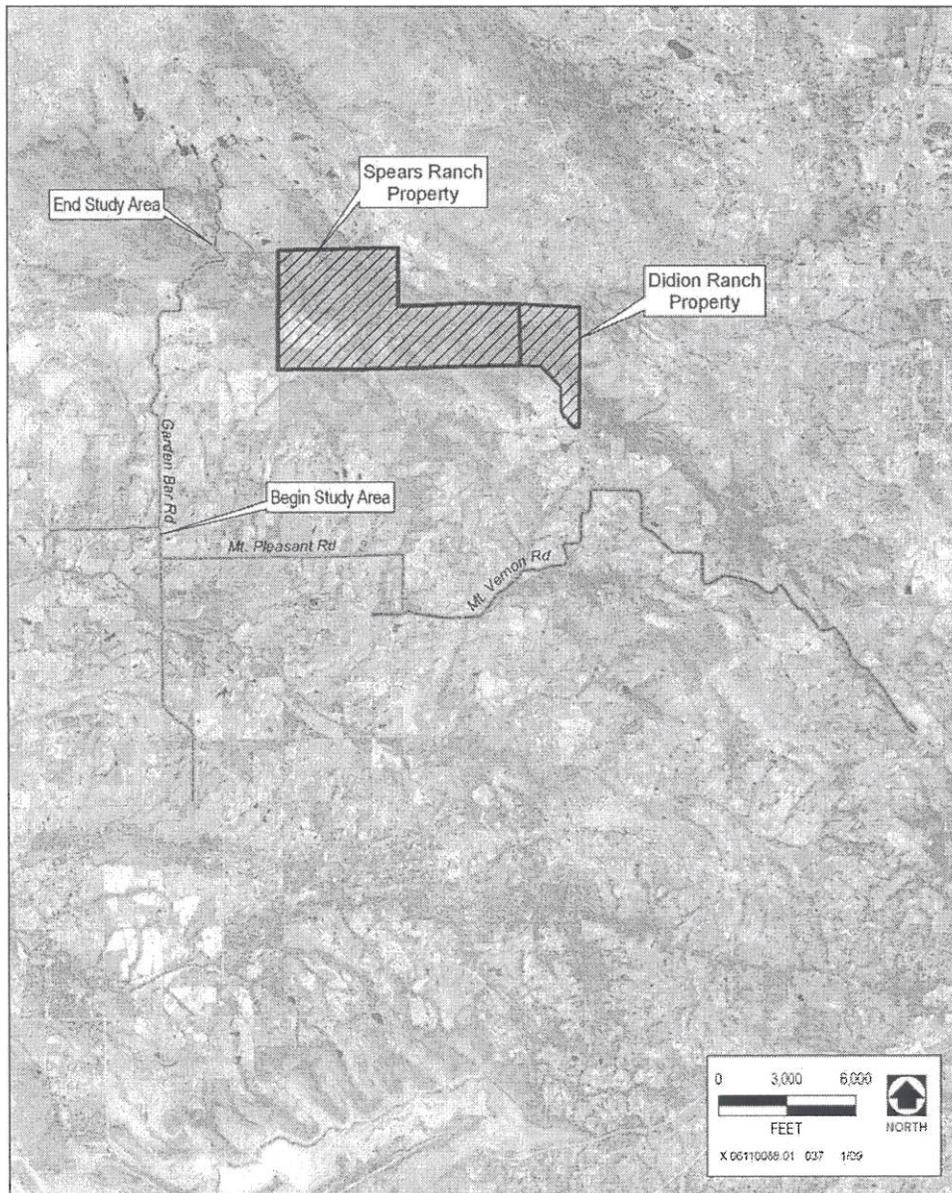
Traffic Safety Report





HIDDEN FALLS REGIONAL PARK PROJECT

TRAFFIC SAFETY STUDY FOR GARDEN BAR ROAD



Prepared for: **EDAW**

Prepared by: **PSOMAS**

Date: August 7, 2008

REGISTERED CIVIL ENGINEER STAMP

This Traffic Safety Study has been prepared by Psomas under the direction of the following registered civil engineer. The registered civil engineer attests to the accuracy of the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

BRIAN G WRIGHT, P.E.
Project Engineer
PSOMAS

Table of Contents

i	Executive Summary	i
1	Introduction.....	1
2	Project Components	1
3	Project Location and Existing Conditions	2
4	Traffic Analysis	3
5	Design Considerations	4
5.1	Design Vehicle/Use Category.....	4
5.2	Design Speed	5
5.3	Typical Section (Roadway Width).....	5
6	Analysis.....	5
6.1	Roadway Width	5
6.2	Horizontal Alignment	6
6.3	Vertical Profile.....	9
6.4	Drainage.....	11
6.5	Signing and Striping	12
6.6	Summary Matrix of Proposed Improvements.....	13
7	Phasing.....	14
8	Cost.....	14

Tables

Table 1	Design Criteria	5
Table 2	Horizontal Sight Distance Improvement Options.....	6
Table 3	Recommended Improvement Options	7
Table 4	Recommended Vertical Curve Improvements.....	10
Table 5	Summary Matrix of Proposed Improvements.....	13

Figures

Figure 1	Vicinity Map.....	15
Figure 2	Location Map and Study Limits	16
Figure 3	Garden Bar Road Improvements	17
Figure 4	Typical Roadway Cross Section.....	18

EXECUTIVE SUMMARY

Psomas was contracted by Placer County through EDAW to complete a Traffic Safety Study for Garden Bar Road in northern Placer County. This study forms part of the Environmental Impact Report currently being prepared by EDAW for the development of the Spears Ranch portion of the Hidden Falls Regional Park.

The purpose of this study is to determine the feasibility of Garden Bar Road north of Mount Pleasant Road, currently a County maintained two-lane rural road, as a public vehicle access route into the western side (Spears Ranch portion) of the Hidden Falls Regional Park.

The analysis considers the development of Hidden Falls Regional Park vehicle access in four potential phases, namely:

- *Phase 1* –No general public vehicle access via Garden Bar Road – The general public would continue to access the entirety of the park from the existing entrance on Mears Place. Garden Bar entrance would continue to be used by County employees, tenants, contractors, consultants, utility providers, fire, and law enforcement personnel without additional improvements. Emergency, construction, and film production vehicles as well as occasional busses or shuttles would enter the site via the existing Garden Bar Road entrance. Occasional classroom sized groups would be permitted to access the site through Garden Bar Entrance on appointment basis (gates would be opened and closed behind groups).
- *Phase 2* – In addition to Phase 1 Access daily public automobile access would be allowed to the new staging area at western end of property via Garden Bar Road. Equestrian trailers would be excluded from the staging area via Garden Bar Road and would continue to enter the site via Mears Road staging area. Events consistent with passive recreation and education with 200 attendees or less at one time would be allowed by County Parks Division reservation. Use of ranch house for educational and/or meeting purposes would remain regulated by County Parks Division reservation system and/or use agreements. The Mears Place entrance would continue to function as a staging/parking area.
- *Phase 3* – In addition to Phase 1 and 2 Access daily public access for equestrian trailers would be allowed to the new staging area at western end of property via Garden Bar Road

The traffic safety study includes an analysis of the existing roadway width, horizontal alignment and vertical profile, and an assessment of drainage and pavement condition, and signing and striping.

The results of the study can be summarized as follows:

- For Phase 1:
 - Prior to allowance of classroom sized groups, a new public access gate, two cattle guards and approximately 200 feet of connecting road to existing access road would be constructed at the intersection of Garden Bar Road near the

- existing access road and fencing would be constructed along both sides of access road between Garden Bar Road and site.
- Up to 25 additional paved parking stalls and up to 12 additional equestrian parking stalls may be developed at the existing Mears Road entrance.
 - For Phase 2 (in addition to Phase 1 improvements):
 - New staging area would be constructed at west end of property to include 50 stall paved parking lot and gravel overflow area
 - Widen Garden Bar Road from Mount Pleasant Road to Hidden Falls access road to 18 feet of hard surface with 2 foot shoulders and vertical curves along Garden Bar Road would be improved as recommended in this report.
 - Signing and striping improvements along Garden Bar Road.
 - Improve the access road from Garden Bar Road to the staging area to 24 feet wide with 2 foot shoulders.
 - A gate would be installed between the Garden Bar Road access staging area and the ranch house to prevent unrestricted vehicle access beyond staging area into remainder of property.
 - For Phase 3 (in addition to Phase 1 and 2 improvements):
 - A gravel equestrian staging area would be constructed adjacent to the new paved parking lot sized to allow parking for up to 20 horse trailers
 - Widen Garden Bar Road from Mount Pleasant Road to Hidden Falls access road to 20 feet of hard surfacing with 2 foot shoulders subject to County review and approval
 - Horizontal curves along Garden Bar Road would be improved as recommended in this report.

A summary matrix of findings and recommendations for each Phase (Use Category) is included in Table 5.

1. INTRODUCTION

Psomas was contracted by Placer County through EDAW to complete a Traffic Safety Study for Garden Bar Road in northern Placer County. This study forms part of the Environmental Impact Report currently being prepared by EDAW for the development of the Spears Ranch portion of the Hidden Falls Regional Park.

In September 2004, a mitigated negative declaration was adopted for the Didion Ranch portion of the park. Therefore the environmental review process has been completed for the Didion Ranch site. In 2006 improvements were completed to the access road and new parking lot constructed for the Didion Ranch portion of the Hidden Falls Regional Park.

The purpose of this study is to determine the feasibility of Garden Bar Road as a public vehicle access route into the western side (Spears Ranch portion) of the Hidden Falls Regional Park (see Figure 1). Constraints and limitations for various users and vehicle types have been identified and recommendations regarding improvements to this facility are included in this report.

The study was based on discussions with County staff, review of the project site, and implementation of design standards appropriate to the unique proposed uses of the project site. No topographical mapping was available at the time of this study and all recommendations should be confirmed and refined during the preliminary engineering phase of the project.

2. PROJECT COMPONENTS

The proposed Hidden Falls Regional Park Project would include construction of a variety of features for the various uses proposed for the park. Specific features and uses that are being considered include:

- An extensive trail system consisting of approximately 12 miles of new unpaved trails in addition to 10 miles of existing ranch roads for hikers, bikers, and equestrians
 - including bridge crossings over Coon Creek, Deadman Creek, and ephemerals to support the trail network
 - connections to the existing trail system within the Didion Ranch portion of the park and other properties;
- picnic, restroom facilities;
- fire suppression amenities;
- equestrian facilities;
- miscellaneous recreational and educational facilities.

3. PROJECT LOCATION AND EXISTING CONDITIONS

Hidden Falls Regional Park is approximately 1,182 acres in the Sierra Nevada Foothills, which consists of the properties formerly known as Spears Ranch (961 acres) and Didion Ranch (221 acres). Garden Bar Road is located to the west of the park; Mt. Vernon and Mt. Pleasant Roads are to the south; Big Hill Road is to the north, and Bell and Hubbard Roads are to the east (see Figure 2).

This portion of **Garden Bar Road** is a County maintained rural road that extends approximately 2.7 miles from the intersection with Mount Pleasant Road on the south to the proposed park entrance on the north. The roadway varies in width between 15 ft and 20 ft, has limited signage and does not have any centerline or edge line striping. Stormwater runoff is generally captured in roadside ditches and carried across the roadway through pipe culverts ranging in size from 12 inches to 36 inches. The roadway could be described as rolling and winding, with grades up to 9% and several tight radius curves (75'-300').



PLATE 1 – GARDEN BAR ROAD (SEGMENT A - STA 20+00 : LOOKING NORTH)

The roadway is lined with property fences and trees. Utility poles carrying electricity and telephone/communication lines are located alongside the roadway. No underground utilities were observed within the roadway. The southern end of the road has more driveway access points and is fairly straight with flatter grades.

The north end of the road is narrower, has more vegetation adjacent to the roadway, steeper grades and several tight radius curves. Currently, Garden Bar Road is used primarily by residents and maintenance vehicles. The road is a designated school bus route. Truck usage is restricted to times when school buses are not present.



PLATE 2 – GARDEN BAR ROAD (SEGMENT B - STA 125+00)

Mount Pleasant Road is a County maintained rural roadway that extends primarily east-west from Crosby Herold Road to Mount Vernon Road and ties into Big Ben Road in the west and Wise Road to the east. The roadway is a two lane facility with nominal shoulders and has a posted speed of 40 mph.

4. TRAFFIC ANALYSIS

A traffic analysis is currently being completed for this project to determine existing and projected future traffic volumes. Current traffic counts indicate that existing traffic volumes on Garden Bar Road are fairly low, averaging 275-325 vehicles per day (vpd) during weekdays and 225-275 vpd on weekends.

Based on experience gained from the Didion Ranch Portion of the Park, it is anticipated that the Hidden Falls Regional Park will initially generate approximately 200-300 vpd on weekends and public holidays. This number is likely to reduce after a flux in use following the initial opening of the western end of the site to public use. It should be noted that traffic volume data from the Mears Road entrance area shows that traffic

associated with the use of Hidden Falls Regional Park peaks during mid-day hours outside of typical AM and PM commute hour peaks. Peak traffic trends would likely be similar on a Garden Bar entrance.

Existing usage of Garden Bar Road is primarily limited to local residents and service vehicles. The road will continue to be a designated school bus route. It is anticipated that the park may generate a variety of traffic from bicycles, passenger vehicles and horse trailers and emergency/maintenance vehicles.

If Phase 2 usage is determined, a surfaced parking lot is proposed and will be sized to accommodate anticipated uses. In addition, a gravel overflow parking area and a secondary parking lot to accommodate a nature/conference center are being considered.

During Phase 3, a gravel equestrian staging area will be installed in addition to the amenities for Phase 2.

5. DESIGN CONSIDERATIONS

5.1 Design Vehicle/Use Category

Four phases of proposed design vehicle and use categories have been identified and are considered in this analysis:

- *Phase 1* – No general public vehicle access via Garden Bar Road – The general public would continue to access the entirety of the park from the existing entrance on Mears Place. Garden Bar entrance would continue to be used by County employees, tenants, contractors, consultants, utility providers, fire, and law enforcement personnel without additional improvements. Emergency, construction, and film production vehicles as well as occasional busses or shuttles would enter the site via the existing Garden Bar Road entrance. Occasional classroom sized groups would be permitted to access the site through Garden Bar Entrance on appointment basis (gates would be opened and closed behind groups).
- *Phase 2* – In addition to Phase 1 Access daily public automobile access would be allowed to the new staging area at western end of property via Garden Bar Road. Equestrian trailers would be excluded from the staging area via Garden Bar Road and would continue to enter the site via Mears Road staging area. Events consistent with passive recreation and education with 200 attendees or less at one time would be allowed by County Parks Division reservation. Use of ranch house for educational and/or meeting purposes would remain regulated by County Parks Division reservation system and/or use agreements. The Mears Place entrance would continue to function as a staging/parking area.
- *Phase 3* – In addition to Phase 1 and 2 Access daily public access for equestrian trailers would be allowed to the new staging area at western end of property via Garden Bar Road

The roadway width requirements for Phase 3, where horse-trailers are present and may be required to pass one another, will be greater than Phase 2 where the likelihood of two buses passing one another is small. Turning radii and tracking requirements (width from outside to inside wheel paths) for buses are slightly greater than those for standard horse-trailers or autos with trailers.

5.2 Design Speed

There is currently no posted speed along Garden Bar Road. For the purposes of this study, the design speed is assumed to be 35 mph for the lower portion of the roadway (Sta 1+00 to 46+00), from now on referred to as Segment A, and 25 mph for the remainder of the road, up to the Entrance at Sta 146+00 (Segment B). Figure 3 shows the layouts of Garden Bar Road. This was based on observations of existing travel speeds and discussions with County staff.

The minimum criteria used in this analysis are shown in Table 1 below.

TABLE 1: DESIGN CRITERIA

Criteria	Design Speed	
	25 mph	35 mph
Stopping Sight Distance	150 ft	250 ft
Horizontal Radius	200 ft	400 ft

Source: Caltrans Highway Design Manual

5.3 Typical Section (Roadway Width):

The standard for a rural secondary roadway is 32 feet of paved surface. Due to the nature of the existing roadway the standard for a rural secondary roadway is not considered appropriate for this setting and would result in unnecessary widening of the existing road and change in character of the roadway given the existing and future use levels. The County Fire Department's requirement is an 18 ft wide all-weather surface (see Figure 4) and is considered appropriate for Phase 2.

6. ANALYSIS

6.1 Roadway Width

In order to determine the minimum width, measurements were taken of the existing roadway at various intervals. Segment A was generally found to be between 16 ft and 20 ft wide, while Segment B was narrower measuring between 15 ft and 17 ft. Roadway widening is shown to occur on one side of the roadway only to make construction more practical and cost effective. Roadway widening is proposed on the side which has the least impact on properties, trees, environmentally sensitive areas and utility poles.

Roadway widening would be required through several areas where potential wetlands were noted. These include Sta 7+20 (left), Sta 17+00 (left), Sta 37+50 (right) and Sta

67+00 (right). Roadway widening would also impact a significant number of trees along the roadway.

Existing roadside ditches would be perpetuated where widening is to take place. Based on observations of the existing cut slopes and soil type, cut slopes are likely to be 2:1 or steeper as recommended by a geotechnical engineer.

The minimum County Fire Department requirement of 18 ft with 2 ft unpaved shoulders considered reasonable for Phase 3 traffic would require widening the existing roadway for a length of 7,600 feet as shown in Figure 3.

Phase 1 usage would not be considered to be significantly greater than baseline usage, so roadway widening and realignment would not be considered necessary.

6.2 Horizontal Alignment

Segment A is generally a straight alignment with a minimum curve radius of 400 ft. No realignments are recommended.

Segment B has several tight radius curves that do not meet the minimum design standards of 200 ft to 400 ft.

Several options were considered to improve the sight distance at these locations as shown in Table 2 below.

TABLE 2: HORIZONTAL SIGHT DISTANCE IMPROVEMENT OPTIONS

Option	Pros	Cons
Realign Road	Improves sight distance Improves safety	Impacts on property, vegetation, utilities would be greater Increased cost May increase traveled speed
Earthwork to push back cut slopes	Improves sight distance	Impacts on property, vegetation, utilities. Does not satisfy design speed criteria.
Roadway Widening	Assists in improving safety Impacts would be fairly minor	Does not satisfy design speed criteria
Vegetation Removal	Assists in improving sight distance Impacts to property would be minor	Impacts to trees and vegetation would remain. Does not satisfy design speed criteria



PLATE 3 – GARDEN BAR ROAD (SEGMENT B - STA 75+00)

After review of the project site the following recommendations have been made for each of the substandard horizontal curves identified in Figure 3 (see Table 3 below). During Phase 1 and 2 additional warning signs are recommended along Garden Bar Road to notify motorists of tight radius curves.

TABLE 3: RECOMMENDED IMPROVEMENT OPTION

Curve Number	Curve Location	Recommended Improvement	Justification
HC-1	Sta 47+00 (Radius 90 ft)	Realignment – Increase radius to 200 ft. Widen to inside.	This is the first curve at the end of Segment A and is below the minimum standard. Widening would impact property on the west side of the roadway. 4-5 trees would be impacted and a utility pole.
HC-2	Sta 55+00 (Radius 175 ft)	Earthwork - push back existing cut slope as part of widening	This short length of roadway could be corrected by pushing back the 10 ft high cut slope on the right side. Widening on the left side is not feasible due to the steep drop off and large number of trees.

TABLE 3: RECOMMENDED IMPROVEMENT OPTION (CONTINUED)

Curve Number	Curve Location	Recommended Improvement	Justification
HC-3	Sta 72+00 (Radius 110 ft) to Sta 75+00 (Radius 110 ft)	Realignment – Increase radius to 200 ft minimum.	This section presents a number of safety concerns with very poor sight distance, steep grades and a driveway at Sta 75+50 (see Plate 3). Widening is recommended to the southwest away from the steep cut slope on the north east side of the road.
HC-4	Sta 83+50 (Radius 110 ft)	Removal of vegetation and widening right.	Removal of the vegetation on the west side of the roadway and widening out to the east are recommended. The existing pipe culvert would need to be replaced or extended if feasible.
HC-5	Sta 96+00 (Radius 150 ft)	Realignment and lowering of the profile are recommended at this location	This curve does not meet the minimum standards for horizontal or vertical curves although the roadway width is adequate. Recommend realignment to the east where a small cut slope of 2-3 ft exists. No trees would be affected.
HC-6	Sta 100+00 (Radius 100 ft)	Realignment –increase radius to 200 ft	Realign to the east where a small cut slope of 3-5 ft exists. One tree may be affected.
HC-7	Sta 108+00 (Radius 75 ft)	Realignment to increase the radius to 200 ft or modify this tee-intersection into a three- way stop.	Realignment would result in a number of large trees being removed. To avoid this, an option would be to install a three way stop controlled intersection.
HC-8	Sta 116+00 (Radius 100 ft)	Realignment between rock outcroppings may be possible along with earthwork and vegetation removal.	Realignment would require excavation of rock which is evident on both sides of the road.
HC-9	Sta 120+00 (Radius 125 ft)	Realignment to increase the radius to 200 ft.	Realignment to the west is recommended creating a small fill slope. Several trees would be impacted. Removal of vegetation only would improve sight distance during daylight.

HC-#: For Horizontal Curve Number see Layout Plans in Figure 3

TABLE 3: RECOMMENDED IMPROVEMENT OPTION (CONTINUED)

Curve Number	Curve Location	Recommended Improvement	Justification
HC-10	Sta 122+50 (Radius 80 ft)	Widening – to improve sight distance at this location.	Realignment to achieve a 200 ft radius would require significant rock excavation and probably blasting. Existing rock outcropping is probably 50 ft above the roadway. Widening out on the west side is more feasible although achieving a 200 ft radius would be difficult without significant earthwork.
HC-11	Sta 126+50 (Radius 100 ft)	Realignment to increase the radius to 200 ft.	Realignment to the west is recommended creating a small fill slope. Several trees would be impacted. Removal of vegetation only would improve sight distance during daylight.
HC-12	Sta 144+00 (Radius 80 ft)	Realignment – Increase radius to 200 ft. Widen to inside and realign the entrance roadway into the park to the apex of the curve. Consideration should be given to making this a tee intersection with a 3-way stop.	This is the proposed location of the Park entrance. Sight distance at this curve would be desirable. Realignment would be relatively easy.

HC-#: For Horizontal Curve Number see Layout Plans in Figure 3

At each curve where the radius is 200 ft or less, it is recommended that the roadway be widened to satisfy the off-tracking requirements for buses, autos with trailers and horse trailers. The recommended widening shall be as follows:

- 100 ft radius – 12 ft minimum lane width
- 150 ft radius – 11 ft minimum lane width
- 200 ft radius – 10 ft minimum lane width

6.3 Vertical Profile:

Several locations along Segment A were identified as having inadequate sight distance due to the length of the vertical curve and approach and exit grades. In addition, at most of these locations, private access driveways are located at the crests of these curves resulting in limited sight distance for motorists entering the roadway. This was confirmed from discussions with several local residents who expressed their concerns with the limited sight distance of the existing roadway.



PLATE 3 – GARDEN BAR ROAD (SEGMENT A - STA 30+00)

After review of the project site, the following recommendations have been made for each of the substandard vertical curves identified in Figure 3 (see Table 4 below). These recommendations are applicable to all vehicle type/use categories. It is recommended that priority be given to those areas identified in Segment A.

TABLE 4: RECOMMENDED VERTICAL CURVE IMPROVEMENTS

Curve Number	Curve Location	Recommended Improvement	Impacts
VC-1	Sta 30+00 (Sight distance 140 ft, approach grades 7% and -9%)	Lower vertical curve by up to 5 ft to achieve 250 ft required sight distance.	Lowering the vertical curve would result in increasing cut slopes by 5 ft, reconstructing fences, tree removal and reconstructing portions of the driveway approaches.
VC-2	Sta 35+00 (Sight distance 120 ft, approach grades 7% and -2%)	Lower vertical curve by up to 5 ft to achieve 250 ft required sight distance.	Lowering the vertical curve would result in increasing cut slopes by 5 ft, reconstructing fences, tree removal and reconstructing portions of the driveway approaches.

**TABLE 4: RECOMMENDED VERTICAL CURVE IMPROVEMENTS
(CONTINUED)**

Curve Number	Curve Location	Recommended Improvement	Impacts
VC-3	Sta 96+00 (Sight distance 130 ft, approach grades 5% and -5%)	Lower vertical curve by 2-3 ft to achieve 150 ft required sight distance.	Lowering the vertical curve would result in increasing cut slopes by 2-3 ft, to 3-5 ft reconstructing fences and reconstructing portions of the driveway approach to the west.
VC-4	Sta 104+00 (Sight distance 130 ft, approach grades 7% and -4%)	Lower vertical curve by 2-3 ft to achieve 150 ft required sight distance.	Lowering the vertical curve would result in increasing cut slopes by 2 ft to 3-5 ft.
VC-5	Sta 111+00 (Sight distance 120 ft, approach grades 6% and -8%)	Lower vertical curve by 2-3 ft to achieve 150 ft required sight distance.	Lowering the vertical curve would result in increasing cut slopes by 2 ft to 3-5 ft, reconstructing fences, tree removal and reconstructing portions of the driveway approaches.

VC-#: For Vertical Curve Number see Layout Plans in Figure 3

Consideration should be given to reducing the design speed on the entire roadway to 25 mph. This will reduce the extent of the profile adjustments required to meet the minimum sight distance standard.

6.4 Drainage

Existing drainage appears to be working adequately with the use of roadside ditches and cross culverts. Discussion with County maintenance staff confirmed there is no known existing flooding or major erosion concerns along this portion of Garden Bar Road. The majority of stormwater runoff is conveyed in roadside ditches and cross pipe culverts varying in size from 12 inches to 36 inches. It is proposed to maintain existing drainage patterns with the improvements. Where new roadside ditches are constructed, rock slope protection (RSP) or other Best Management Practices (BMP's) are recommended where grades result in velocities that exceed the permissible velocities in Table 862.2 of the Highway Design Manual. Flared end sections and rip-rap or RSP is recommended at the outlets of cross culverts.



PLATE 4 – GARDEN BAR ROAD (SEGMENT B - STA 66+00)

6.5 Signing and Striping

Garden Bar Road is not currently striped. It is recommended that the intersections of Garden Bar Road and Mt Pleasant Road be striped and a “STOP” pavement marking, stop limit line and a Stop sign (R1-1) be installed. The same would apply to the tee-intersection at Sta 108+00. These improvements are recommended for all proposed vehicle type/use categories. As discussed previously, consideration should be given to making the entrance road off of Garden Bar a tee-intersection and a 3-way stop.

For proposed vehicle type/use categories 2 and 3 it is recommended that at all tight radius horizontal curves (200 ft or less) directional warning signs (W1-8) be installed. Where driveways occur in the apex of the horizontal and vertical curves additional warning signs should be installed. Warning signs alerting motorists of winding roads (W1-5) and bicycles (W11-1) and speed limit signs (R2-1) shall be posted at several locations along the roadway. The specific types and number of signs should be confirmed during the schematic design (preliminary engineering) phase. The entrance road to the park at Sta 144+00 should be realigned and located at the apex of the curve to provide maximum sight distance. The entrance road should be paved due to the steep grades and would also require installation of a “STOP” pavement marking, stop limit line and Stop sign (R1-1).

Directional guidance signs would be placed along primary public access routes from both Auburn and Lincoln. For Phase 3 broader signage may be required due to the type of motorist associated with this use category. In addition, the higher traffic influx associated with a Phase 3 scenario (as opposed to the relatively metered and incremental increase in traffic associated with Phase 2) may provide nexus to evaluate roadway deficiencies on additional key ingress/egress routes beyond the limits of this study, such as Garden Bar Road south of Mount Pleasant and the Garden Bar/Wise Road intersection.

It is anticipated that a parking lot will be included with this project similar to what was recently constructed at the Mears Road Entrance. Directional and informational signs located at specific locations throughout Hidden Falls Regional Park and a kiosk would be placed at the parking/staging area in addition to interpretive and directional signage and/or audio-visual displays at key points throughout the property.

6.6 Summary Matrix of Proposed Improvements

TABLE 5: SUMMARY OF PROPOSED IMPROVEMENTS

Proposed Improvement	Phase 1 (Category 1)	Phase 2 (Category 2)	Phase 3 (Category 3)
Roadway Widening to 18 ft minimum	None	7,600 ft	N/A
Roadway Widening to 20 ft minimum	None	N/A	10,400 ft
Realignment of roadway – Increase minimum radius to 200 ft.	None	Additional warning signs are recommended along Garden Bar Road to notify motorists of tight radius curves.	Curves HC-1, HC-2 HC-3, HC-4 HC-5, HC-6 HC-7, HC-8 HC-9, HC-10 HC-11, HC-12
Profile Adjustment	None	Curves VC-1, VC-2 VC-3, VC-4 VC-5	Curves VC-1, VC-2 VC-3, VC-4 VC-5
Drainage Improvements	None	Yes	Yes

TABLE 5: SUMMARY OF PROPOSED IMPROVEMENTS (Continued)

Proposed Improvement	Phase 1 (Category 1)	Phase 2 (Category 2)	Phase 3 (Category 3)
Signing and Striping	Several warning signs are recommended	Several warning signs are recommended	Several warning signs are recommended with additional Guidance Signs
Intersection Improvements	Minor entrance road improvements including gate, cattle guards and fencing Mt Pleasant/ Garden Bar Rd Signing & Striping Improvements	Improve the access road from Garden Bar Road to the staging area to 24 feet wide with 2 foot shoulders Mt Pleasant/ Garden Bar Rd Signing & Striping Improvements	Mt Pleasant/ Garden Bar Rd Signing & Striping Improvements

7. PHASING

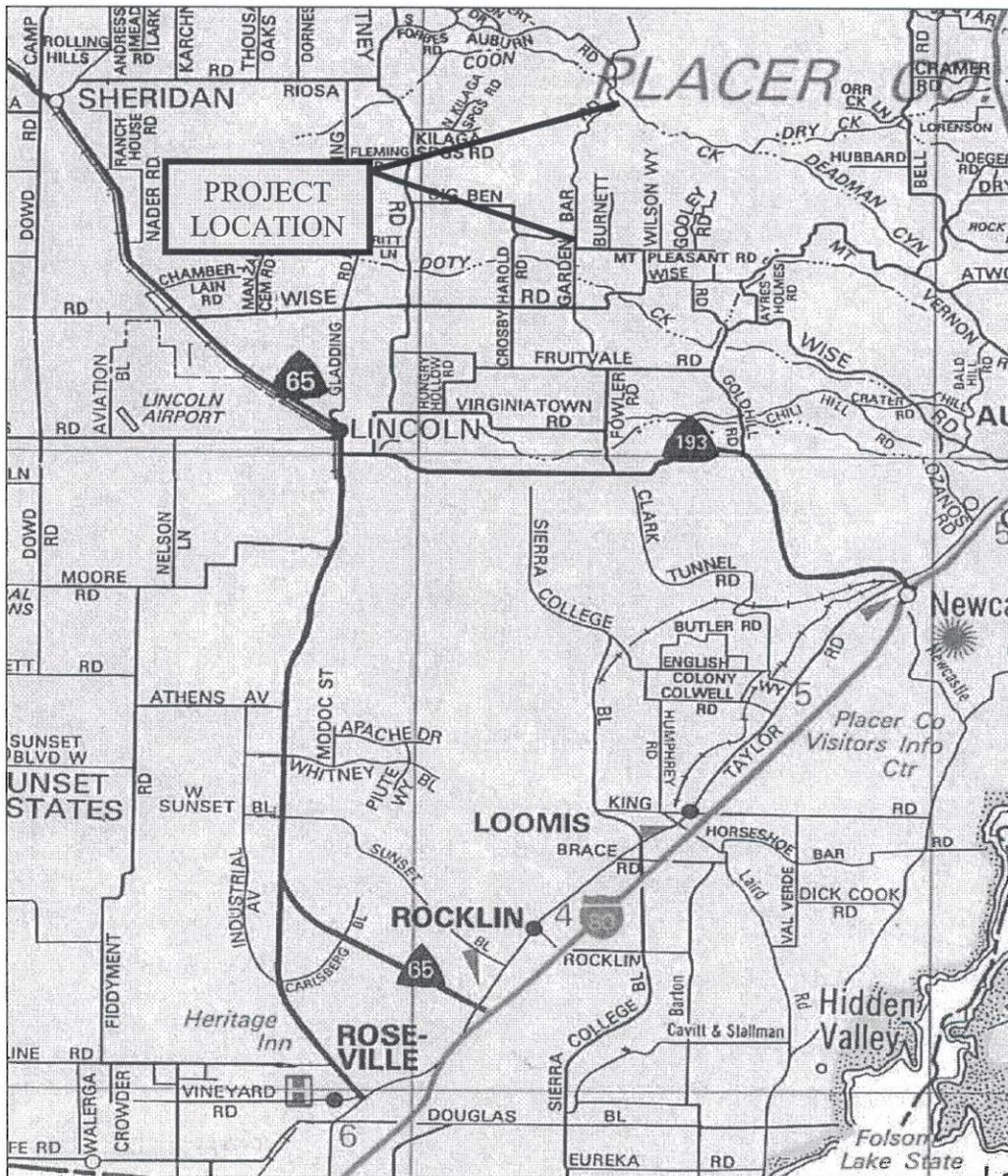
In consideration of the phasing alternatives for public vehicle access along Garden Bar Road The following is a priority ranking of recommended improvements:

1. Signing and striping at identified intersections
2. Vertical sight distance deficiencies along Segment A of Garden Bar Road.
3. Horizontal/vertical sight distance issues along Segment B of Garden Bar Road.
4. Roadway widening at tight radius curves.
5. General roadway widening and drainage improvements.

Phasing of the project would be scheduled based on funding availability, user demand, and other factors.

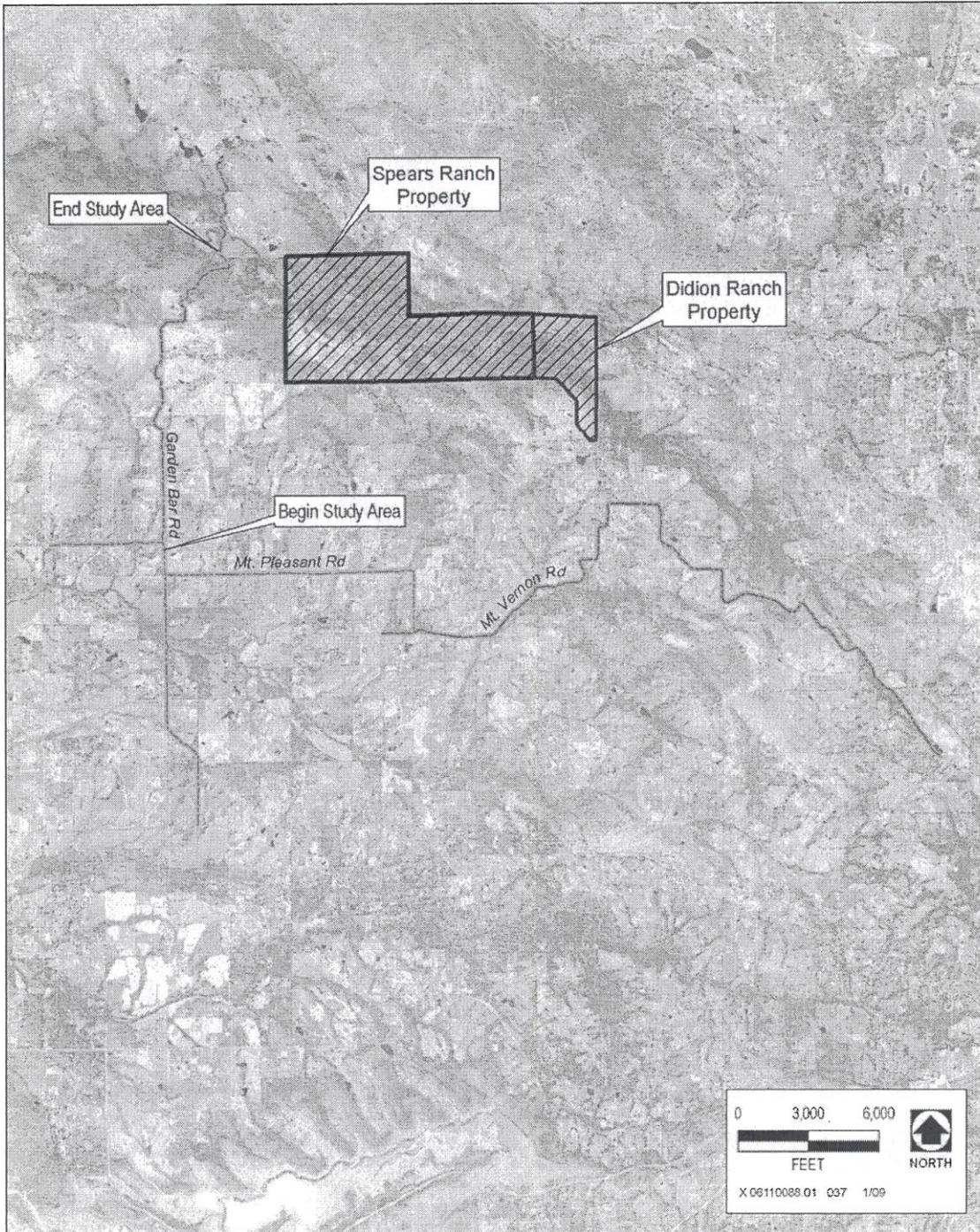
8. COSTS

Development of construction costs associated with these improvements is beyond the scope of the Traffic Safety Study and would be performed during the Schematic Design (Preliminary Engineering) Phase.

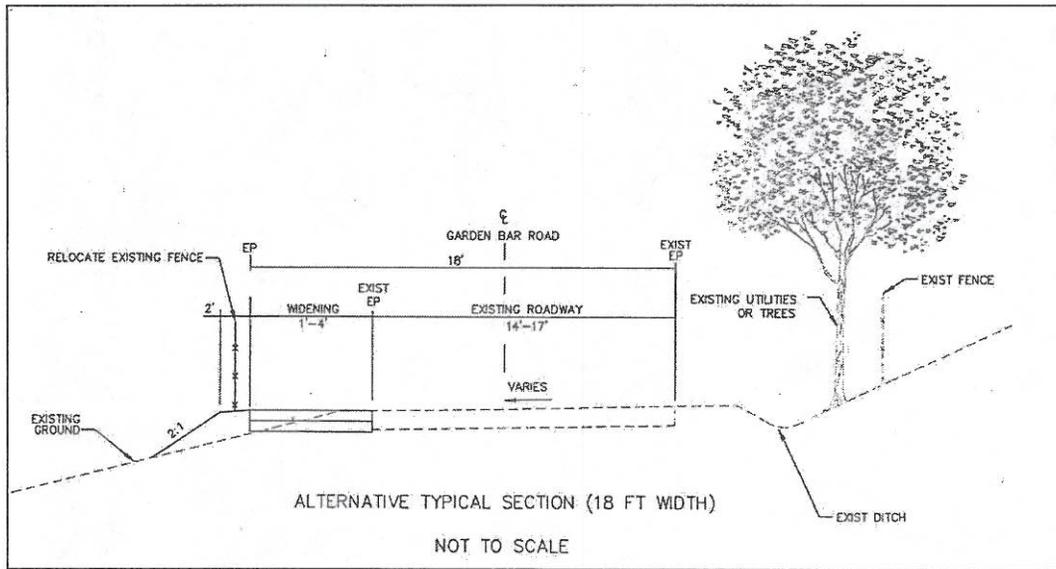


NOT TO SCALE

FIGURE 1:
VICINITY MAP



**FIGURE 2:
LOCATION MAP AND STUDY LIMITS**



**FIGURE 4:
TYPICAL ROADWAY CROSS SECTION
(18 FT WIDTH)**

APPENDIX D

Air Quality

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\Documents and Settings\boparaip\Desktop\Work\Hidden Falls Regional Park\Urbemis\Facilities Construction.urb924

Project Name: Construction of maintenance buildings

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
2008											
Fine Grading 05/01/2008-	0.39	1.04	0.62	0.00	0.01	0.06	0.08	0.00	0.06	0.06	98.40
Fine Grading Dust	0.04	0.31	0.16	0.00	0.01	0.02	0.03	0.00	0.01	0.02	25.84
Fine Grading Off Road Diesel	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
Fine Grading On Road Diesel	0.04	0.31	0.15	0.00	0.00	0.02	0.02	0.00	0.01	0.01	24.72
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12
Asphalt 06/02/2008-06/11/2008	0.02	0.10	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	9.22
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.07	0.03	0.00	0.00	0.01	0.01	0.00	0.01	0.01	4.53
Paving On Road Diesel	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.88
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
Building 06/12/2008-11/21/2008	0.09	0.63	0.40	0.00	0.00	0.04	0.04	0.00	0.04	0.04	63.04
Building Off Road Diesel	0.08	0.61	0.30	0.00	0.00	0.04	0.04	0.00	0.04	0.04	52.26
Building Vendor Trips	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.17
Building Worker Trips	0.00	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.61
Coating 11/22/2008-12/11/2008	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
Architectural Coating	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29

Phase Assumptions

Phase: Fine Grading 5/1/2008 - 6/1/2008 - Default Fine Site Grading Description

Total Acres Disturbed: 0.12

Maximum Daily Acreage Disturbed: 0.12

Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 6/2/2008 - 6/11/2008 - Default Paving Description

Acres to be Paved: 6.5

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 6/12/2008 - 11/21/2008 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 11/22/2008 - 12/11/2008 - Default Architectural Coating Description

- Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
- Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
- Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
- Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\Documents and Settings\boparaip\Desktop\Work\Hidden Falls Regional Park\Urbemis\Trail Construction.urb924

Project Name: Trail Construction

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
2008	0.08	0.58	0.30	0.00	1.87	0.03	1.90	0.39	0.03	0.42	60.57
Mass Grading 09/01/2008-	0.08	0.58	0.30	0.00	1.87	0.03	1.90	0.39	0.03	0.42	60.57
Mass Grading Dust	0.00	0.00	0.00	0.00	1.87	0.00	1.87	0.39	0.00	0.39	0.00
Mass Grading Off Road Diesel	0.08	0.50	0.24	0.00	0.00	0.03	0.03	0.00	0.02	0.02	47.90
Mass Grading On Road Diesel	0.00	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.30
Mass Grading Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.37
2009	0.06	0.45	0.23	0.00	1.53	0.02	1.55	0.32	0.02	0.34	49.56
Mass Grading 09/01/2008-	0.06	0.45	0.23	0.00	1.53	0.02	1.55	0.32	0.02	0.34	49.56
Mass Grading Dust	0.00	0.00	0.00	0.00	1.53	0.00	1.53	0.32	0.00	0.32	0.00
Mass Grading Off Road Diesel	0.06	0.39	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	39.19
Mass Grading On Road Diesel	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.61
Mass Grading Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.76

Phase Assumptions

Phase: Mass Grading 9/1/2008 - 4/1/2009 - Trail Excavation

Total Acres Disturbed: 17

Maximum Daily Acreage Disturbed: 4.25

Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 52.5

Off-Road Equipment:

1 Excavators (42 hp) operating at a 0.57 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Rubber Tired Dozers (84 hp) operating at a 0.59 load factor for 6 hours per day

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Documents and Settings\boparaip\Desktop\Work\Hidden Falls Regional Park\Urbemis\Facilities Construction.urb924

Project Name: Construction of maintenance buildings

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 5/1/2008-5/30/2008 Active	3.35	28.06	14.68	0.00	1.20	1.41	2.62	0.25	1.30	1.55	2,349.48
- Fine Grading 05/01/2008-	3.35	28.06	14.68	0.00	1.20	1.41	2.62	0.25	1.30	1.55	2,349.48
- Fine Grading Dust	0.00	0.00	0.00	0.00	1.20	0.00	1.20	0.25	0.00	0.25	0.00
- Fine Grading Off Road Diesel	3.31	28.00	13.56	0.00	0.00	1.41	1.41	0.00	1.30	1.30	2,247.32
- Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
- Fine Grading Worker Trips	0.04	0.06	1.12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.17
Time Slice 6/2/2008-6/11/2008 Active	5.48	24.61	13.35	0.01	0.04	1.72	1.76	0.01	1.58	1.60	2,305.98
- Asphalt 06/02/2008-06/11/2008	5.48	24.61	13.35	0.01	0.04	1.72	1.76	0.01	1.58	1.60	2,305.98
- Paving Off-Gas	2.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
- Paving Off Road Diesel	2.78	16.39	8.47	0.00	0.00	1.40	1.40	0.00	1.29	1.29	1,131.92
- Paving On Road Diesel	0.50	8.09	2.65	0.01	0.03	0.32	0.35	0.01	0.29	0.30	969.73
- Paving Worker Trips	0.07	0.12	2.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	204.33
Time Slice 6/12/2008-11/21/2008	1.46	10.78	6.85	0.00	0.01	0.68	0.69	0.00	0.62	0.63	1,077.58
- Building 06/12/2008-11/21/2008	1.46	10.78	6.85	0.00	0.01	0.68	0.69	0.00	0.62	0.63	1,077.58
- Building Off Road Diesel	1.39	10.47	5.09	0.00	0.00	0.67	0.67	0.00	0.61	0.61	893.39
- Building Vendor Trips	0.02	0.23	0.15	0.00	0.00	0.01	0.01	0.00	0.01	0.01	37.07
- Building Worker Trips	0.05	0.09	1.61	0.00	0.01	0.00	0.01	0.00	0.00	0.01	147.12
Time Slice 11/24/2008-12/11/2008	34.72	0.03	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.38
- Coating 11/22/2008-12/11/2008	34.72	0.03	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.38
- Architectural Coating	34.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
- Coating Worker Trips	0.01	0.03	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.38

Phase Assumptions

Phase: Fine Grading 5/1/2008 - 6/1/2008 - Default Fine Site Grading Description

Total Acres Disturbed: 0.12

Maximum Daily Acreage Disturbed: 0.12

Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

5/15/2008 04:41:15 PM

- | Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
- | Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- | Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 6/2/2008 - 6/11/2008 - Default Paving Description

Acres to be Paved: 6.5

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 6/12/2008 - 11/21/2008 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 11/22/2008 - 12/11/2008 - Default Architectural Coating Description

- Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
- Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
- Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
- Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name: C:\Documents and Settings\boparaip\Desktop\Work\Hidden Falls Regional Park\Urbemis\Trail Construction.urb924

Project Name: Trail Construction

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Time Slice	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
9/1/2008-12/31/2008 Active	1.89	13.18	6.81	0.00	42.51	0.66	43.17	8.88	0.61	9.49	1,376.62
Mass Grading 09/01/2008-	1.89	13.18	6.81	0.00	42.51	0.66	43.17	8.88	0.61	9.49	1,376.62
Mass Grading Dust	0.00	0.00	0.00	0.00	42.50	0.00	42.50	8.88	0.00	8.88	0.00
Mass Grading Off Road Diesel	1.75	11.37	5.40	0.00	0.00	0.59	0.59	0.00	0.54	0.54	1,088.62
Mass Grading On Road Diesel	0.11	1.76	0.58	0.00	0.01	0.07	0.08	0.00	0.06	0.07	211.37
Mass Grading Worker Trips	0.03	0.05	0.84	0.00	0.00	0.00	0.01	0.00	0.00	0.00	76.63
1/1/2009-4/10/2009 Active	1.75	12.43	6.46	0.00	42.51	0.62	43.13	8.88	0.57	9.45	1,376.65
Mass Grading 09/01/2008-	1.75	12.43	6.46	0.00	42.51	0.62	43.13	8.88	0.57	9.45	1,376.65
Mass Grading Dust	0.00	0.00	0.00	0.00	42.50	0.00	42.50	8.88	0.00	8.88	0.00
Mass Grading Off Road Diesel	1.63	10.74	5.16	0.00	0.00	0.56	0.56	0.00	0.51	0.51	1,088.62
Mass Grading On Road Diesel	0.10	1.65	0.53	0.00	0.01	0.06	0.07	0.00	0.06	0.06	211.37
Mass Grading Worker Trips	0.02	0.04	0.77	0.00	0.00	0.00	0.01	0.00	0.00	0.00	76.66

Phase Assumptions

Phase: Mass Grading 9/1/2008 - 4/11/2009 - Trail Excavation

Total Acres Disturbed: 17

Maximum Daily Acreage Disturbed: 4.25

Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 52.5

Off-Road Equipment:

1 Excavators (42 hp) operating at a 0.57 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Rubber Tired Dozers (84 hp) operating at a 0.59 load factor for 6 hours per day

Summary Report for Annual Emissions (Tons/Year)

File Name: C:\Documents and Settings\boparaip\Desktop\Work\Hidden Falls Regional Park\Urbemis\Trail Construction.urb924

Project Name: Trail Construction

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2008 TOTALS (tons/year unmitigated)	0.08	0.58	0.30	0.00	1.87	0.03	0.39	0.03	0.42	60.57
2009 TOTALS (tons/year unmitigated)	0.06	0.45	0.23	0.00	1.53	0.02	0.32	0.02	0.34	49.56

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: C:\Documents and Settings\boparaip\Desktop\Work\Hidden Falls Regional Park\Urbemis\Facilities Construction.urb924

Project Name: Construction of maintenance buildings

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2008 TOTALS (lbs/day unmitigated)	34.72	28.06	14.68	0.01	1.20	1.72	0.25	1.58	1.60	2,349.48

Summary Report for Summer Emissions (Pounds/Day)

File Name: C:\Documents and Settings\boparaip\Desktop\Work\Hidden Falls Regional Park\Urbemis\Weekend Traffic.urb924

Project Name: Hidden Falls Operational - Weekend

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

TOTALS (lbs/day, unmitigated)	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
	3.39	5.05	42.22	0.03	5.93	1.16	3,472.95

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

TOTALS (lbs/day, unmitigated)	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
	3.39	5.05	42.22	0.03	5.93	1.16	3,472.95

Summary Report for Summer Emissions (Pounds/Day)

File Name: C:\Documents and Settings\boparaip\Desktop\Work\Hidden Falls Regional Park\Urbemis\Trail Construction.urb924

Project Name: Trail Construction

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2008 TOTALS (lbs/day unmitigated)	1.89	13.18	6.81	0.00	42.51	0.66	43.17	8.88	0.61	9.49	1,376.62
2009 TOTALS (lbs/day unmitigated)	1.75	12.43	6.46	0.00	42.51	0.62	43.13	8.88	0.57	9.45	1,376.65

Summary Report for Winter Emissions (Pounds/Day)

File Name: C:\Documents and Settings\boparaip\Desktop\Work\Hidden Falls Regional Park\Urbemis\Weekend Traffic.urb924

Project Name: Hidden Falls Operational - Weekend

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	4.43	7.23	48.75	0.03	5.93	1.16	3,033.86

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	4.43	7.23	48.75	0.03	5.93	1.16	3,033.86

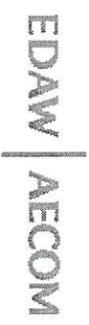
APPENDIX E

Noise Modeling

Appendix E
Traffic Noise Prediction Model, (FHWA RD-77-108)
 Predicted Noise Levels

Project Name : Hidden Falls Regional Park EIR
 Project Number : 6110088.01

Modeling Condition : Existing
 Metric (Leq, Ldn, CNEL) : CNEL



Segment	Roadway	Segment		Noise Levels, dB CNEL				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	Garden Bar Rd (N)	Mt Pleasant Rd	project access	42.6	40.5	45.1	47.9	2	4	8	17	36
2	Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	51.7	47.7	49.9	54.8	5	10	23	49	105
3	Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	51.1	45.7	47.1	53.4	4	8	18	39	84
4	Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd	55.0	49.5	51.0	57.2	7	15	33	70	152
5	Mears Dr (temporary)	Mears Place	Mt Vernon Rd	43.8	41.7	46.3	49.1	2	4	9	20	44
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	42.2	40.1	44.7	47.5	2	3	7	16	34
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	50.8	46.8	48.9	53.9	4	9	20	42	91
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	50.3	44.8	46.3	52.6	3	7	16	34	74
9	WK Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd	53.9	48.4	49.9	56.2	6	13	28	60	129
10	WK Mears Dr (temporary)	Mears Place	Mt Vernon Rd	43.0	40.9	45.5	48.3	2	4	8	18	39

Appendix E
Traffic Noise Prediction Model, (FHWA RD-77-108)
 Model Input Sheet



Project Name : Hidden Falls Regional Park EIR
 Project Number : 6110088.01
 Modeling Condition : Existing
 Ground Type : Soft
 Metric (L_{day}, L_{dn}, CNEq) : CNEq
 K Factor :
 Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment		Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
		From	To										
1	Garden Bar Rd (N)	Mt Pleasant Rd	project access	285	25	50	94	4	2	78.97	11.27	9.76	0
2	Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	885	35	50	94	4	2	78.97	11.27	9.76	0
3	Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	375	45	50	94	4	2	78.97	11.27	9.76	0
4	Mt Pleasant Rd	Garden Bar Rd (S; Wally Allen Rd		910	45	50	94	4	2	78.97	11.27	9.76	0
5	Mears Dr (temporary)	Mears Place	Mt Vernon Rd	377	25	50	94	4	2	78.97	11.27	9.76	0
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	260	25	50	94	4	2	78.97	11.27	9.76	0
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	715	35	50	94	4	2	78.97	11.27	9.76	0
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	310	45	50	94	4	2	78.97	11.27	9.76	0
9	WK Mt Pleasant Rd	Garden Bar Rd (S; Wally Allen Rd		710	45	50	94	4	2	78.97	11.27	9.76	0
10	WK Mears Dr (temporary)	Mears Place	Mt Vernon Rd	314	25	50	94	4	2	78.97	11.27	9.76	0

Appendix E

Traffic Noise Prediction Model, (FHWA RD-77-108)
Model Input Sheet

Project Name : Hidden Falls Regional Park EIR

Project Number : 6110088.01

Modeling Condition : Existing + Project

Ground Type : Soft

Metric (L_{eq}, L_{dni}, CNEL) : CNEL

K Factor :

Traffic Desc. (Peak or ADT) : ADT



Segment	Roadway	From	To	Segment	Traffic Vol. (Mph)	Speed	Distance	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
						(Mph)	to CL							
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access		541	25	50	94	4	2	78.97	11.27	9.76	0
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd		969	35	50	94	4	2	78.97	11.27	9.76	0
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)		457	45	50	94	4	2	78.97	11.27	9.76	0
4	WD Mt Pleasant Rd	Garden Bar Rd	(S), Wally Allen Rd		1000	45	50	94	4	2	78.97	11.27	9.76	0
5	WD Mears Dr (temporary)	Mears Place	Mt Vernon Rd		441	25	50	94	4	2	78.97	11.27	9.76	0
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access		720	25	50	94	4	2	78.97	11.27	9.76	0
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd		867	35	50	94	4	2	78.97	11.27	9.76	0
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)		458	45	50	94	4	2	78.97	11.27	9.76	0
9	WK Mt Pleasant Rd	Garden Bar Rd	(S), Wally Allen Rd		872	45	50	94	4	2	78.97	11.27	9.76	0
10	WK Mears Dr (temporary)	Mears Place	Mt Vernon Rd		429	25	50	94	4	2	78.97	11.27	9.76	0

Appendix E
Traffic Noise Prediction Model, (FHWA RD-77-108)
 Predicted Noise Levels

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Existing + Project
Metric (Leq, Ldn, CNEL) : CNEL



Segment	Roadway	Segment		Noise Levels, dB CNEL				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access	45.4	43.3	47.9	50.7	3	6	12	26	56
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	52.1	48.1	50.3	55.2	5	11	24	52	111
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	52.0	46.5	48.0	54.2	4	10	21	45	96
4	WD Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd	55.4	49.9	51.4	57.6	8	16	35	75	162
5	WD Mears Dr (temporary)	Mears Place	Mt Vernon Rd	44.5	42.4	47.0	49.8	2	5	10	22	48
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	46.6	44.5	49.1	51.9	3	7	14	31	67
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	51.6	47.6	49.8	54.7	5	10	22	48	103
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	52.0	46.5	48.0	54.3	4	10	21	45	96
9	WK Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd	54.8	49.3	50.8	57.0	7	15	32	68	148
10	WK Mears Dr (temporary)	Mears Place	Mt Vernon Rd	44.4	42.3	46.9	49.7	2	5	10	22	48

Appendix E
Traffic Noise Prediction Model, (FHWA RD-77-108)
 Model Input Sheet

Project Name : Hidden Falls Regional Park EIR

Project Number : 6110088.01

Modeling Condition : Cumulative + Project

Ground Type : Soft

Metric (L_{eq}, L_{dn}, CNEL) : CNEL

K Factor :

Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	From	Segment	To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access	project access	500	25	50	94	4	2	78.97	11.27	9.76	0
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	Wise Rd	1110	35	50	94	4	2	78.97	11.27	9.76	0
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	Garden Bar Rd (N)	540	45	50	94	4	2	78.97	11.27	9.76	0
4	WD Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd	Garden Bar Rd (S)	1125	45	50	94	4	2	78.97	11.27	9.76	0
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	project access	455	25	50	94	4	2	78.97	11.27	9.76	0
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	Wise Rd	900	35	50	94	4	2	78.97	11.27	9.76	0
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	Garden Bar Rd (N)	435	45	50	94	4	2	78.97	11.27	9.76	0
9	WK Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd	Garden Bar Rd (S)	880	45	50	94	4	2	78.97	11.27	9.76	0

Appendix E
Traffic Noise Prediction Model, (FHWA RD-77-108)
 Predicted Noise Levels

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Cumulative + Project
Metric (Leq, Ldn, CNEL) : CNEL

Segment	Roadway	Segment		Noise Levels, dB CNEL				Distance to Traffic Noise Contours, Feet				
		From	To	Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access	45.0	42.9	47.5	50.3	2	5	11	24	53
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	52.7	48.7	50.9	55.8	6	12	26	57	122
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	52.7	47.2	48.7	55.0	5	11	23	50	107
4	WD Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd	55.9	50.4	51.9	58.2	8	17	38	81	175
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	44.6	42.5	47.1	50.0	2	5	11	23	50
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	51.8	47.8	49.9	54.9	5	11	23	49	106
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	51.8	46.3	47.8	54.0	4	9	20	43	93
9	WK Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd	54.8	49.4	50.8	57.1	7	15	32	69	148

Appendix G
Traffic Noise Prediction Model, (FHWA RD-77-108)
 Model Input Sheet

Project Name : Hidden Falls Regional Park EIR

Project Number : 6110088.01

Modeling Condition : Cumulative + Project

Ground Type : Soft

Metric (L_{eq}, L_{dn}, CNEL) : CNEL

K Factor :

Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	From	To	Segment	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	Offset (dB)
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access		756	25	50	94	4	2	78.97	11.27	9.76	0
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd		1194	35	50	94	4	2	78.97	11.27	9.76	0
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)		622	45	50	94	4	2	78.97	11.27	9.76	0
4	WD Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd		1215	45	50	94	4	2	78.97	11.27	9.76	0
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access		915	25	50	94	4	2	78.97	11.27	9.76	0
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd		1052	35	50	94	4	2	78.97	11.27	9.76	0
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)		583	45	50	94	4	2	78.97	11.27	9.76	0
9	WK Mt Pleasant Rd	Garden Bar Rd (S)	Wally Allen Rd		1042	45	50	94	4	2	78.97	11.27	9.76	0

Appendix G
Traffic Noise Prediction Model, (FHWA RD-77-108)
 Predicted Noise Levels

Project Name : Hidden Falls Regional Park EIR
Project Number : 6110088.01
Modeling Condition : Cumulative + Project
Metric (Leq, Ldn, CNEL) : CNEL

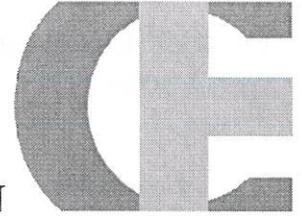
Segment	Roadway		Segment	Noise Levels, dB CNEL				Distance to Traffic Noise Contours, Feet				
	From	To		Auto	MT	HT	Total	70 dB	65 dB	60 dB	55 dB	50 dB
1	WD Garden Bar Rd (N)	Mt Pleasant Rd	project access	46.8	44.7	49.3	52.1	3	7	15	32	69
2	WD Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	53.0	49.0	51.2	56.1	6	13	28	59	128
3	WD Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	53.3	47.9	49.3	55.6	5	12	25	55	118
4	WD Mt Pleasant Rd	Garden Bar Rd	(S) Wally Allen Rd	56.2	50.8	52.2	58.5	9	18	40	85	184
6	WK Garden Bar Rd (N)	Mt Pleasant Rd	project access	47.6	45.5	50.2	53.0	4	8	17	37	79
7	WK Garden Bar Rd (S)	Mt Pleasant Rd	Wise Rd	52.5	48.4	50.6	55.6	5	12	25	55	118
8	WK Mt Pleasant Rd	Big Bent Rd	Garden Bar Rd (N)	53.0	47.6	49.1	55.3	5	11	24	52	113
9	WK Mt Pleasant Rd	Garden Bar Rd	(S) Wally Allen Rd	55.6	50.1	51.6	57.8	8	17	36	77	166

APPENDIX F

Water Demand Calculation Report

Water Demand Calculation

April 7, 2009



CARLTON
Engineering Inc.

tel (530) 889-7776

For: **Tim Arndt**

Placer County Procurement
11476 "C" Avenue
Auburn, CA 95603

From: Carl Sloan
Subject: Water Demand Calculation Report - DRAFT
Project: 6339-01-08 Hidden Falls Regional Park

Total pages: 7

1. Introduction

This water demand calculation was prepared specifically for the Hidden Falls Regional Park project. This report provides detailed information regarding the calculations of the Maximum Day Demand (MDD) and the Peak Hour Demand (PHD) for this project. The calculations were prepared using the most current information available for the project. Future information obtained for the proposed area, or from other sources may result in changes.

2. Project Description and Background

The Hidden Falls Regional Park project consists of approximately 1,200 acres; and involves access and recreational improvements. It is located in Auburn, Placer County, and consists of two properties know as the Spears Ranch (approximately 979 acres) and Didion Ranch (approximately 221 acres). The project area for this water demand calculation is located within the Spears Ranch portion of the project. Currently the project proposes the use of groundwater wells for water service.

3. Water Calculations Criteria

- a. Proposed Improvements and Assumptions
 - i. One (1) staging area of similar size to the Didion Ranch Staging Area.
 - ii. Existing house to provide service for sixty (60) overnight campers, five (5) staff members and one (1) commercial kitchen. No shower or laundry facility.
 - iii. One (1) maintenance yard.
 - iv. One (1) caretaker residence.
 - v. Water demand calculations based on wastewater usage.
- b. References
 - i. Chapter 16 of the Title 22 California Code of Regulations used to calculated MDD and PHD.
 - ii. Onsite Wastewater Treatment System Manual - EPA 625/R-00/008-Chapter 3 (Appendix C).
 - iii. Existing Well Reading Data from the Didion Ranch Staging Area (Appendix B).

4. Results

Water demand calculations results are included in Appendix A titled Water Demand Calculations Table attached. The results include the MDD and PHD calculations for each specific use as well as the entire project.

Water Demand Calculation

April 7, 2009

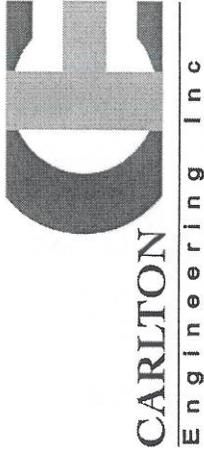
5. Conclusions

Based on the assumptions listed above and per results in the attached Appendix A - Water Demand Calculations Table, the groundwater source shall provide the new public water system with a minimum MDD of 4.7 gpm and PHD of 7.1 gpm; that includes a 20% contingency for the entire project. In case that the new public water system is incapable of supporting the entire project, MDD and PHD calculations are included for each specific use in Appendix A.

Per section 64554.(a)(2) of the Title 22 of the California Code of Regulations in Chapter 16 the public water system shall have storage capacity equal to or greater than the MDD of 5616 gallons, unless the system can demonstrate that it has an emergency source connection that can meet the MDD requirement.

APPENDIX A - Water Demand Calculation

Project: HIDDEN FALLS REGIONAL PARK
 Job number: 6339-01-08
 Date: 03/07/2009
 Revised: 04/07/2009
 Prepared by: MDH
 Checked by: CAM



Facility	Type of Occupancy	Occupants	Data Source	Average Daily Demand	Total Average Daily Demand	MDD ⁵	PHD ⁶
Existing House 1	Organized Camps	60 Campers	Table 3-6 Bunkhouse ¹	40 Gal/Person/Day	2400 Gal/Day	2.50 GPM	3.75 GPM
Existing House 1	Organized Camps	5 Staff	Table 3-3 Residential ¹	69.3 Gal/Person/Day	346.5 Gal/Day	0.36 GPM	0.54 GPM
Comm. Kitchen in Existing House 1		195 meals ³	Table 3-4 Restaurant -Per Meal ¹	3 Gal/Meal/Day	585 Gal/Day	0.61 GPM	0.91 GPM
Caretaker House 2	Single Dwelling	1	Table 3-3 Residential ¹	69.3 Gal/Person/Day	69.3 Gal/Day	0.07 GPM	0.11 GPM
Staging Area	Picnic Areas	100	Hidden Falls (Didion) Well Reading	October 2008 ²	236.2 Gal/Day	0.25 GPM	0.37 GPM
Maintenance Yard	Workshop	5 Staff	Table 3-4 Industrial Building ¹	13 Gal/Person/Day	65 Gal/Day	0.07 GPM	0.10 GPM
				TOTAL (Gal/Day)	3702 Gal/Day	5616 Gal/Day	8496 Gal/Day
				TOTAL (GPM)	2.6 GPM	3.9 GPM	5.8 GPM
				TOTAL plus 20% Contingency (GPM) ⁷	3.1 GPM	4.7 GPM	7.0 GPM

NOTES:

- Data Source from EPA 625/R-00/008-Chapter 3
- Maximum Month October 2008 from Hidden Falls (Didion) Well Reading
- 195 meals based on 65 persons x 3 meals/day
- Average Day Demand (ADD)
- Maximum Day Demand (MDD). MDD calculations based on a peaking factor of 1.5 as delineated in section 64554.(b)(2)(C) of the Title 22 of the California Code of Regulations in Chapter 16.
- Peak Hour Demand (PHD). PHD calculations based on a peaking factor of 1.5 from the MDD as delineated in section 64554.(b)(2)(D) of the Title 22 of the California Code of Regulations in Chapter 16.
- 20% Contingency added to calculated water demand for unaccounted usage (i.e. hose bibs, drinking fountains, etc)

APPENDIX B
Hidden Falls (Didion) Well Reading
Average Day Demand Calculation



Data provided by Placer County Parks Division - Dated 2/25/2009						Calculated by Carlton Engineering	
Reading No.	Date of Reading	Meter Reading at Well head (gallons)	Days Since Last Reading	Gal/Day Since Last Reading	Gal/Day Running Average	ADD (Average Day Demand) Calculation *interpolated value	
2	08/01/2008	429950	0	0.0			
3	08/05/2008	430310	4	90.0	90.0		
4	08/08/2008	430540	3	76.7	84.3		
5	08/14/2008	431060	6	86.7	85.4		
6	08/15/2008	431100	1	40.0	82.1		
7	08/19/2008	431370	4	67.5	78.9		
8	08/22/2008	431600	3	76.7	78.6		
9	08/27/2008	432470	5	174.0	96.9		
10	08/29/2008	432550	2	40.0	92.9	08/31/2008	432870 gal*
11	09/02/2008	433190	4	160.0	101.3	09/01/2008	433030 gal*
12	09/05/2008	433360	3	56.7	97.4		
13	09/09/2008	437160	4	950.0	184.9		
14	09/12/2008	437450	3	96.7	178.6		
15	09/16/2008	437710	4	65.0	168.7		
16	09/19/2008	437840	3	43.3	161.0		
17	09/24/2008	438110	5	54.0	151.1		
18	09/26/2008	438180	2	35.0	147.0		
19	09/30/2008	438480	4	75.0	142.2		
20	10/03/2008	438590	3	36.7	137.1	10/01/2008	4438517 gal*
21	10/10/2008	438920	7	47.1	128.1		
22	10/14/2008	439410	4	122.5	127.8		
23	10/17/2008	439800	3	130.0	127.9		
24	10/21/2008	444950	4	1287.5	185.2		
25	10/22/2008	445340	1	390.0	187.7		
26	10/24/2008	445480	2	70.0	184.9		
27	10/28/2008	445720	4	60.0	179.2		
28	10/31/2008	445840	3	40.0	174.6		
29	11/04/2008	445930	4	22.5	168.2	11/01/2008	445863 gal*
30	11/07/2008	446010	3	26.7	163.9		
31	11/12/2008	446350	5	68.0	159.2		
32	11/14/2008	446490	2	70.0	157.5		
33	11/18/2008	446810	4	80.0	154.7		
34	11/21/2008	446960	3	50.0	151.9	11/30/2008	447860 gal*
35	12/02/2008	448060	11	100.0	147.2	12/01/2008	447960 gal*
36	12/05/2008	448140	3	26.7	144.4		
37	12/09/2008	448380	4	60.0	141.8		
38	12/12/2008	448500	3	40.0	139.5		
39	12/16/2008	448680	4	45.0	136.7		
40	12/19/2008	448790	3	36.7	134.6	12/31/2008	449510 gal*
41	01/06/2009	449870	18	60.0	126.1	01/01/2009	449570 gal*
42	01/09/2009	449995	3	41.7	124.5		
43	01/13/2009	450290	4	73.8	123.3		
44	01/16/2009	450400	3	36.7	121.7		
45	01/20/2009	450960	4	140.0	122.2		
46	01/23/2009	451020	3	20.0	120.4		

APPENDIX C

EPA 625/R-00/008-Chapter 3

Chapter 3: Establishing treatment system performance requirements

Table 3-3. Residential water use by fixture or appliance^{a,b}

Fixture/use	Gal/use: Average range	Uses/person/day: Average range	Gal/person/day: Average range ^c	% Total: Average range
Toilet	3.5 2.9-3.9	5.05 4.5-5.6	18.5 15.7-22.9	26.7 22.6-30.6
Shower	17.2 ^d 14.9-18.6	0.75 ^d 0.6-0.9	11.6 8.3-15.1	16.8 11.8-20.2
Bath	See shower	See shower	1.2 0.5-1.9	1.7 0.9-2.7
Clothes washer	40.5	0.37 0.30-0.42	15 12.0-17.1	21.7 17.8-28.0
Dishwasher	10 9.3-10.6	0.1 0.06-0.13	1 0.6-1.4	1.4 0.9-2.2
Faucets	1.4 ^e	8.1 ^f 6.7-9.4	10.9 8.7-12.3	15.7 12.4-18.5
Leaks	NA	NA	9.5 3.4-17.6	13.7 5.3-21.6
Other Domestic	NA	NA	1.6 0.0-6.0	2.3 0.0-8.5
Total	NA	NA	69.3 57.1-83.5	100

^aResults from AWWARF REUWS at 1,188 homes in 12 metropolitan area. Homes surveyed were served by public water supplies, which operate at higher pressure than private water sources. Leakage rates might be lower for homes on private water supplies.

^bResults are averages over range. Range is the lowest to highest average for 12 metropolitan areas.

^cGal/person/day might not equal gal/use multiplied by uses/person/day because of differences in the number of data points used to calculate means.

^dIncludes shower and bath.

^eGallons per minute.

^fMinutes of use per person per day.

Source: Mayer et al., 1999.

EPA 625/R-00/008-Chapter 3

Chapter 3: Establishing treatment system performance requirements

Table 3-4. Typical wastewater flow rates from commercial sources^{a,b}

Facility	Unit	Flow, gallons/unit/day	
		Range	Typical
Airport	Passenger	2-4	3
Apartment house	Person	40-80	50
Automobile service station ^c	Vehicle served	8-15	12
	Employees	9-15	13
Bar	Customer	1-5	3
	Employees	10-16	13
Boarding house	Person	25-60	40
Department store	Toilet room	400-600	500
	Employee	8-15	10
Hotel	Guest	40-60	50
	Employee	8-13	10
Industrial building (sanitary waste only)	Employee	7-16	13
Laundry (self-service)	Machine	450-650	550
	Wash	45-55	50
Office	Employee	7-16	13
Public lavatory	User	3-6	5
Restaurant (with toilet)	Meal	2-4	3
	Conventional Customer	8-10	9
	Short order Customer	3-8	6
Bar/cocktail lounge	Customer	2-4	3
	Employee	7-13	10
Shopping center	Parking Space	1-3	2
Theater	Seat	2-4	3

^aSome systems serving more than 20 people might be regulated under USEPA's Class V Underground Injection Control (UIC) Program. See <http://www.epa.gov/safewater/uic.html> for more information.

^bThese data incorporate the effect of fixtures complying with the U.S. Energy Policy Act (EPACT) of 1994.

^cDisposal of automotive wastes via subsurface wastewater infiltration systems is banned by Class V UIC regulations to protect ground water. See <http://www.epa.gov/safewater/uic.html> for more information.

Source: Crites and Tchobanoglous, 1998.

EPA 625/R-00/008-Chapter 3

Chapter 3: Establishing treatment system performance requirements

Table 3-6. Typical wastewater flow rates from recreational facilities^a

Facility	Unit	Flow, gallons/unit/day	
		Range	Typical
Apartment, resort	Person	50-70	60
Bowling alley	Alley	150-250	200
Cabin, resort	Person	8-50	40
Cafeteria	Customer	1-3	2
	Employee	8-12	10
Camps:			
Pioneer type	Person	15-30	25
Children's, with central toilet/bath	Person	35-50	45
Day, with meals	Person	10-20	15
Day, without meals	Person	10-15	13
Luxury, private bath	Person	75-100	90
Trailer camp	Trailer	75-150	125
Campground-developed	Person	20-40	30
Cocktail lounge	Seat	12-25	20
Coffee Shop	Customer	4-8	6
	Employee	8-12	10
Country club	Guests onsite	60-130	100
	Employee	10-15	13
Dining hall	Meal served	4-10	7
Dormitory/bunkhouse	Person	20-50	40
Fairground	Visitor	1-2	2
Hotel, resort	Person	40-60	50
Picnic park, flush toilets	Visitor	5-10	8
	Customer	1-4	3
Store, resort	Employee	8-12	10
	Customer	5-12	10
Swimming pool	Employee	8-12	10
	Seat	2-4	3
Theater	Seat	2-4	3
Visitor center	Visitor	4-8	5

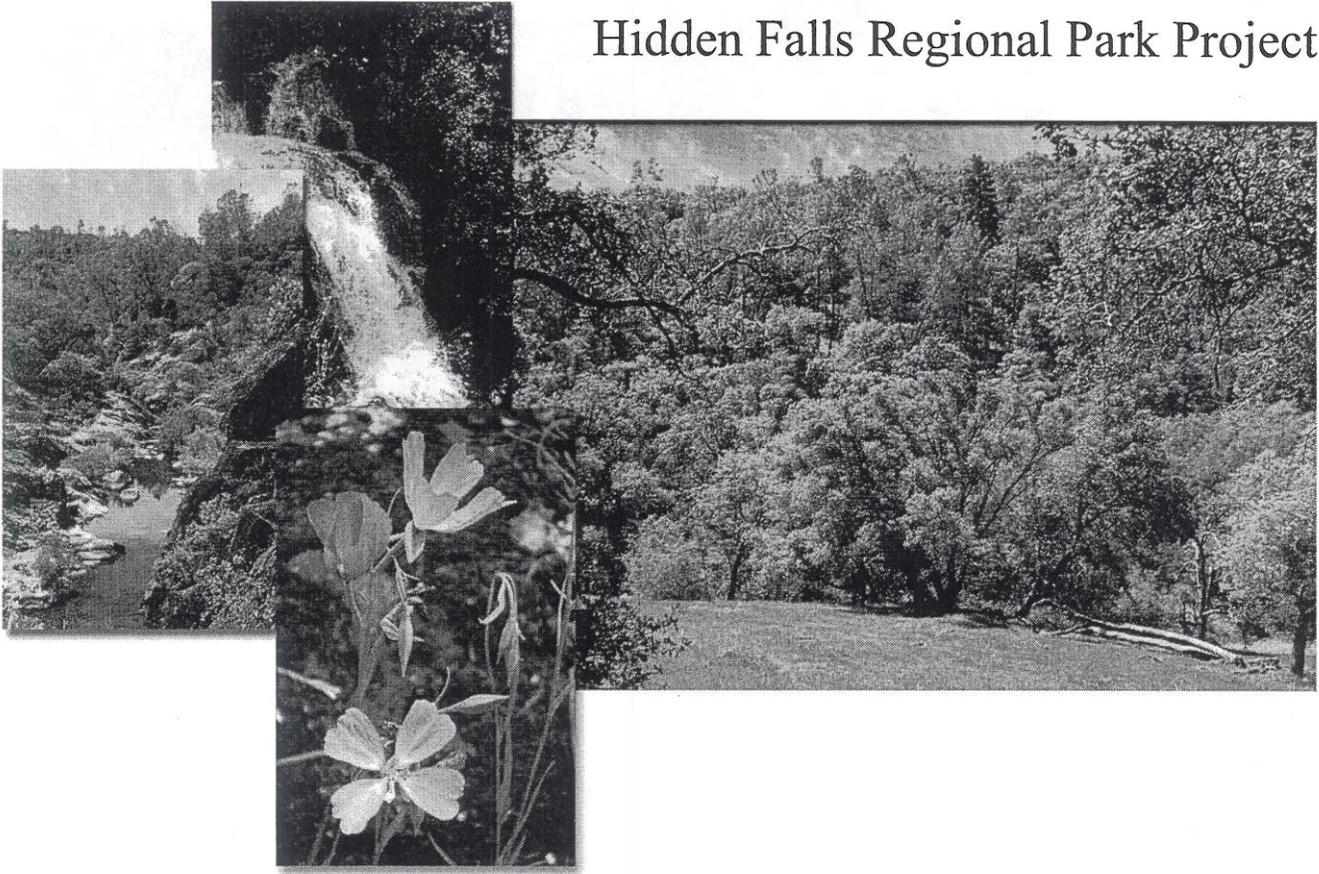
^aSome systems serving more than 20 people might be regulated under USEPA's Class V UIC Program.

Source: Crites and Tchobanoglous, 1998.

APPENDIX G

Rare Plant Survey

Administrative Draft
Special-Status Plant Report
Hidden Falls Regional Park Project



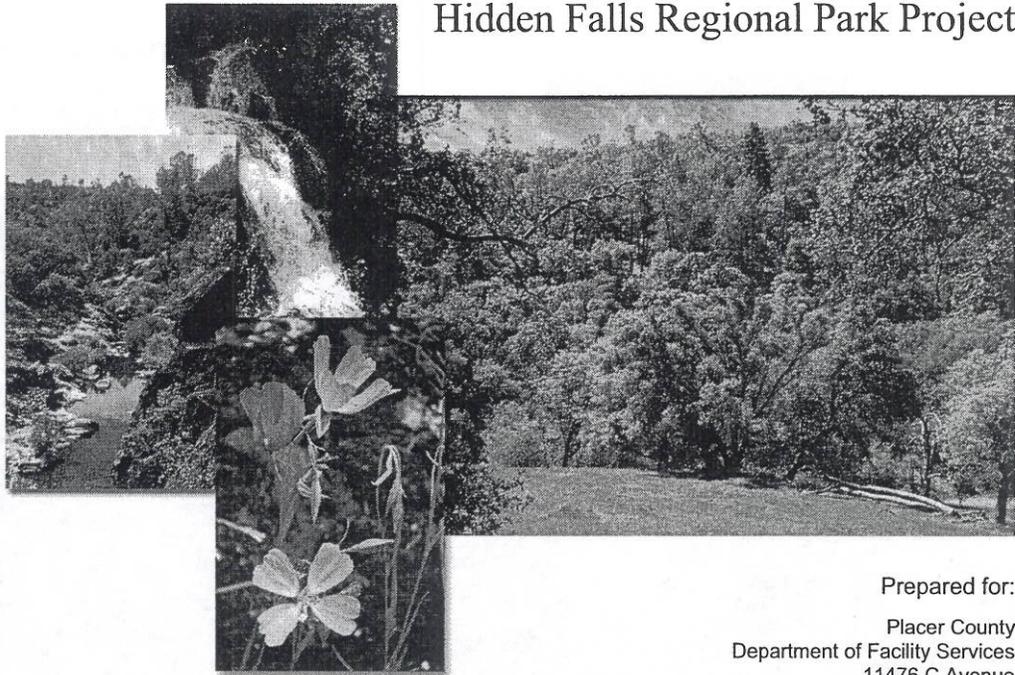
Prepared by:
EDAW
2022 J Street
Sacramento, CA 95814

November 2007

EDAW | AECOM

Administrative Draft
Special-Status Plant Report

Hidden Falls Regional Park Project



Prepared for:

Placer County
Department of Facility Services
11476 C Avenue
Auburn, CA 95603

Contact

Andy Fisher
(530) 889-6814

Prepared by:

EDAW
2022 J Street
Sacramento, CA 95814

Contact:

Petra Unger
Senior Botanist
916/414-5800

November 2007

EDAW | AECOM

TABLE OF CONTENTS

Section	Page
INTRODUCTION	1
STUDY AREA DESCRIPTION	1
METHODS	1
Prefield Investigation.....	1
Field Surveys	4
RESULTS	5
Prefield Investigation Results	5
Field Survey Results	6
Plant Communities.....	9
Results by Species	11
REFERENCES	12

TABLE

1	Special-Status Plants With Potential to Occur in the Hidden Falls Regional Park Study Area.....	9
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EXHIBITS

1	Vicinity Map	2
2	Study Area Boundary	3
3	Plant Communities and Locations of Special-Status Plant Occurrences in the Study Area	7

APPENDICES

A	Plant Species Observed in the Study Area
B	California Department of Fish and Game California Natural Diversity Data Forms
C	Representative Photographs

ACRONYMS AND ABBREVIATIONS

CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
DFG	California Department of Fish and Game'
EIR	Environmental Impact Report
GIS	Geographic Information System
NPPA	Native Plant Protection Act
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

INTRODUCTION

This report describes the methods and results of a focused botanical survey for special-status plant species in the 961-acre Spears Ranch portion of the proposed Hidden Falls Regional Park Project (proposed project) in unincorporated Placer County between North Auburn and the City of Lincoln (Exhibit 1). The proposed project would expand upon the existing 221-acre site (Didion Ranch) to provide facilities for passive recreation (i.e., hiking, biking, horseback riding, etc.) in the entire 1,182-acre property. The surveys covered the entire 961-acre Spears Ranch, hereafter referred to as the study area (Exhibit 2).

The purpose of the special-status plant surveys was to identify occurrences of special-status plants that could be disturbed as a result of proposed project activities including creation of a trail system connecting with existing trails in the neighboring regional park property, and associated miscellaneous passive recreation facilities, increased vehicle access and parking, creation of interpretative, educational, and maintenance facilities and infrastructure, and fish, wildlife, and habitat restoration. The special status survey, in conjunction with a wetland delineation report, was conducted as part of the background environmental documentation for preparation of an Environmental Impact Report (EIR) presently in preparation for the proposed park expansion.

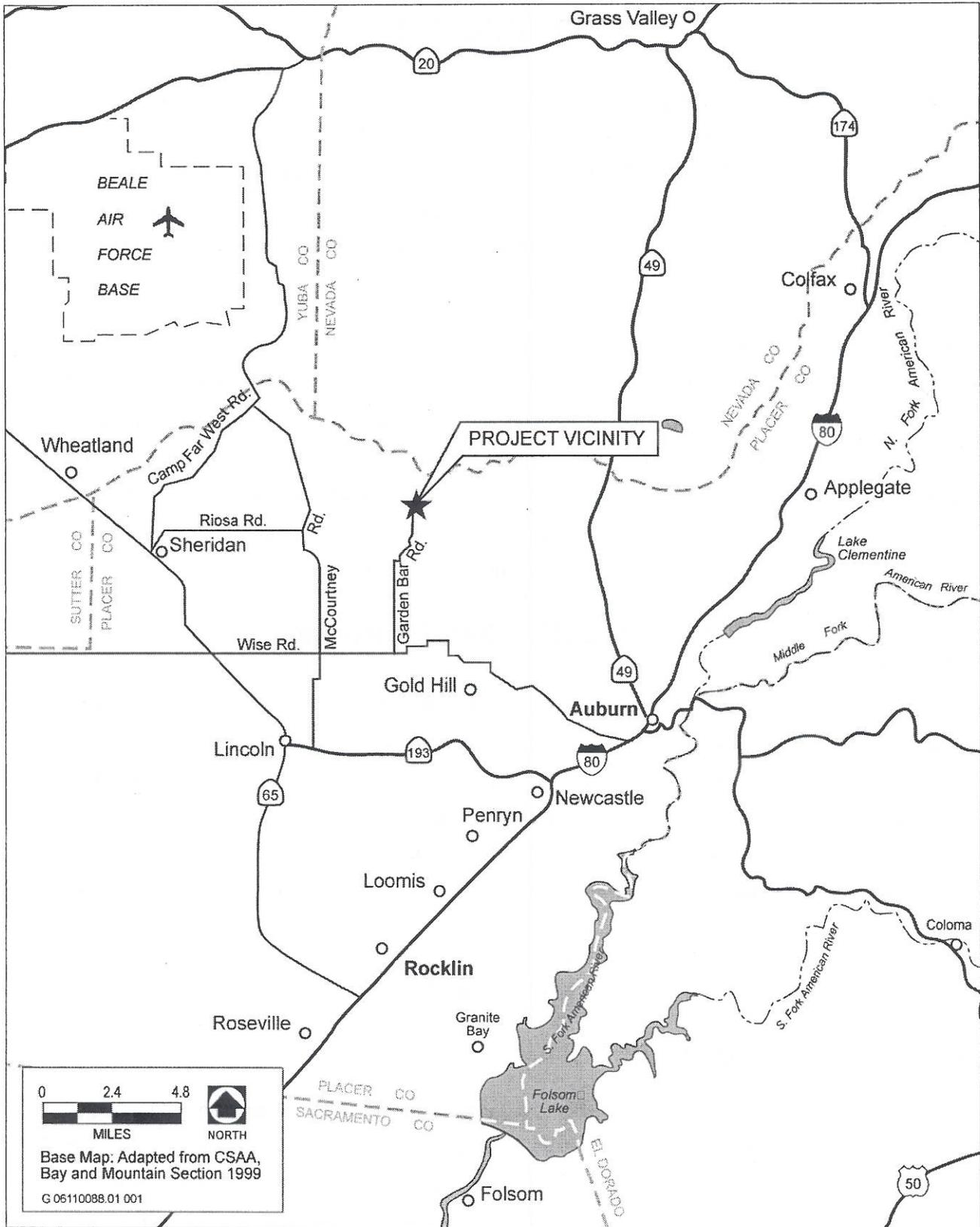
STUDY AREA DESCRIPTION

The majority of the Spears Ranch portion of Hidden Falls Regional Park consists of gently rolling to steep hills covered by a patchwork of annual grassland and oak woodlands. The areas of upland oak woodland can be divided into three types of woodland based on the dominant oak species. These three communities are interior live oak woodland, blue oak woodland, and black oak woodland. Foothill pine (*Pinus sabiniana*) occurs throughout the property in all woodland types. Other vegetation communities identified include valley foothill riparian woodland and freshwater marsh along Coon Creek and intermittent drainages flowing from the north and the south into Coon Creek.

METHODS

PREFIELD INVESTIGATION

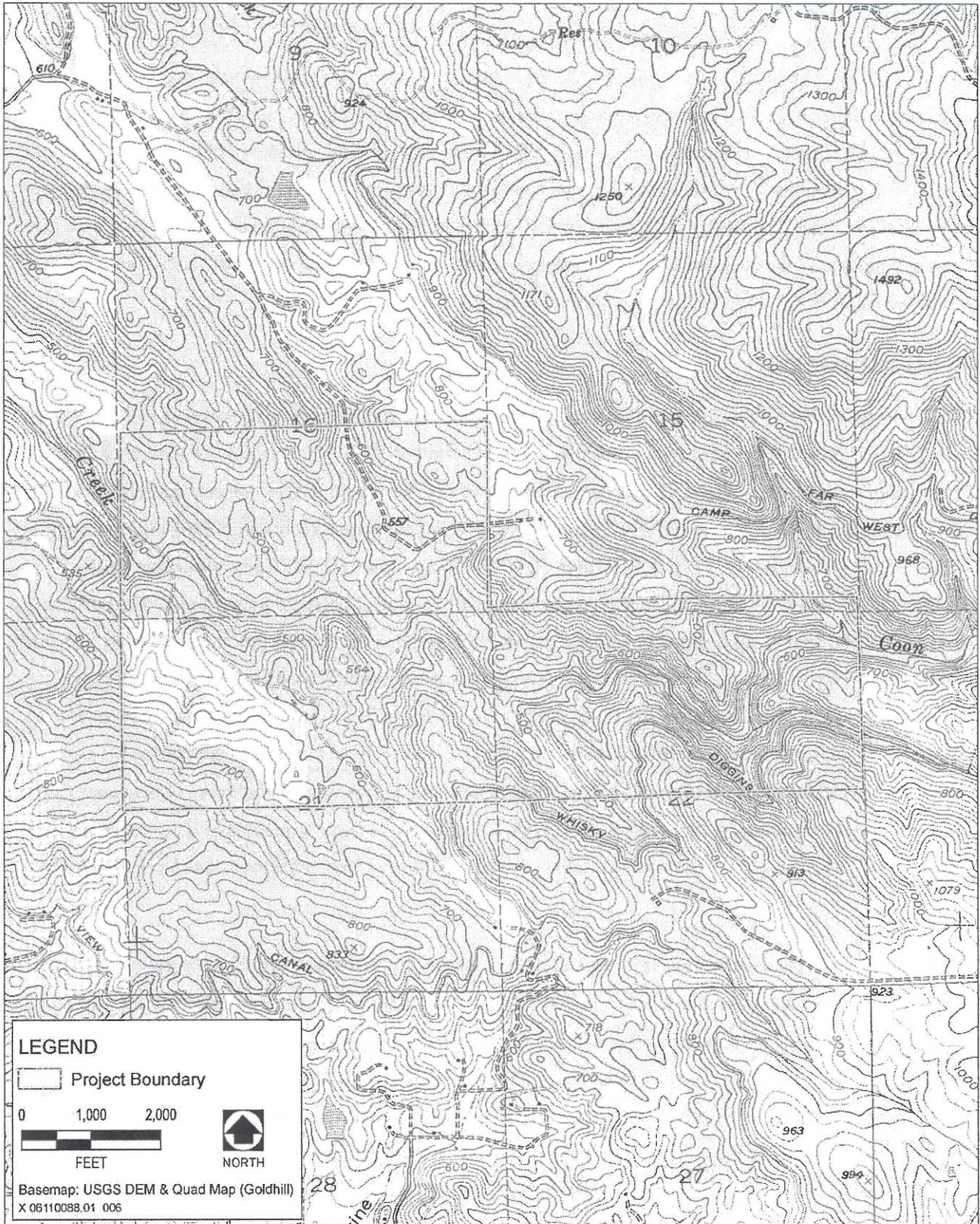
A list of special-status plant species with potential to occur in the study area was compiled by performing database searches of the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2006) and California Department of Fish and Game's (DFG) California Natural Diversity Database (CNDDB 2006). The Gold Hill, Rocklin, Pilot Hill, Auburn, Lake Combie, Wolf, Lincoln, Roseville, and Camp Far West U.S. Geological Survey (USGS) 7.5 minute quadrangles were included in the database record searches.



Source: EDAW 2006

Vicinity Map

Exhibit 1



Source: EDAW 2006

Study Area Boundary

Exhibit 2

In order to evaluate the study area's potential to support special-status plant species, aerial photographs of the study area were reviewed to identify areas supporting potentially suitable habitat for special-status plant species. A survey package, including photographs of each target species and their preferred habitats, was prepared prior to the surveys to familiarize field botanists with the characteristics and blooming periods of target plant species. Plant communities present in the study area were mapped from aerial photograph interpretation and were ground truthed during preliminary field surveys. The plant community polygons were later digitized onto a Geographic Information System (GIS) overlay and used to create a map exhibit showing the location and extent of each plant community present in the study area. Plant community classification is based on the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986).

FIELD SURVEYS

EDAW botanists Mark Bibbo and Sarah Bennett conducted focused special-status plant surveys on May 10, 25, 30, and 31. The protocol for the special-status plant surveys followed DFG's "*Guidelines for Assessing the Effects of Proposed Development on Rare, Threatened, and Endangered Plants and Plant Communities*" (DFG 2000) and U.S. Fish and Wildlife Service (USFWS) *Guidelines for conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2000), which involve using systematic field techniques in all habitats in the study area to ensure thorough coverage of potential impact areas. The botanists covered the entire Spears ranch property with special attention given to the habitats present in the study area with greater potential for containing occurrences of the target plant species. A reference population of Brandegee's clarkia present at Lake Clementine on the North Fork of the American River to the south of the study area was visited prior to the surveys on May 10th to confirm that the species was flowering and to familiarize the surveyors with the distinguishing characteristics and habitat requirements of this species and to observe typical associated species. All plants encountered during the surveys were identified to the highest taxonomic level necessary for a rare plant determination. Nomenclature used follows the Jepson Manual Higher Plants of California (Hickman 1993).

The locations of all special-status plants encountered were mapped by hand as either points or polygons onto aerial photographs of the study area (scale 1" = 400'). In addition, GIS coordinates were recorded for each location while in the field. These location points and polygons were later digitized onto a GIS overlay to produce a map of the distribution and extent of special-status plant populations in the study area. Locations that were mapped separately from one another were distinguished based on spatial distribution, as well as differences in common associated species and habitat type. Notes on habitat, topography, aspect, phenology, and associated species of the special-status plant species identified were recorded on California Native Species Field Survey Forms to be submitted to the CNDDDB upon completion of the final survey report. Representative photographs of the special-status plant species encountered in the study area were taken.

RESULTS

PREFIELD INVESTIGATION RESULTS

Special-status plants are defined as plants that are legally protected or that are otherwise considered sensitive by federal, state or local resource conservation agencies and organizations. Special-status plants are species, subspecies or varieties that fall into one or more of the following categories, regardless of their legal or protection status:

- ▶ Officially listed by the state of California or the federal government as Endangered, Threatened or Rare;
- ▶ A candidate for state or federal listing as Endangered, Threatened or Rare;
- ▶ Taxa which meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the California Environmental Quality Act (CEQA) Guidelines;
- ▶ Taxa designated as a special-status, sensitive or declining species by other state or federal agencies or non-governmental organizations; and
- ▶ Taxa considered by the CNPS to be “rare, threatened or endangered in California” (Lists 1B and 2).

The CNPS Inventory includes five lists for categorizing plant species of concern, which are summarized below. The plants listed on CNPS lists 1A, 1B, and 2 meet the definitions of Section 1901, Chapter 10 of the Native Plant Protection Act (NPPA) or Sections 2062 and 2067 (California Endangered Species Act [CESA]) of the California Department of Fish and Game Code and may qualify for state listing. Therefore, they are considered rare plants pursuant to Section 15380 of CEQA. DFG recommends and local government agencies may require that they be fully considered during preparation of environmental documents pursuant to CEQA. Some of the plants constituting CNPS Lists 3 and 4 meet the definitions of Section 1901, Chapter 10 or Sections 2062 and 2067 of the DFG Code and are eligible for state listing. DFG recommends, and local governments may require, that CNPS List 3 and List 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA (DFG 2000). The CNPS lists are categorized as follows:

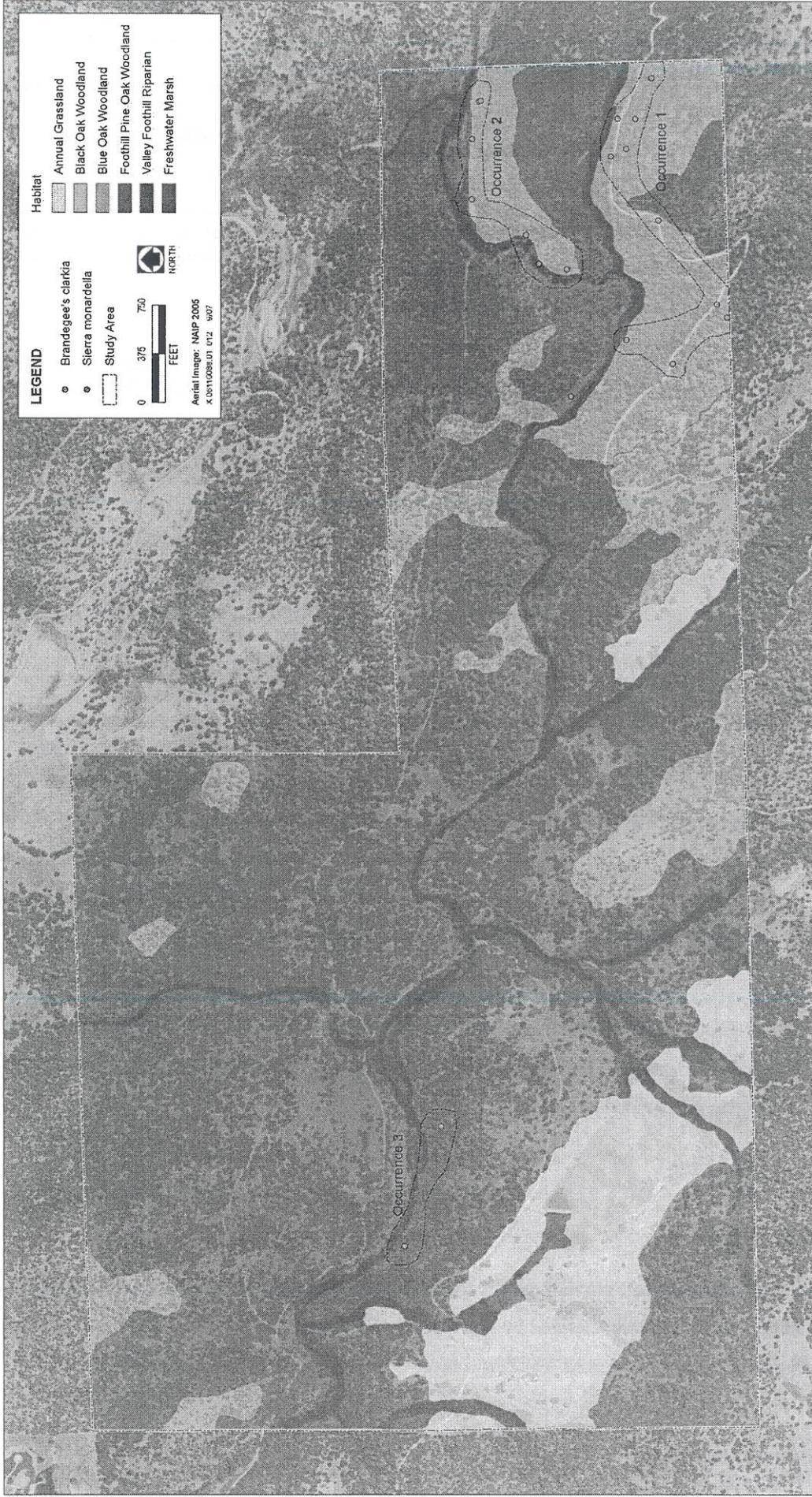
- ▶ List 1A - plants presumed extinct in California;
- ▶ List 1B - plants rare, threatened, or endangered in California and elsewhere;
- ▶ List 2 - plants rare, threatened, or endangered in California but more common elsewhere;
- ▶ List 3 - plants about which we need more information - a review list; and
- ▶ List 4 - plants of limited distribution - a watch list.

Searches of the CNPS and CNDDDB databases identified 19 special-status plant species as occurring in the vicinity of the study area. Seventeen of these species were identified as having no potential to occur in the study area due to narrow substrate requirements or geographical distributions and were therefore excluded from further analysis. Stebbin's morning glory (*Calystegia stebbinsii*), Pine Hill ceanothus (*Ceanothus roderickii*), El Dorado bedstraw (*Galium californicum* ssp. *sierrae*), Red Hills soap root (*Chlorogalum grandiflorum*), and El Dorado County mule ears (*Wyethia reticulata*) are restricted to gabbro soils in El Dorado and Nevada counties. Jepson's onion (*Allium jepsonii*) and big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*) are found on serpentine soils, which do not occur in the study area. Dwarf Downingia (*Downingia pusilla*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*), Red Bluff dwarf rush (*Juncus leiospermus* var. *leiospermus*), legenere, (*Legenere limosa*), and pincushion navarretia (*Navarretia myersii* spp. *myersii*) occur in vernal pool habitats, which don't occur in the study area. Hispid bird's-beak (*Cordylanthus mollis* ssp. *hispidus*) in Placer County occurs in damp alkaline meadows at about 150 feet elevation. These conditions are not present in the study area. Butte county fritillary (*Fritillaria eastwoodiae*) primarily occurs in the northern foothills of the Sierra and Cascade ranges. The southernmost known occurrences are found north of the study area in Yuba County where they are occur at higher elevations in Ponderosa Pine forest.

Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeae*) and oval-leaved viburnum (*Viburnum ellipticum*) are the two special-status plant species identified during the pre-field investigation as having potential to occur in the study area. These two species were targeted during on-site surveys. In addition, Sierra monardella (*Monardella candicans*), a CNPS List 4 plant that had not been previously observed in the area, was observed during field surveys. Table 1 summarizes the regulatory status, habitat, and blooming period of Brandegee's clarkia, Sierra Monardella, and oval-leaved viburnum. Habitat and elevation range information for these species was obtained from the CNPS Electronic Inventory (2006) and *The Jepson Manual Higher Plants of California* (Hickman 1993).

FIELD SURVEY RESULTS

Plant communities mapped in the study area are described below and a comprehensive plant species list of all taxa observed is included in Appendix A. Two special-status plant species Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeae*), a CNPS List 1b plant, and Sierra monardella (*Monardella candicans*), a CNPS List 4 plant, were documented within the study area during field surveys. A total of twenty populations of Brandegee's clarkia and one population of Sierra monardella were recorded and mapped (Exhibit 3). The CNDDDB and CNPS consider plants located within 0.25 mile of each other as single occurrences. CNDDDB data forms for special-status plant occurrences are provided in Appendix B and are cross-referenced to the special-status plant locations shown in



Source: EDAW 2007

Plant Communities and Locations of Special-Status Plant Occurrences in the Study Area

Exhibit 3

Table 1
Special-Status Plants With Potential to Occur in the Hidden Falls Regional Park Study Area

Species	Status 1			Habitat and Blooming Period	Potential for Occurrence
	USFWS	DFG	CNPS		
Plants					
Brandegee's clarkia <i>Clarkia biloba</i> ssp. <i>brandegeae</i>	—	—	1B	Chaparral, cismontane woodland; often in road cuts; 700 to 3,000 feet elevation; blooms May to July	Known to occur: This species was identified in the study area during the focused botanical surveys.
Sierra monardella <i>Monardella candicans</i>	—	—	4	Sandy or gravelly soils in chaparral, cismontane woodland, and lower montane coniferous forest; 450 to 2,700 feet elevation; blooms April to July	Known to occur: This species was identified in the study area during the focused botanical surveys.
Oval-leaved viburnum <i>Viburnum ellipticum</i>	—	—	2	Chaparral, cismontane woodland or lower montane coniferous forest; 600 to 4,000 feet elevation; blooms May to June	Could occur: the majority of the survey area is below the elevation range of this species where it occurs in the central foothills, but associated species and potential habitat do occur on the site; not found during focused special-status plant surveys.
1 Legal Status Definitions U.S. Fish and Wildlife Service (USFWS): T Federal Threatened E Federal Endangered California Department of Fish and Game (DFG): R Rare T Threatened E Endangered		California Native Plant Society (CNPS) Listing Categories: 1B Plants rare, threatened, or endangered in California and elsewhere 2 Plants rare, threatened, or endangered in California but more common elsewhere 3 Plants for which more information is needed – a review list 4 Plants of limited distribution – a watch list			
Sources: CNDDDB 2006, CNPS 2006, Hickman 1993					

Exhibit 3. Representative photographs of Brandegee's clarkia and the habitat in which it was encountered are provided in Appendix C. A description of the special-status plant species encountered, including their habitat and distribution in the study area, is provided below.

PLANT COMMUNITIES

BLUE OAK WOODLAND

Blue oak woodland occurs on moderate slopes near the tops of ridges in the study area. This oak woodland type is typically more savannah-like and is characterized by more evenly spaced and larger individual blue oaks. Interior live oak and foothill pine may also be present. The shrub layer is typically absent and the understory is

characterized by a dense cover of non-native grasses and forbs, such as bromes (*Bromus diandrus* and *B. hordeaceus*), wild oat (*Avena fatua*), foxtail barley (*Hordeum murinum* ssp. *murinum*), medusahead (*Taeniatherum caput-medusae*), cut-leaved geranium (*Geranium dissectum*), and Italian thistle (*Carduus pycnocephalus*).

BLACK OAK WOODLAND

Black oak woodland is found on steep north-facing slopes in the southeast portion of the property. This woodland type is characterized by a dense canopy that is at least 50 percent relative cover of black oak (*Quercus kelloggii*) with interior live oak and blue oak also present. Scattered ponderosa pine (*Pinus ponderosa*) is also present as an emergent tree. The shrub layer is usually dense and is characterized by species such as toyon (*Heteromeles arbutifolia*), hoary coffeeberry (*Rhamnus tomentella*), and poison oak. The herb layer is usually sparse and contains mix of native and non-native grasses and forbs. Native grasses and forbs found in the understory of the black oak woodland include blue wild rye (*Elymus glaucus*), woodland brome (*Bromus laevipes*), California melicgrass (*Melica californica*), yarrow (*Achillea millefolium*), and twining Brodiaea (*Dichelostemma volubile*). The populations of Brandege's clarkia were primarily located in this oak woodland type.

ANNUAL GRASSLAND

Annual grassland occurs in a few large grazed clearings. Annual grassland is an herbaceous plant community characterized by dense cover of nonnative annual grasses with numerous species of nonnative annual forbs, as well as some native wildflowers. Typical grass species include bromes, wild oat, foxtail barley, medusahead, and Italian ryegrass (*Lolium multiflorum*). Common nonnative forbs observed include cut-leaved geranium, filaree (*Erodium botrys*), blessed milk thistle (*Silybum marianum*), lesser hawkbit (*Leontodon taraxacoides*), and rose clover (*Trifolium hirtum*). Native wildflowers such as rusty popcorn flower (*Plagiobothrys nothofulvus*), Ithuriel's spear (*Triteleia laxa*), harvest brodiaea (*Brodiaea elegans*), blow-wives (*Achyrrachaena mollis*), caterpillar phacelia (*Phacelia cicutaria*), and native clovers (*Trifolium* spp.) are also present.

VALLEY FOOTHILL RIPARIAN WOODLAND

Valley foothill riparian woodland occurs along the banks of Coon creek, Deadman creek, and the intermittent drainages that have surface water for the majority of the year. These deciduous woodlands are dominated in the tree canopy by Fremont cottonwood (*Populus fremontii*), valley oak (*Quercus lobata*) and white alder (*Alnus rhombifolia*). Shining willow (*Salix lucida* var. *lasiandra*), red willow (*Salix laevigata*), and Oregon ash (*Fraxinus latifolia*) may also occur in the tree layer. Shrubs and lianas, such as California grape (*Vitis californica*), arroyo willow (*Salix lasiolepis*), and Himalayan blackberry (*Rubus discolor*) form a dense understory layer, along with wetland herbaceous species such as torrent sedge (*Carex nudata*), mugwort (*Artemisia douglasiana*), and horsetail (*Equisetum arvense*) occurring along the water's edges.

FRESHWATER MARSH

Freshwater marsh occurs in saturated soils on the fringes of the stock ponds and in spots along the intermittent drainages in the study area. The vegetation is characterized by obligate wetland herbaceous species such as spikerushes (*Eleocharis acicularis* and *Eleocharis macrostachya*), rushes (*Juncus effusus* and *Juncus bufonius*), cattails (*Typha angustifolia*) and smartweed (*Polygonum lapathifolium*). Often this vegetation is surrounded by woody riparian shrubs such as arroyo willow, Himalayan blackberry and western dogwood (*Cornus sericea*).

RESULTS BY SPECIES

BRANDEGEE'S CLARKIA (*CLARKIA BILOBA* SSP. *BRANDEGEEAE*)

Brandegge's clarkia, a member of the evening primrose family, is a CNPS List 1B plant. It was previously listed as a USFWS Species of Concern, however as of May 2006, the USFWS no longer maintains lists of Species of Concern. Brandegge's clarkia is found in the central Sierra Nevada foothills between 804 and 2,904 feet above mean sea level in chaparral and woodland habitats, often on road-cuts. It is an annual herb with rose-pink flowers that blooms from May to July. The feature that distinguishes this subspecies from the other two subspecies of *Clarkia biloba* is the length of the notch at the tip of the petal. In Brandegge's clarkia, the notch is less than 1/5 of the petal length.

Brandegge's clarkia was encountered during this special-status plant surveys throughout the study area on steep north-facing slopes in openings in the black oak woodlands. Populations of Brandegge's clarkia were abundantly distributed throughout the southeastern corner of the property. Information of these occurrences was summarized in three CNDDDB records included in Appendix B of this report. Brandegge's clarkia was most typically found on steep north facing slopes in the shade and openings of black oak and foothill pine-oak woodland where common associated species included hedgehog dogtail (*Cynosorus echinatus*), field hedge parsley (*Torilis arvensis*), poison oak (*Toxicodendron diversilobum*), blue wild rye (*Elymus glaucus*), and white globe lily (*Calochortus albus*). Many of the populations are found on the roadcuts along Whiskey Diggins canal and the associated road. Due to the abundance of the Brandegge's clarkia population on the property as well as the fact that they occur on areas of previous disturbance, proposed project activities associated with the expansion of recreation facilities are unlikely to have an overall adverse affect on the viability of this species in the study area.

SIERRA MONARDELLA

Sierra monardella (*Monardella candicans*), a member of the mint family, is a CNPS list 4 plant. It is a small, annual plant with half inch heads of white flowers that bloom from April to July. Sierra monardella grows on sandy or gravelly soils in oak woodland, chaparral, and ponderosa pine forest throughout the Sierra Nevada foothills.

Sierra monardella was not identified in the pre-field investigation as a potential target special status plant species for the survey because no records currently exist in the CNDDDB for the species. A single population of the species was located in the study area (Exhibit 3). Sierra monardella was found in the opening of Foothill Pine-Oak woodland on the north side of Coon creek. The surrounding plant community is moderately dense annual grassland on a low gradient southwest facing terrace above the creek. Associated species included species typical of the annual grassland and surrounding woodlands such as bromes (*Bromus* spp.), lupines (*Lupinus* sp.), smooth cat's ears (*Hypochaeris glabra*), four spot (*Clarkia purpurea*), Ithuriel's spear (*Triteleia laxa*), needleleaf navarretia (*Navarretia intertexta*), and brodiaea (*Brodiaea elegans*).

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APPENDIX A

Plant Species Observed in the Study Area

APPENDIX A PLANT SPECIES OBSERVED IN THE STUDY AREA

**Table 1
Plant Species Observed in the Study Area**

<i>Scientific Name</i>	Common Name
<i>Adiantum jordanii</i>	California maidenhair fern
<i>Aesculus californica</i>	California buckeye
<i>Agoseris heterophylla</i>	annual agoseris
<i>Ailanthus altissima</i>	tree-of-heaven
<i>Alisma plantago-aquatica</i>	American waterplantain
<i>Allium amplexans</i>	narrow leaved onion
<i>Allium peninsulare</i>	Mexicali onion
<i>Alnus rhombifolia</i>	white alder
<i>Ambrosia psilostachya</i>	western ragweed
<i>Amsinckia menziesii</i> var. <i>intermedia</i>	fiddleneck
<i>Anaphalis margaritacea</i>	pearly everlasting
<i>Anthemis cotula</i>	dog-fennel
<i>Anthriscus caucalis</i>	Bur-chervil
<i>Aphanes occidentalis</i>	western lady's mantle
<i>Aristolochia californica</i>	California pipevine
<i>Artemisia douglasiana</i>	mugwort
<i>Asclepias cordifolia</i>	purple milkweed
<i>Asclepias eriocarpa</i>	Indian milkweed
<i>Baccharis pilularis</i>	coyote brush
<i>Baccharis salicifolia</i>	mulefat
<i>Bidens frondosa</i>	beggar ticks
<i>Brachypodium distachyon</i>	false brome
<i>Brickellia californica</i>	brickelbush
<i>Briza maxima</i>	rattlesnake grass
<i>Briza minor</i>	little quaking grass
<i>Bromus diandrus</i>	ripgut brome
<i>Bromus hordeaceus</i>	soft chess
<i>Bromus japonicus</i>	Japanese brome
<i>Bromus laevipes</i>	woodland brome
<i>Bromus madritensis</i> var. <i>madritensis</i>	red brome
<i>Bromus madritensis</i> var. <i>rubens</i>	foxtail chess

**Table 1
Plant Species Observed in the Study Area**

<i>Scientific Name</i>	Common Name
<i>Calandrinia ciliata</i>	red maids
<i>Calochortus albus</i>	white globelily
<i>Calochortus luteus</i>	yellow mariposa lily
<i>Calystegia occidentalis</i>	western morning-glory
<i>Cardamine oligosperma</i>	Idaho bittercress
<i>Carduus pycnocephalus</i>	Italian thistle
<i>Carex barbarae</i>	valley sedge
<i>Carex nudata</i>	torrent sedge
<i>Carex praegracilis</i>	slender sedge
<i>Castilleja attenuata</i>	valley tassels
<i>Centaurea solstitialis</i>	yellow star-thistle
<i>Centaurium muehlenbergii</i>	Muhlenberg's centaury
<i>Cephalanthus occidentalis</i>	buttonbush
<i>Cerastium glomeratum</i>	mouse-ear chickweed
<i>Cercis occidentalis</i>	redbud
<i>Chondrilla juncea</i>	skeleton weed
<i>Cichorium intybus</i>	chicory
<i>Clarkia biloba</i> ssp. <i>brandegeae</i>	Brandegee's clarkia
<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i>	four-spot
<i>Claytonia parviflora</i>	streambank springbeauty
<i>Claytonia perfoliata</i>	miner's lettuce
<i>Clematis lasianthus</i>	virgins bower
<i>Conium maculatum</i>	poison hemlock
<i>Cornus glabrata</i>	brown dogwood
<i>Cynodon dactylon</i>	Bermuda grass
<i>Cynosurus echinatus</i>	hedgehog dogtail
<i>Daucus pusillus</i>	rattlesnake weed
<i>Dichelostemma capitatum</i>	blue dicks
<i>Eleocharis acicularis</i>	needle spikerush
<i>Eleocharis macrostachya</i>	creeping spikerush
<i>Elymus glaucus</i>	blue wild rye
<i>Ericameria arborescens</i>	goldenfleece
<i>Erigeron foliosus</i> var. <i>hartwegii</i>	Hartweg's fleabane
<i>Erigeron philadelphicus</i>	Philadelphia fleabane

**Table 1
Plant Species Observed in the Study Area**

<i>Scientific Name</i>	Common Name
<i>Eriophyllum lanatum</i>	woolly sunflower
<i>Erodium botrys</i>	braodleaf filaree
<i>Eryngium vaseyi</i>	coyote thistle
<i>Eschscholzia caespitosa</i>	foothill poppy
<i>Eschscholzia californica</i>	California poppy
<i>Euphorbia spathulata</i>	warty spurge
<i>Euthamia occidentalis</i>	western goldenrod
<i>Festuca arundinacea</i>	reed fescue
<i>Ficus carica</i>	fig
<i>Filago gallica</i>	filago
<i>Galium aparine</i>	bedstraw
<i>Galium murale</i>	yellow wall bedstraw
<i>Galium porrigens</i>	climbing bedstraw
<i>Gastridium ventricosum</i>	nitgrass
<i>Geranium dissectum</i>	cut-leaved geranium
<i>Geranium molle</i>	dove's foot geranium
<i>Gilia capitata</i>	blue head gilia
<i>Githopsis specularioides</i>	common blue-cup
<i>Glyceria declinata</i>	waxy mannagrass
<i>Gnaphalium luteo-album</i>	everlasting-album
<i>Grindelia hirsutula</i>	hairy gumweed
<i>Helenium puberulum</i>	sneezeweed
<i>Heteromeles arbutifolia</i>	toyon
<i>Hoita macrostachya</i>	leather root
<i>Hypericum perforatum</i>	St. Johnswort
<i>Hypochaeris glabra</i>	smooth cat's ear
<i>Iris pseudacorus</i>	paleyellow iris
<i>Juncus bufonius</i>	common toad rush
<i>Juncus effusus</i>	common rush
<i>Keckiella brevifolia</i>	gaping keckielia
<i>Lactuca serriola</i>	prickly lettuce
<i>Lemna minor</i>	duckweed
<i>Lepidium nitidum</i>	common peppergrass
<i>Linanthus bicolor</i>	bicolor linanthus

**Table 1
Plant Species Observed in the Study Area**

<i>Scientific Name</i>	Common Name
<i>Linanthus ciliatus</i>	whisker brush
<i>Linum usitatissimum</i>	common flax
<i>Lolium multiflorum</i>	Italian ryegrass
<i>Lonicera hispidula</i>	hairy honeysuckle
<i>Lonicera interrupta</i>	chaparral honeysuckle
<i>Ludwigia peploides</i>	false loosestrife
<i>Lupinus microcarpus</i>	chick lupine
<i>Lupinus nanus</i>	sky lupine
<i>Luzula comosa</i>	wood rush
<i>Madia elegans</i> ssp. <i>vernalis</i>	common tarweed
<i>Madia gracilis</i>	slender tarweed
<i>Medicago polymorpha</i>	bur-clover
<i>Melica californica</i>	California melicgrass
<i>Mentha arvensis</i>	field mint
<i>Micropus californicus</i>	slender cottonweed
<i>Mimulus guttatus</i>	seep monkeyflower
<i>Monardella candicans</i>	Sierra monardella
<i>Monardella villosa</i>	coyote mint
<i>Nassella pulchra</i>	purple needlegrass
<i>Navarretia intertexta</i>	needleleaf navarretia
<i>Navarretia tagetina</i>	marigold navarretia
<i>Nemophila pedunculata</i>	littlefoot nemophila
<i>Odontostomum hartwegii</i>	Hartweg's odontostomum
<i>Panicum capillare</i>	witchgrass
<i>Parentucellia viscosa</i>	yellow glandweed
<i>Pentagramma triangularis</i>	goldenback fern
<i>Perideridia kelloggii</i>	squawroot
<i>Phacelia cicutaria</i>	caterpillar phacelia
<i>Phlox gracilis</i>	slender phlox
<i>Plagiobothrys nothofulvus</i>	popcornflower
<i>Plagiobothrys stipitatus</i> var. <i>micranthus</i>	stalked popcorn flower
<i>Plantago lanceolata</i>	English plantain
<i>Plectritis macrocera</i>	white plectritis
<i>Poa annua</i>	annual blue grass

**Table 1
Plant Species Observed in the Study Area**

<i>Scientific Name</i>	Common Name
<i>Poa pratensis</i>	Kentucky bluegrass
<i>Polygala cornuta</i>	milkwort
<i>Polygonum arenastrum</i>	common knotweed
<i>Polygonum punctatum</i>	water smartweed
<i>Polypodium calirhiza</i>	nested polypody
<i>Populus alba</i>	white poplar
<i>Populus fremontii</i>	Fremont's cottonwood
<i>Prunella vulgaris</i>	common selfheal
<i>Pteridium aquilinum</i> var. <i>pubescens</i>	bracken fern
<i>Quercus douglasii</i>	blue oak
<i>Quercus kelloggii</i>	black oak
<i>Quercus lobata</i>	Valley Oak
<i>Quercus wislizeni</i>	interior live oak
<i>Ranunculus californicus</i>	California buttercup
<i>Rhamnus ilicifolia</i>	redberry
<i>Rhamnus tomentella</i>	hoary coffeeberry
<i>Rorippa nasturtium-aquaticum</i>	watercress
<i>Rubus discolor</i>	Himalayan blackberry
<i>Rumex crispus</i>	curly dock
<i>Rumex pulcher</i>	fiddledock
<i>Salix exigua</i>	sandbar willow
<i>Salix laevigata</i>	red willow
<i>Salix lasiolepis</i>	arroyo willow
<i>Sanicula bipinnatifida</i>	purple sanicle
<i>Sanicula crassicaulis</i>	Pacific sanicle
<i>Scirpus acutus</i>	hardstem bulrush
<i>Selaginella hansenii</i>	Hansen's spikemoss
<i>Senecio vulgare</i>	old-man-in-the-spring
<i>Sherardia arvensis</i>	field madder
<i>Silene gallica</i>	catchfly
<i>Silybum marianum</i>	blessed milkthistle
<i>Solidago californica</i>	California goldenrod
<i>Stachys albens</i>	White Hedge nettle
<i>Thysanocarpus curvipes</i>	common fringe-pod

**Table 1
Plant Species Observed in the Study Area**

<i>Scientific Name</i>	Common Name
<i>Torilis arvensis</i>	field hedge parsley
<i>Toxicodendron diversilobum</i>	poison oak
<i>Trifolium ciliolatum</i>	foothill clover
<i>Trifolium dubium</i>	shamrock clover
<i>Trifolium hirtum</i>	red clover
<i>Trifolium subterraneum</i>	Subterranean Clover
<i>Trifolium willdenovii</i>	tomcat clover
<i>Triteleia bridgesii</i>	Bridges' Brodiaea
<i>Triteleia laxa</i>	Ithuriel's spear
<i>Triticum aestivum</i>	common wheat
<i>Typha angustifolia</i>	narrow-leaf cattail
<i>Urtica dioica</i>	stinging nettle
<i>Verbascum blattaria</i>	moth mullein
<i>Verbena bonariensis</i>	South American vervain
<i>Vicia sativa</i>	spring vetch
<i>Vinca major</i>	vinca
<i>Vitis californica</i>	California grape
<i>Vulpia bromoides</i>	brome fescue
<i>Vulpia microstachys</i>	small fescue
<i>Vulpia myuros</i>	foxtail fescue
<i>Wyethia angustifolia</i>	narrowleaf mule ears
<i>Xanthium strumarium</i>	cocklebur

APPENDIX B

California Department of Fish and Game
California Natural Diversity Data Forms

Mail to:
 California Natural Diversity Database
 Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814
 Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 05/31/2007



California Native Species Field Survey Form



Scientific Name: *Clarkia biloba var. brandeegae*

Common Name: Brandegee's clarkia

Species Found? Yes No If not, why?

Total No. Individuals +/- 3000 Subsequent Visit? yes no

Is this an existing NDDB occurrence? yes, Occ. # _____ no unk.

Collection? If yes: yes Not yet deposited, likely DAV

Number _____ Museum / Herbarium _____

Reporter: Mark Bibbo

Address: 2022 J Street
Sacramento, CA

E-mail Address: mark.bibbo@edaw.com

Phone: (916) 414-5800

Plant Information

Phenology: _____% vegetative 100% flowering _____% fruiting

Animal Information

# adults	# juveniles	# larvae	# egg masses	# unknown
<input type="checkbox"/>				
breeding	wintering	burrow site	rookery	nesting
<input type="checkbox"/>				
other				

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Hidden Falls Regional Park, On the Spears Ranch property, close to Coon Creek, about 0.25 mile due north of the large stock pond in the middle of the property.

County: Placer County Landowner / Mgr.: Placer County

Quad Name: Gold Hill Elevation: 430 ft.

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model Thales Mobile Mapper

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 1 m meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 38.9707°
-121.204° *Refers to Occurrence #2 on map*

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

Steep north facing slope in the shade of Black oak-Interior Live Oak-Foothill Pine woodland. Growing with *Cynosorus echinatus*, *Torilis arvensis*, *Toxicodendron diversilobum*, *Elymus glaucus*, and *Calochortus albus*.

Other rare taxa seen at THIS site on THIS date:
 (separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Grazing, recreation (hiking/equestrian trails)

Visible disturbances:

Threats: Grazing, non-native invasive weeds.

Comments: This occurrence consists of numerous clumps of hundreds of individuals in a similar position on the slope stretching for about a quarter mile on either side of the GPS point.

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): Jepson

Compared with specimen housed at: DAV

Compared with photo / drawing in: Cal Photos

By another person (name): _____

Other: _____

Photographs: (check one or more)

Slide	Print	Digital
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Plant / animal	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input checked="" type="checkbox"/>

May we obtain duplicates at our expense? yes no

Mail to:
 California Natural Diversity Database
 Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814
 Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 05/24/2007

California Native Species Field Survey Form

Scientific Name: *Clarkia biloba var. brandegeae*

Common Name: Brandegee's clarkia

<p>Species Found? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No _____ <small>If not, why?</small></p> <p>Total No. Individuals <u>+/- 5,000</u> Subsequent Visit? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no</p> <p>Is this an existing NDDB occurrence? <input checked="" type="checkbox"/> no <input type="checkbox"/> unk. <small>Yes, Occ. # _____</small></p> <p>Collection? If yes: <u>yes</u> Not yet deposited, likely DAV. <small>Number _____ Museum / Herbarium _____</small></p>	<p>Reporter: <u>Mark Bibbo</u></p> <p>Address: <u>2022 J Street</u> <u>Sacramento, CA</u></p> <p>E-mail Address: <u>mark.bibbo@edaw.com</u></p> <p>Phone: <u>(916) 414-5800</u></p>
--	--

<p>Plant Information</p> <p>Phenology: _____% vegetative <u>100</u>% flowering _____% fruiting</p>	<p>Animal Information</p> <table style="width: 100%;"> <tr> <td># adults <input type="checkbox"/></td> <td># juveniles <input type="checkbox"/></td> <td># larvae <input type="checkbox"/></td> <td># egg masses <input type="checkbox"/></td> <td># unknown <input type="checkbox"/></td> </tr> <tr> <td>breeding</td> <td>wintering</td> <td>burrow site</td> <td>rookery</td> <td>nesting</td> </tr> <tr> <td>other</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	# adults <input type="checkbox"/>	# juveniles <input type="checkbox"/>	# larvae <input type="checkbox"/>	# egg masses <input type="checkbox"/>	# unknown <input type="checkbox"/>	breeding	wintering	burrow site	rookery	nesting	other				
# adults <input type="checkbox"/>	# juveniles <input type="checkbox"/>	# larvae <input type="checkbox"/>	# egg masses <input type="checkbox"/>	# unknown <input type="checkbox"/>												
breeding	wintering	burrow site	rookery	nesting												
other																

Location Description (please attach map AND/OR fill out your choice of coordinates, below)
 Hidden Falls Regional Park, On the Spears Ranch property, in the southeastern portion of the property, along Whiskey Diggins canal.

County: Placer County Landowner / Mgr.: Placer County

Quad Name: Gold Hill Elevation: 707 ft.

T _____ R _____ Sec _____, _____ ¼ of _____ ¼, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ ¼ of _____ ¼, Meridian: H M S GPS Make & Model Thales Mobile Mapper

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 1 m meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 38.9657°
-121.175° *Refers to Occurrence No. 1 on map.*

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):
 Steep north facing slope in the shade and openings of Black oak-Interior Live Oak-Foothill Pine woodland. Growing with Heteromeles arbutifolia, Aesculus californica, Cynosorus echinatus, Torilis arvensis, Allium peninsulare and Pentagramma triangularis.

Other rare taxa seen at THIS site on THIS date:
 (separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Grazing, recreation (hiking/equestrian trails)

Visible disturbances: _____

Threats: Grazing, non-native invasive weeds.

Comments: This occurrence consists of numerous clumps of hundreds of individuals on the road cuts along the irrigation canal and the road that follows it, as well as on the north facing slopes on either side of the road cuts. These sub-populations of Clarkia occur all along the road in this southeastern portion of the property.

<p>Determination: (check one or more, and fill in blanks)</p> <p><input checked="" type="checkbox"/> Keyed (cite reference): <u>Jepson</u></p> <p><input checked="" type="checkbox"/> Compared with specimen housed at: <u>DAV</u></p> <p><input checked="" type="checkbox"/> Compared with photo / drawing in: <u>Cal Photos</u></p> <p><input type="checkbox"/> By another person (name): _____</p> <p><input type="checkbox"/> Other: _____</p>	<p>Photographs: (check one or more)</p> <table style="width: 100%;"> <tr> <td>Plant / animal</td> <td>Slide <input type="checkbox"/></td> <td>Print <input type="checkbox"/></td> <td>Digital <input checked="" type="checkbox"/></td> </tr> <tr> <td>Habitat</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Diagnostic feature</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table> <p>May we obtain duplicates at our expense? yes <input checked="" type="checkbox"/> no <input type="checkbox"/></p>	Plant / animal	Slide <input type="checkbox"/>	Print <input type="checkbox"/>	Digital <input checked="" type="checkbox"/>	Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Plant / animal	Slide <input type="checkbox"/>	Print <input type="checkbox"/>	Digital <input checked="" type="checkbox"/>										
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										

Mail to:
 California Natural Diversity Database
 Department of Fish and Game
 1807 13th Street, Suite 202
 Sacramento, CA 95814

Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

For Office Use Only

Source Code _____ Quad Code _____
 Elm Code _____ Occ. No. _____
 EO Index No. _____ Map Index No. _____

Date of Field Work (mmdd/yyyy): 05/31/2007

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Clarkia biloba* var. *brandeegae*

Common Name: Brandegee's clarkia

Species Found? Yes No If not, why? _____

Total No. Individuals +/- 10,000 Subsequent Visit? yes no
 Is this an existing NDDDB occurrence? no unk.
 Yes, Occ. # _____

Collection? If yes: yes Not yet deposited, likely DAV
 Number _____ Museum / Herbarium _____

Reporter: Mark Bibbo

Address: 2022 J Street
 Sacramento, CA

E-mail Address: mark.bibbo@edaw.com

Phone: (916) 414-5800

Plant Information

Phenology: _____% vegetative 100% flowering _____% fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
 breeding wintering burrow site rookery nesting other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Hidden Falls Regional Park, On the Spears Ranch property, at the east end, on the south side of Coon Creek.

County: Placer County Landowner / Mgr.: Placer County

Quad Name: Gold Hill Elevation: 580 ft.

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model Thales Mobile Mapper

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 1 m _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 38.9679°
 -121.177° Refers to Occurrence No 3 on Map.

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

Steep north facing slope in the shade and openings of Black oak-Interior Live Oak-Foothill Pine woodland. Growing with *Heteromeles arbutifolia*, *Toxicodendron diversilobum*, *Cynosorus echinatus*, *Torilis arvensis*, *Achillea millefolium* and *Clarkia purpurea*.

Other rare taxa seen at THIS site on THIS date:
 (separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: Grazing, recreation (hiking/equestrian trails)

Visible disturbances:

Threats: Grazing, non-native invasive weeds.

Comments: This occurrence consists of numerous clumps of hundreds of individuals at the base of this slope stretching for about a half a mile on either side of the GPS point.

Determination: (check one or more, and fill in blanks)

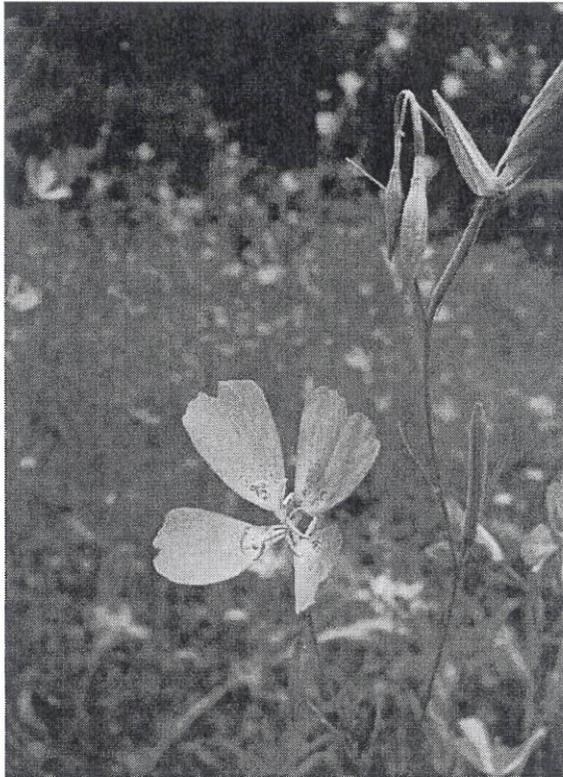
Keyed (cite reference): Jensen
 Compared with specimen housed at: DAV
 Compared with photo / drawing in: Cal Photos
 By another person (name): _____
 Other: _____

Photographs: (check one or more) Slide Print Digital
 Plant / animal
 Habitat
 Diagnostic feature

May we obtain duplicates at our expense? yes no

APPENDIX C

Representative Photographs



Brandegee's Clarkia with characteristic shallowly lobed petals



Open woodland habitat along roadcuts where Brandegee's Clarkia was typically found in the study area

Representative Photographs

Appendix C

APPENDIX H

Special-Status Wildlife Species with the Potential to Occur in the
Hidden Falls Project Area and its Vicinity

**Special-Status Wildlife Species With Potential to Occur
in the Hidden Falls Regional Park Project Area and Vicinity**

Species	Status ¹		Habitat	Potential for Occurrence
	USFWS	DFG		
Invertebrates				
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	T	---	Elderberry shrubs, typically in riparian habitats.	None; there are no elderberry shrubs present in the project area.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	T	---	Vernal pools in valley and foothill grasslands.	None; there are no vernal pools present in the project area.
Vernal pool tadpole shrimp <i>Lepidurus Packardii</i>	E	---	Vernal pools in valley and foothill grasslands.	None; there are no vernal pools present in the project area.
Fish				
Central Valley fall/late fall-run chinook salmon ESU <i>Oncorhynchus tshawytscha</i>	---	Species of Special Concern	Essential Fish Habitat designated; requires cold, freshwater streams with suitable gravel for spawning; rears in seasonally inundated floodplains, rivers, and tributaries, and in the Delta	Occurs in the lower Sacramento River, the ESC/NCC, and Coon Creek. Unlikely to pass waterfalls and access the project reach.
Central Valley steelhead DPS <i>Oncorhynchus mykiss</i>	T	---	Critical Habitat designated; requires cold, freshwater streams with suitable gravel for spawning; rears in seasonally inundated floodplains, rivers, and tributaries, and in the Delta	Occurs in the lower Sacramento River, the ESC/NCC, and Coon Creek
Amphibians				
California red-legged frog <i>Rana aurora draytonii</i>	T	Species of Special Concern	Riparian and slow-water rivers and lakes with emergent aquatic vegetation.	Could occur; Several cattle stock ponds and freshwater marshes in the southwest section of the project area provide suitable habitat.
Foothill yellow-legged frog <i>Rana boylei</i>	---	Species of Special Concern	Perennial rocky streams in a wide range of deciduous and coniferous habitats; rarely found far from permanent water.	Could occur; Coon Creek and other shallow, perennial drainages with cobble provide suitable habitat.
Western spadefoot <i>Spea hammondi</i>	---	Species of Special Concern	Vernal pools in upland with burrows and other below-ground refuge.	Unlikely to occur; there are no vernal pools present in the project area.
Reptiles				
Northwestern pond turtle <i>Emys marmorata</i>	---	Species of Special Concern	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation.	Known to occur; surveys conducted in 2005 confirm presence along Coon Creek.
Birds				
Cooper's hawk <i>Accipiter cooperii</i>	---	Species of Special Concern	Typically inhabits oak savannah, woodlands and open grassland habitats.	Likely to occur; suitable foraging and nesting habitat present in the project area in oak woodlands.

**Special-Status Wildlife Species With Potential to Occur
in the Hidden Falls Regional Park Project Area and Vicinity**

Species	Status ¹		Habitat	Potential for Occurrence
	USFWS	DFG		
Sharp-shinned hawk <i>Accipiter striatus</i>	---	Species of Special Concern	Nests and forages in woodlands but may occur in the more open savannah woodland type habitats such as blue oak woodland and blue oak – foothill pine.	Could occur; suitable foraging and nesting habitat present in the project area in oak woodlands.
Tricolored blackbird <i>Agelaius tricolor</i>	---	Species of Special Concern	Forage in grasslands and agricultural fields; nest in freshwater marsh, riparian scrub, and other dense shrubs and herbs.	Unlikely to occur; marginal nesting and foraging habitat present in clusters of blackberry thickets in grassland openings, however this habitat is too separated from other regional locations with preferred habitat.
Golden eagle <i>Aquila chrysaetos</i>	---	Species of Special Concern; Fully Protected	Forages over open shrub and grasslands; nests on cliffs or large rock outcrops.	Known to breed just outside of the park; suitable foraging and nesting habitat present in the project area in annual grasslands and oak woodlands.
Yellow-breasted chat <i>Icteria virens</i>	---	Species of Special Concern	Forages and nests in riparian thickets of willow, blackberry, wild grape, and other brushy tangles near watercourses.	Known to occur; foraging and nesting habitat present in the project area in patches of blackberry thickets along Coon Creek and surrounding freshwater marshes and stock ponds.
Yellow warbler <i>Dendroica petechia</i>	---	Species of Special Concern	Nests in mesic, deciduous thickets, especially riparian; preferred habitat includes moist areas with dense insect prey populations.	Could occur; no suitable breeding habitat present in the project area; possible occurrence as a migrant.
White-tailed kite <i>Elanus leucurus</i>	---	Fully Protected	Forages in grasslands and agricultural fields; nests in isolated trees or small woodland patches.	Could occur; marginally suitable foraging habitat present in the project area in grasslands with scattered oak trees.
Bald eagle <i>Haliaeetus leucocephalus</i>	---	E	Forages in open water, roosts in adjacent trees; nests in tall, sturdy trees.	Unlikely to occur; no large, open water on the project area.
California black rail <i>Laterallus jamaicensis coturniculus</i>	---	T	Forages and nests in freshwater marshes with shallow water and little to no fluctuation that are composed of dense stands of bulrushes and/or cattails.	Known to occur; suitable foraging and nesting habitat present in marshes along Coon Creek.
Loggerhead shrike <i>Lanius ludovicianus</i>	---	Species of Special Concern	Forages in grasslands and nests in shrubs and small trees.	Could occur; suitable foraging habitat present in the project area in grasslands with scattered oak trees.

Special-Status Wildlife Species With Potential to Occur in the Hidden Falls Regional Park Project Area and Vicinity				
Species	Status ¹		Habitat	Potential for Occurrence
	USFWS	DFG		
Mammals				
Ringtail <i>Bassariscus astutus</i>	---	Fully Protected	Forages in chaparral, rocky hillsides and riparian areas. Denning habitat includes rock crevices, boulder piles, underground cavities, or hollow trees.	Known to occur; suitable foraging habitat and denning habitat present in large (> 6" dbh) trees along Coon Creek.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	---	Species of Special Concern	Lives in a wide variety of habitats but most common in mesic sites; typically roosts in caves, mines, and similar structures	Could occur; suitable habitat present in the project area in rock crevices within foothill pine-oak woodlands.
¹ Legal Status Definitions <u>U.S. Fish and Wildlife Service (USFWS):</u> T Federal Threatened E Federal Endangered <u>California Department of Fish and Game (DFG):</u> R Rare T Threatened E Endangered SSC Species of Special Concern				
Sources: CNDDB 2007; USFWS 2007; Hidden Falls Regional Park Initial Study 2006; CDFG 2004, 2005, 2006, 2007.				

Valley elderberry longhorn beetle and vernal pool invertebrates and amphibians are not expected to occur in the project area because the project area lacks their required habitat. No elderberry shrub, vernal pool or other seasonal wetland exists within the project area.

Sacramento splittail and hardhead were historically present in the Cook Creek drainage, however, are unable to access the project area because of downstream natural and man-made barriers in the channel.

Some special-status bird species that occur in the region are not expected to occur within the project area due to lack of suitable habitat or habitat connectivity. These include tricolored blackbird and bald eagle. Tricolored blackbirds are not likely to occur because the marginal blackberry bramble breeding habitat is far removed from locations of other populations. Bald eagle is not likely to occur because there are no large, open water sites in the project area.



COUNTY OF PLACER
Community Development Resource Agency

Michael J. Johnson, AICP

PLANNING

HEARING DATE: January 28, 2010

ITEM NO.: 4

TIME: 11:00 a.m.

TO: Placer County Planning Commission

FROM: Development Review Committee

SUBJECT: **Final Environmental Impact Report and Conditional Use Permit – Hidden Falls Regional Park (PEIR 20070444 and PCPA 20090391)**

CURRENT GENERAL PLAN DESIGNATION: Agriculture/Timberland, 40-acre minimum (Spears portion); Low Density Residential (Didion portion)

CURRENT ZONING: O (Open Space) Spears portion/ F-B-X 50-acre minimum, PD = 2, Didion portion

STAFF PLANNER: Lisa Carnahan

LOCATION: The Hidden Falls Regional Park (Park) project site comprises approximately 1,200 acres and is located 40 miles northeast of Sacramento, between north Auburn and the City of Lincoln in Placer County. The Park consists of the two adjoining properties formerly known as the Spears Ranch (979 acres) and the Didion Ranch (221 acres). The Park is located east of Garden Bar Road, north of Mt. Vernon and Mt. Pleasant Roads, west of Bell and Hubbard Roads and south of Big Hill Road. The project area includes portions of Coon and Deadman Creeks and is located south of the Bear River. The Assessor's Parcel Numbers for the project area include the following: 026-072-045, 026-072-047, 026-072-054, 026-072-055, 026-072-056, 026-072-057, 026-072-062, 026-072-063, 026-072-076, 026-072-049-510, 026-072-050-510, 026-080-065, 026-080-066, 026-080-067, 026-080-068, 026-080-069, 026-080-070, 026-080-071, 026-080-072, and 026-080-091.

APPLICANT: Placer County Facility Services

PROPOSAL: This project proposes to add approximately 979 acres to the already existing Hidden Falls Regional Park. The proposed project would include an additional access and parking area via Garden Bar Road, road improvements along Garden Bar Road, an expansion of the Didion Ranch parking lot, construction of a multiple-use trail system, and implementation of other passive recreational facilities that would be located within the Park. The County has the principal responsibility for approving and carrying out the proposed project and is the primary source of funding for the proposed project. It is anticipated that project features would be constructed in phases as funding becomes available.

CEQA COMPLIANCE:

An Environmental Impact Report was prepared for the project to satisfy the requirements of the California Environmental Quality Act. The Draft Environmental Impact Report (Draft EIR) was distributed on June 17, 2009. A public hearing to accept comments on the Draft EIR was held by the Planning Commission on July 9, 2009, and the 45-day public review period of the Draft EIR

ended July 31, 2009. Comments on the Draft EIR were responded to in the Final EIR, which was subsequently published for the required 10-day public review period prior to today's hearing. No written public comments were received on the Final EIR during the public review period held from December 11 through December 21, 2009. Due to a publication error, the Final EIR was republished and available for public review for another 10-day period, lasting from January 12 through January 21, 2010. The Final EIR is referenced in Attachment D. The Planning Commission will be asked to certify the Final EIR as a part of the entitlement process for this project.

PUBLIC NOTICES AND REFERRAL FOR COMMENTS:

Public notices were mailed to approximately 498 nearby property owners of record, as well as people who commented on the Draft Environmental Impact Report. Community Development Resource Agency staff and the Departments of Public Works, Air Pollution Control District, Environmental Health, Facility Services, Placer County Fire, other State and Federal Agencies, as well as the Rural Lincoln Municipal Advisory Council (MAC) and North Auburn MAC and various other user groups were transmitted copies of the Draft Environmental Impact Report for review and comment. The public comment period for the Draft Environmental Impact Report ended July 31, 2009. The Final Environmental Impact Report was available for the required 10-day public comment period from December 11 through December 21, 2009. Subsequent to the public review period which ended on December 21, it came to the County's attention that a portion of the Final EIR had been missing from the copy posted on the County's website, and on the CD copies which had been distributed. Upon discovery, the website was immediately updated and new CD's were distributed. The Final EIR was republished from January 12, 2010 through January 21, 2010 in order to allow the public to review the document in its entirety.

BACKGROUND:

This item was continued from the January 14, 2010 Planning Commission hearing to the January 28, 2010 Planning Commission hearing due to a publication error in the Final EIR. The Final EIR was republished for a 10-day public comment period which lasted from January 12 through January 21, 2010. Three written comments and 11 verbal comments were received during the January 14, 2010 public hearing. There was no new information brought forth in the comments which would result in new environmental impacts or additional mitigation measures being required or cause a change in the Final EIR. The comments will be further addressed in the staff presentation at the January 28, 2010 Planning Commission hearing.

For the past 100 years, the western 979 acres (Spears Ranch) of the Park were used primarily for livestock grazing and firewood harvesting. The current tenant (i.e., the former owner) has used the property for cattle grazing since 1985. For the past 20 years, the stocking rate has fluctuated between 75 and 100 cows. The former owner has retained grazing rights in a portion of the Park until 2014, at which point the County will take over these rights. Cattle continue to be grazed on portions of the Park, primarily in irrigated pasture areas, and fencing has been placed in areas to manage the grazing activities. The ranch house, support structures, and grazing lands are located in the western portion of the Park. The property is currently served by public and private services and utilities. The eastern portion of the Park is not subject to heavy grazing activity because of uneven and undulating topography and inaccessibility of the area associated with Coon Creek, Deadman Creek, and associated tributaries.

The Big Hill area of Placer County including the project area and area to the north has been identified as a strategic opportunity area for land conservation because of the relatively undeveloped stretches of the Coon Creek and Bear River watersheds, blue oak woodland and other habitats, value as a connected migration corridor with protected areas to the north such as the Spenceville Wildlife Area in Yuba County, and the large intact parcel sizes in the area. Trail connectivity is being planned to link the Park to the Placer Land Trust parcels to the northeast, contingent upon successful acquisition of trail access rights through linking parcels.

PROJECT DESCRIPTION:

In October 2004, the Planning Commission approved a Minor Use Permit and adopted a Mitigated Negative Declaration for the eastern 221-acre portion of the Hidden Falls Regional Park currently open to the public (referred to as the Didion Ranch portion of the Park). This eastern segment of the Park opened to the public in October 2006 and includes approximately 7 miles of natural surface trails available for non-motorized multiple use, a paved access road and parking lot via Mears Drive, as well as other amenities. The proposed project combines the former Didion Ranch and former 979-acre Spears Ranch portions of the Park in the request for approval of a Conditional Use Permit and certification of the Final Environmental Impact Report. The Conditional Use Permit would encompass the entire 1,200-acre Park and would supersede the Minor Use Permit. The proposed project would include an additional access via Garden Bar Road, construction of a multiple-use trail system, and implementation of other passive recreational facilities that would be located within the Park. Specific features and uses that are proposed within the Park include the following:

1. Approximately 14 miles of new multiple-use, natural-surface trails in addition to more than 10 miles of existing ranch roads for hikers, mountain bikers, and equestrians;
2. Trail and bridge connections to other public trails near the Park property (in addition to the trail network constructed on-site);
3. American's with Disabilities (ADA) accessible trails including access for ADA vehicles;
4. Development of a nature/cultural education/commercial kitchen/conference center at the existing ranch house or other suitable location within the facility development zone;
5. Bridge crossings over Coon Creek and other streams to support the trail network, provide emergency access, and connect to the existing trail system within the Didion Ranch portion of the Park;
6. Culvert and rock-lined stream crossings over intermittent drainages to support the trails network;
7. Permanent restroom facilities; portable, holding tank and/or vault-type restroom facilities;
8. Groundwater wells for drinking water, restrooms, and fire suppression;
9. Fire suppression facilities (i.e., helistops for emergency use and an emergency water system);
10. Equestrian facilities (i.e., horse watering facilities, hitching posts);
11. Picnic areas throughout the Park to accommodate use, including covered pavilions;
12. Benches and rest areas throughout the Park;
13. Enclosed animal-proof trash receptacles throughout the Park to accommodate use;
14. Suitable landscaping around parking areas and restrooms;
15. Improvements to facilitate public access to viewing areas (i.e. pond-side boardwalk, falls observation deck);
16. A disc golf course may be developed that would generally coincide with areas of shaded fuel breaks and other upland areas where the foot traffic pattern would not impact sensitive areas;
17. Drinking fountains;
18. Designated fishing locations along Coon Creek and/or ponds developed in coordination with the California Department of Fish and Game (DFG);
19. New fishing ponds developed in conjunction with the fuel load reduction and/or grazing plans and in coordination with DFG;
20. Film and theater production, subject to County Film Permit requirements;

21. Managed hunting of legal game and nuisance animals (e.g. feral pigs) during times of Park closure. Hunting would be allowed for up to two 2-day seasons per year with 10 hunting permits being issued per season or through depredation permits;
22. Interpretive programs, including signage, displays, and/or guided tours;
23. A group camping area with one or more formalized fire pits, a group tent area, and/or bunkhouses for scheduled, supervised overnight use within the facility development zone;
24. Restoration of various habitats within the Park;
25. Phased construction of parking areas for automobiles and horse trailers via the Garden Bar Road entrance in conjunction with improvements to Garden Bar Road, and expansion of the Didion Ranch parking area;
26. Use of the Park for grazing, educational classes, field trips and scheduled, supervised overnight group camping;
27. Reservation-based events consistent with passive recreation and nature enjoyment such as cross-country training and meets. Events with an aggregate of less than 200 people on-site at any given time, not including regular use of the Park, would obtain reservations through the standard reservation system of the Placer County Parks Division. Large events that exceed 200 individuals on-site at any given time or exceed parking capacity would be required to obtain a Temporary Outdoor Event Permit from the County Community Development Resources Agency.

Vehicle access to the Garden Bar side of the Park would be expanded in phases as funding becomes available. Prior to allowing expanded vehicle access for each phase, the corresponding road and parking improvements would be completed as described in the following table.

Table 1 Summary of Park Access Phasing	
Permitted Access	Corresponding Improvements
PHASE 1	
<ul style="list-style-type: none"> ▶ Trail and emergency access system would be completed throughout the Park and opened for daily public use via existing Mears entrance ▶ Daily public vehicle access would be restricted to existing Mears entrance ▶ Didion Ranch parking area may be expanded from 50 to up to as many as 75 parking spaces for cars and from six to as many as 12 parking spaces for trucks and trailers including relocating the adjacent helistop. ▶ Garden Bar entrance would continue to be used by County employees, tenants, contractors, consultants, utility providers, maintenance trucks, and fire and law enforcement personnel without additional improvements ▶ Development of existing ranch house may proceed during Phase 1 ▶ Occasional classroom sized groups would be permitted to access site through Garden Bar entrance on appointment basis (gates 	<ul style="list-style-type: none"> ▶ Prior to allowance of classroom sized groups, a new public access gate and approximately 200 feet of connecting road to existing access road would be constructed at the intersection of Garden Bar Road near the existing access road. ▶ Prior to allowance of classroom sized groups, a 48 inch high 12.5-gauge woven wire field fence would be constructed along both sides of access road between Garden Bar Road and Park entrance. (as applicable per the terms of the Purchase and Sale Agreement with the Spears family) ▶ Prior to allowance of classroom sized groups, two cattle guards would be installed at each end of the access road between Garden Bar Road and the Park entrance. (as applicable per the terms of the Purchase and Sale Agreement with the Spears family) ▶ Up to 25 additional paved parking stalls and up to 12 additional equestrian parking stalls may be developed at the existing Mears entrance (Placer County 2003).

<p>would be opened and closed behind groups)</p> <ul style="list-style-type: none"> ▶ A handicap-placard-only parking area may be constructed near the emergency access bridge. Park use would be regulated through the Placer County Parks Division reservation system. 	
PHASE 2	
<p>In addition to Phase 1 Access:</p> <ul style="list-style-type: none"> ▶ Daily public automobile access would be allowed to the new parking area at western end of property via Garden Bar Road. ▶ Equestrian trailers would be excluded from the western parking area and from entering the Park via Garden Bar Road. Equestrians would continue to enter the Park via Mears entrance. ▶ Reservation-based events consistent with passive recreation and education with 200 attendees or less at one time would be allowed by County Parks Division reservation. ▶ Use of ranch house for educational and/or meeting purposes would remain regulated by County Parks Division reservation system and/or use agreements. 	<p>In addition to Phase 1 Improvements:</p> <ul style="list-style-type: none"> ▶ New parking area would be constructed at western end of property to include 50 stall paved parking lot and gravel overflow area. ▶ Widen Garden Bar Road from Mt. Pleasant Road to access road to 18 feet of hard surface with 2-foot shoulders where feasible subject to County review and approval.¹ ▶ Vertical curves along Garden Bar Road would be improved in accordance with traffic safety report recommendations subject to County review and approval. ▶ Signing and striping improvements along Garden Bar Road would be made in accordance with traffic safety report recommendations subject to County review and approval. ▶ Improve the access road from Garden Bar Road to the western parking area to 24 feet wide all weather surface with 2-foot shoulders where feasible subject to County review and approval¹. ▶ Install a gate between the western parking area and the ranch house to prevent unrestricted vehicle access beyond parking area into remainder of property.
PHASE 3	
<p>In addition to Phase 1 and 2 Access:</p> <ul style="list-style-type: none"> ▶ Daily public access for equestrian trailers would be allowed to the western parking area via Garden Bar Road. 	<p>In addition to Phase 1 and 2 improvements:</p> <ul style="list-style-type: none"> ▶ A gravel equestrian staging area would be constructed adjacent to the new paved parking area to allow parking for up to 20 horse trailers. ▶ Widen Garden Bar Road from Mt. Pleasant Road to the access road to 20 feet of hard surfacing with 2-foot shoulders where feasible subject to County review and approval.¹ ▶ Horizontal curves along Garden Bar Road would be improved in accordance with traffic safety report recommendations subject to County review of improvement plans.
<p>¹ In areas along Garden Bar Road and the access road from Garden Bar Road to the Park entrance where the County determines that status trees, significant rock outcroppings, and other valuable natural features within the proposed widening corridor should be preserved or where adequate road right-of-way does not currently exist and is not obtainable through market value based willing seller negotiations, alternatives such as turnouts, striping, and/or signage may be considered and approved in lieu of full width widening for those discreet areas.</p>	

SITE CHARACTERISTICS:

The project area is situated along Coon Creek and is south of the Bear River. Garden Bar Road is located to the west; Mt. Vernon and Mt. Pleasant Roads are to the south; and Bell and Hubbard Roads are to the east. The area is undeveloped except for an existing ranch house and several smaller support structures.

The Park and the surrounding area are characterized by blue oak woodland and oak-foothill pine woodland. Coon Creek flows from the northeastern portion of the property to the westernmost property boundary. Deadman Creek flows from the southeastern boundary and is confluent with Coon Creek within the Park. Several intermittent tributaries flow into Coon Creek from both the north and south. On-site creeks flow to the Sacramento River via the Cross Canal. Adjacent land uses include rural residential home sites and agriculture, mostly in the form of cattle grazing.

EXISTING LAND USE AND ZONING:

	<u>LAND USE</u>	<u>ZONING</u>
SITE	Proposed Park	O (Spears)/F-B-X 50 acre min. (PD = .2) (Didion)
NORTH	Rural Residential	F-B-X 50 – 160 acre minimum
SOUTH	Rural Residential	F-B-X 10 acre min., F-B-X– 50 acre min. (PD = .2)
EAST	Rural Residential	F-B-X 40 acre minimum
WEST	Rural Residential	F-B-X 30-40 acre minimum

DISCUSSION OF ISSUES:

The following discussion will focus on the significant elements of the project including the environmental review, and the requested entitlement.

ENVIRONMENTAL REVIEW

The EIR is required to identify “areas of controversy” that include issues raised by the public and by public agencies in the Notice of Preparation (NOP) process. The potential areas of controversy for the Hidden Falls Regional Park project that were identified during this process include:

- Roadway improvements;
- Increased risk of wildfire;
- Public safety/noise related to hunting; and
- Public access via Garden Bar Road.

Summary of Major Environmental Issues

Provided below is an overview of each of the environmental sections contained within the Draft and Final EIR that includes a description of the environmental setting, the potential project-specific and cumulative environmental impacts and the mitigation measures developed to reduce these impacts where feasible. This staff report has been written to provide information about these environmental issues that are addressed in the Draft and Final EIR; the staff report, however, does not provide a discussion or analysis of these issues.

Land Use

The use of the site as a passive park is consistent with the intent of the Open Space land use designation of the Zoning Ordinance. The proposed project would add trails and recreational facilities and would increase the use of the project area by the public. Although this change in use would be different from some surrounding uses, the project would be limited to passive recreational and educational amenities and would be consistent with the agricultural and open space objectives of the Placer Legacy program, thus ensuring compatibility with the surrounding land use. Impacts to land use were considered to be less than significant and no mitigation measures are required.

Geology and Soils

The proposed project encompasses approximately 3.5 miles of Coon Creek, and elevations in the Park range from less than 400 feet above sea level in the western portion to more than 1,200 feet above sea level at the eastern project boundary. Construction and operation-related erosion hazards were deemed to have a less than significant effect with the implementation of stormwater and construction best-management practices, as well as post-development best management practices. Additionally, the applicants will be required to conduct on-site soil testing and prepare and implement an asbestos dust control plan, if necessary, in order to protect workers from naturally occurring asbestos which could be disturbed during construction. The mitigation measures proposed for this project include compliance with the County's Grading Ordinance and the preparation of the following reports/plans: erosion control/ winterization plan, drainage report, geotechnical report, and improvement/grading plans. Implementation of these mitigation measures will reduce project impacts to geology and soils to a less-than-significant level.

Hydrology and Water Quality

The principal hydrologic features in the Park are Coon Creek and Deadman Creek, and a large stock pond on the western end of the Park. Coon Creek flows from the eastern portion of the Spears Ranch portion of the Park to the westernmost property boundary. Other hydrologic features on the site include smaller streams and seasonal wetlands. Groundwater conditions within the Park consist of fractured rock substrate and recharge from the Coon Creek watershed. The existing groundwater well which provided water for the ranch house within the Spears Ranch portion of the Park is capable of producing 2.1 gallons of water per minute.

The proposed trail system would cross Coon Creek in three locations. One bridge would provide access for pedestrians, equestrians, and emergency vehicles and two bridges would provide access for pedestrians, equestrians, and small maintenance vehicles only. Approximately eight pedestrian/equestrian foot bridges would also be constructed over drainages along the trail system, including Deadman Creek. Up to 25 additional drainage crossings would require construction or replacement of culverts or the use of rock-lined stream crossings. Project construction could cause short-term degradation of water quality and long-term soil erosion, therefore, a grading and drainage plan will be prepared and implemented as a mitigation measure. Additionally, authorization for construction of the bridges will be obtained from the DFG, Central Valley Regional Water Quality Control Board as well as the U.S. Army Corps of Engineers (USACE).

Operation of two septic systems and up to two ground water wells is proposed as part of the project. A permit for wells that serve public facilities would be acquired and would include conditions of approval to protect groundwater resources. If groundwater is to be used for emergency fire suppression water, and water demands for fire suppression combined with water demands for other proposed uses are calculated to be consistent with yields found in nearby private wells, then no further mitigation is required. If the water requirements surpass that of yields found in nearby wells, additional sources of water will need to be found. The proposed mitigation measures would bring the level of impacts on hydrology and water quality to a less-than-significant level.

Air Quality

The proposed project is located in western portion of Placer County, which lies within the Sacramento Valley Air Basin. Western Placer County is designated as non-attainment for ozone standards and both the Sacramento Area Regional Ozone Attainment Plan and the County's Air Pollution Control District 1991 Air Quality Attainment Plan focus on reducing the emissions of ozone precursors, reactive organic compounds and nitrogen oxides. Construction-related emissions of criteria air pollutants and precursor emissions from the proposed project would not violate or contribute substantially to an existing or projected air quality violation, or expose nearby residents to substantial pollutant concentrations.

The project is required to prepare and submit an asbestos dust control plan to the Placer County Air Pollution Control District for review and approval and all contractors will be required to maintain their construction equipment in accordance to the plan. This plan will reduce the potential impacts related to air quality to a less-than-significant level.

Transportation and Circulation

Public access to the Park is currently provided via Mears Drive. Future access to the Park would be provided via a new Garden Bar Road parking lot in addition to an expanded Mears Drive parking lot. Park visitors would use the existing access road/easement from Garden Bar Road to the proposed western parking area. Vehicle access to the Park would be expanded in phases as funding becomes available in the future. The first phase would include an expansion of the existing Mears Drive parking area, and the allowance for classroom-sized groups to be occasionally permitted access to the Park through the Garden Bar entrance on an appointment basis. Prior to allowance of these groups, a new public access gate would be constructed, and connecting gates would be opened and closed behind groups. In order to ensure safe ingress and egress via Garden Bar Road, construction of parking areas for automobiles and horse trailers via the western entrance would happen in conjunction with improvements to Garden Bar Road.

Several commenters raised the issue of impacts to other local roads due to increased traffic. Although there will be an incremental increase of project traffic to these peripheral roads, they will continue to operate at a Level of Service "B" in the future with the project, and improvements beyond those identified for the segment of Garden Bar Road are not warranted. In addition to the planned improvements to Garden Bar Road, the County will pay a traffic impact fee to the Capital Improvement Program to further off-set any cumulative traffic impacts on area roadways.

Reservation-based events at the Park could cause an increase in automobile, truck and bus traffic in addition to regular Park use. Use of Garden Bar Road by buses and/or delivery trucks could impact traffic flow along the road. Reservation-based events (involving less than 200 people on-site at a given time) would be regulated by the County Parks Division Reservation System and would include restrictions so that event start and end times would not to exceed peak usage of the park, and the usage of Garden Bar Road and the parking lot would not exceed the capacity. These mitigation measures would bring the level of this impact to a less-than-significant level. Large events (over 200 people) that could result in an exceedance of parking capacity would be required to obtain a Temporary Outdoor Event Permit and undergo separate environmental review.

Biological

The project site consists of undeveloped and relatively undisturbed ±841-acre oak woodland, ±89-acre annual grassland, ±46-acre valley foothill riparian woodland and ±5.6 acres of freshwater marsh habitat. The oak woodland component of the project is composed primarily of interior live oak and blue oak and is contiguous to oak woodland habitat on portions of adjacent offsite parcels. A preliminary wetland delineation identified 31.5 acres of potentially jurisdictional waters of the United States (which includes drainages, stock ponds, marshes and seeps) on the Spears Ranch property and along Garden Bar Road. In order to protect aquatic habitats and the native fish community, the County will obtain and implement the conditions of a streambed alteration agreement from DFG. Prior to construction, the County will obtain a verified wetland delineation from the USACE and shall replace, restore, or enhance on a "no net loss" basis the acreage of all waters of the United States and wetland habitats that would be affected by implementation of the project. In addition, the County will secure a 404 permit from the USACE and a 401 permit from the State Water Resources Control Board.

The project area supports suitable habitat for a wide variety of resident and migratory wildlife species. Special-status species known to occur within the project site include two plants (Brandege's clarkia and Sierra monardella), three birds (Golden eagle, Yellow-breasted chat, and

California black rail), one reptile (Northwestern pond turtle) and one mammal (Ringtail). Various measures, including pre-construction surveys and protective fencing, will be implemented in order to protect the various species which may inhabit the site.

Project implementation would result in potentially significant impacts to oak woodlands. The County shall mitigate this impact to a less-than-significant level by either paying in-lieu fees into the County approved oak woodland preservation fund for removal of all native trees larger than five (5) inches diameter at breast height proposed for removal or payment of \$24,000 per acre of woodland impacted to be deposited into the Placer County Tree Preservation Fund. The Fund will be used for the purchase of conservation easements within the County where existing oak woodlands that form a contiguous habitat can be permanently set aside.

Noise

The project site is located in a relatively rural setting, and is surrounded by parcels zoned Farm with 20-160 acre minimums. The principal sources of ambient noise in the area include vehicle traffic on nearby roads and residential agricultural activities. The single-family residences on the south and west sides of the project represent the noise sensitive land uses in the vicinity.

Long term traffic associated with project operation would not exceed Placer County standards but would result in a noticeable (i.e., 3 dBA or greater) increase in traffic noise levels along area roadways, and would increase ambient noise at nearby existing residences. A mitigation measure will be required that restricts public vehicular access to the Park to 6 a.m. until 30 minutes after sunset and would reduce this impact to a less-than significant level.

Several commenters expressed concern about allowing hunting in the Park. Up to 4 days of hunting of legal game would be allowed in the Park during two, 2-day seasons per year. Hunting would only be allowed during times of Park closure to eliminate conflicts with other recreation activities. Hunting would be regulated by the County and Department of Fish and Game officials and will conform to the Placer County Noise Ordinance. Hunter education will be provided to advise permitted hunters about the restricted areas near adjacent land uses and areas of the Park to minimize potential noise impacts.

Public Services and Utilities

The project area is outside of existing municipal service areas for water and wastewater. Implementation of the proposed project would require the installation of up to two groundwater wells and a septic system within the Spears Ranch portion of the Park, and the existing groundwater well and septic system could be upgraded or abandoned and replaced as part of the project.

Several commenters expressed concern about the potential of increased wildfire due to campfires being allowed in the Park and the ability of emergency personnel to respond to fires. One or two campfire pits in the group camp area is proposed. These campfires would only be allowed during group camping events and would not be allowed by other Park users or in any other areas of the Park. Group camping events would be allowed within the Park on a reservation basis only, and would be subject to agreement and conditions determined by the County. Additionally, the County would consult with CalFire on local fire conditions and would not allow campfires during high fire hazard days.

The project would include fire suppression facilities, including the construction of an emergency access bridge over Coon Creek, a new helistop on the Spears Ranch portion of the Park for emergency use, a hydrant system, and an emergency water storage system to be used for fire protection.

Aesthetics

The scenic resources on the project site include areas of dense oak woodland and open grassland, the riparian corridor along the course of Coon Creek and Deadman Creek and the other drainages. The proposed project would not change the character of the site from open space. The proposed project would introduce new physical elements into the landscape; however, the proposed facilities of the Park (i.e., bridges, trails, viewing boardwalk, restrooms, picnic areas, and expanded parking area) would be in remote locations, and would avoid creating visually obtrusive effects.

The proposed project would widen Garden Bar Road in phases, coinciding with improvements to the Park. The removal of existing trees along Garden Bar Road would be required and would result in a substantial physical change to the visual environment of the road and would occur within close proximity of viewers, including adjacent residents. The County will attempt to avoid as much impact to status trees along Garden Bar Road as practical through engineering analysis within the parameters of safety standards and available right-of-way. To reduce the potential degradation of visual quality resulting from tree removal, the County shall revegetate and restore all disturbed areas along Garden Bar Road. Changes to the scenic character of Garden Bar Road would be a significant impact, and although mitigation measures would reduce this impact, it would remain significant and unavoidable.

Cultural Resources

Nine potentially significant cultural resources and one significant cultural resource have been documented within the Spears Ranch portion of the Park. In order to mitigate for potential loss or damage to these cultural resources, the County will prepare detailed design plans for trails, roads, and Park facilities to ensure that direct effects associated with project implementation avoids all significant and potentially significant documented cultural resources in the project area and manages the project site to avoid indirect effects.

Hazards and Hazardous Materials

Project construction and maintenance would require the storage, use and handling of small amounts of hazardous materials such as gasoline, diesel fuels, oils, plaster, cement, herbicides, etc. Best Management Practices will be implemented during all phases of construction on the project site in order to mitigate this impact to less than significant.

Several existing buildings may likely contain asbestos building material and lead-based paint. In addition, several remnant mining or prospecting resources are located on site that could contain hazardous materials. If areas containing hazardous materials are to be disturbed, the County shall require its contractor to prepare and implement a site health and safety plan. For any prospecting or mining resources, soil sampling shall be conducted to determine if there are any hazardous materials present on site. Implementation of these mitigation measures will reduce this impact to a less-than-significant level.

Cumulative Impacts

The proposed Park is consistent with the land uses and zoning of the project area, including the goals and policies of the General Plan. Either alone, or combined with other nearby land preservation projects, it would not have a significant cumulative effect on land use, planning, or agricultural resources. Due to the implementation of site-specific mitigation consistent with the Central Valley Regional Water Quality Control Board program, the proposed project would not contribute to a significant cumulative effect on soils, geology, or seismicity. Similarly, the Park would not contribute to a significant cumulative effect on cultural resources, transportation and circulation, air quality, noise, water quality or hydrology, biological resources, public services or utilities, or hazardous materials and hazards.

Growth-Inducing Impact

Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, through the stimulation of economic activity within the region, or through the establishment of policies or other precedents that directly or indirectly encourage additional growth. Implementation of the proposed project would occur in phases and would generate short-term employment opportunities. It is anticipated that the new jobs would be filled using the existing local employment pool. Existing County staff is expected to manage and maintain the Park. Therefore, indirect growth-inducing impacts resulting from implementation of the proposed project would be less than significant.

This property would be managed by the County for open space, natural resources values, and outdoor recreational uses. No new services or utilities would be constructed with more capacity than needed for uses currently being proposed. Although improvements would need to occur along Garden Bar Road, many additional road improvements and other requirements would need to be met for any further development to occur along Garden Bar Road. For these reasons, the project would not result in direct growth-inducing effects, and this impact would be less than significant.

Significant Unavoidable Environmental Impacts

Implementation of the proposed project would result in significant unavoidable impacts to the aesthetics along Garden Bar Road. As part of the road improvements necessary to accommodate additional traffic on Garden Bar Road, some trees and vegetation would be removed. Although the County will attempt to reduce this impact by avoiding status trees where possible and revegetating and restoring all disturbed areas to minimize the visual quality impacts, it will not reduce the impact to a less-than-significant level.

Alternatives

The Draft EIR provides a discussion and comparison of four project alternatives: Alternative 1 – No Project Alternative; Alternative 2 – Single-Track Trails Alternative; Alternative 3 – Dispersed Recreation Alternative and Alternative 4 – Reduced Access Alternative. Table 15-1 on page 15-15 of the Draft EIR provides a comparison of the four Alternatives and the proposed project.

According to the CEQA Guidelines, if the environmentally superior alternative is the “No Project Alternative”, an environmentally superior alternative must be selected from the other alternatives. The “Reduced Access Alternative” is the environmentally superior alternative among the other alternatives. However, neither this alternative, nor any of the other alternatives, would have the beneficial effect on recreation that would result from implementing the proposed project.

CONDITIONAL USE PERMIT

Per the Placer County Zoning Ordinance, a Conditional Use Permit is required for public park projects within the Open Space zone district. This Conditional Use Permit would encompass the entire 1,200-acre site, and would supersede Minor Use Permit 20040635 which was approved for the Didion Ranch side of the Park in 2004. The recommended Conditions of Approval detailed in attachment H would supersede the Conditions of Approval linked to the above-referenced Minor Use Permit.

LINCOLN AND NORTH AUBURN MUNICIPAL ADVISORY COUNCILS

The North Auburn MAC members and Lincoln MAC members unanimously recommended approval of the proposal for development of the Hidden Falls Regional Park on November 10, 2009, and November 16, 2009, respectively. (Attachments E and F)

RECOMMENDATION:

The Developmental Review Committee recommends the Planning Commission approve the Conditional Use Permit and Certify the Final Environmental Impact Report, based upon the following findings and recommended conditions of approval.

FINDINGS:

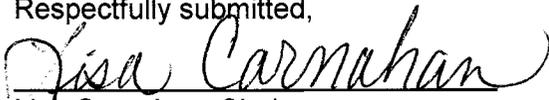
CEQA:

Please refer to Attachment G, "Statement of Findings and Statement of Overriding Considerations".

Conditional Use Permit:

1. The proposed modifications are consistent with all applicable provisions of Chapter 17, Planning County Zoning Ordinance and any applicable provisions of other chapters of the Code in that a public park is a permitted use allowed within the Open Space and Farm zone districts.
2. The proposed Park is consistent with applicable policies and objectives of the Placer County General Plan as well as the Placer Legacy goals. Specifically, the Park provides consistency with the intent of Goal 1.G of the General Plan to designate land for and promote the development and expansion of public and private recreational facilities to serve the needs of residents and visitors. The proposed Park also directly implements the recreational resources element of the Placer Legacy Program, as it conserves natural features necessary for access to a variety of outdoor recreation opportunities.
3. The establishment, maintenance or operation of the proposed Hidden Falls Regional Park will not, under the circumstances of the particular case, be detrimental to the health, safety, peace, comfort and general welfare of people residing or working in the neighborhood of the proposed use, or be detrimental or injurious to property or improvements in the neighborhood or to the general welfare of the County.
4. The proposed Park will be consistent with the character of the immediate neighborhood and will not be contrary to its orderly development.
5. The proposed Park will not generate a volume of traffic beyond the design capacity of all roads providing access to the project.

Respectfully submitted,



Lisa Carnahan, Chairperson
Developmental Review Committee

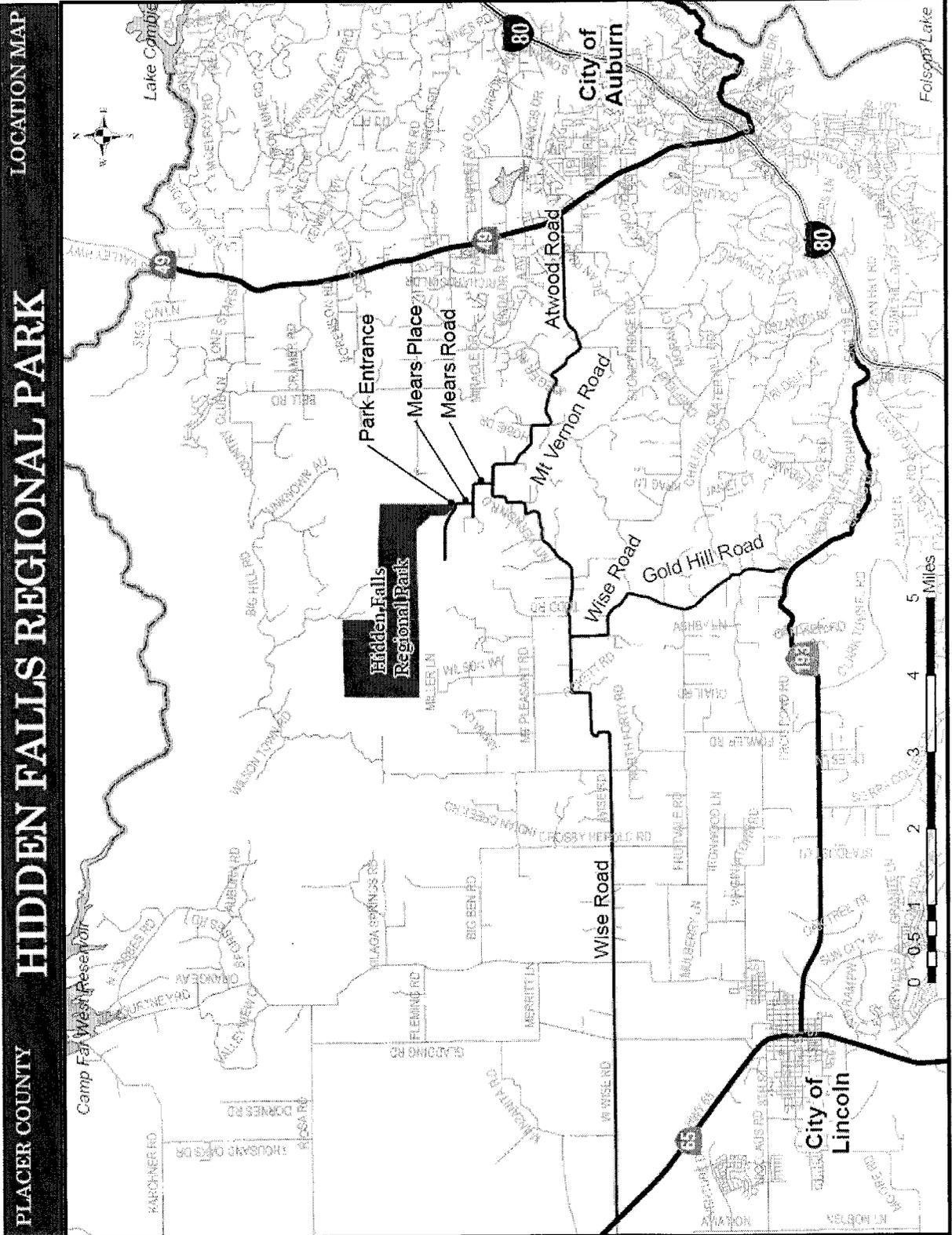
ATTACHMENTS:

- Attachment A - Vicinity Map
- Attachment B - Site Plan (Proposed Project)
- Attachment C - Hidden Falls Regional Park Draft EIR (distributed under separate cover on June 17, 2009)
- Attachment D - Hidden Falls Regional Park Final EIR (distributed under separate cover on December 11, 2009)
- Attachment E - North Auburn MAC Project Approval Letter
- Attachment F - Rural Lincoln MAC Project Approval Letter
- Attachment G - Statement of Findings and Statement of Overriding Considerations

Attachment H - Recommended Conditions of Approval
Attachment I - Correspondence from January 14, 2010 Planning Commission Hearing

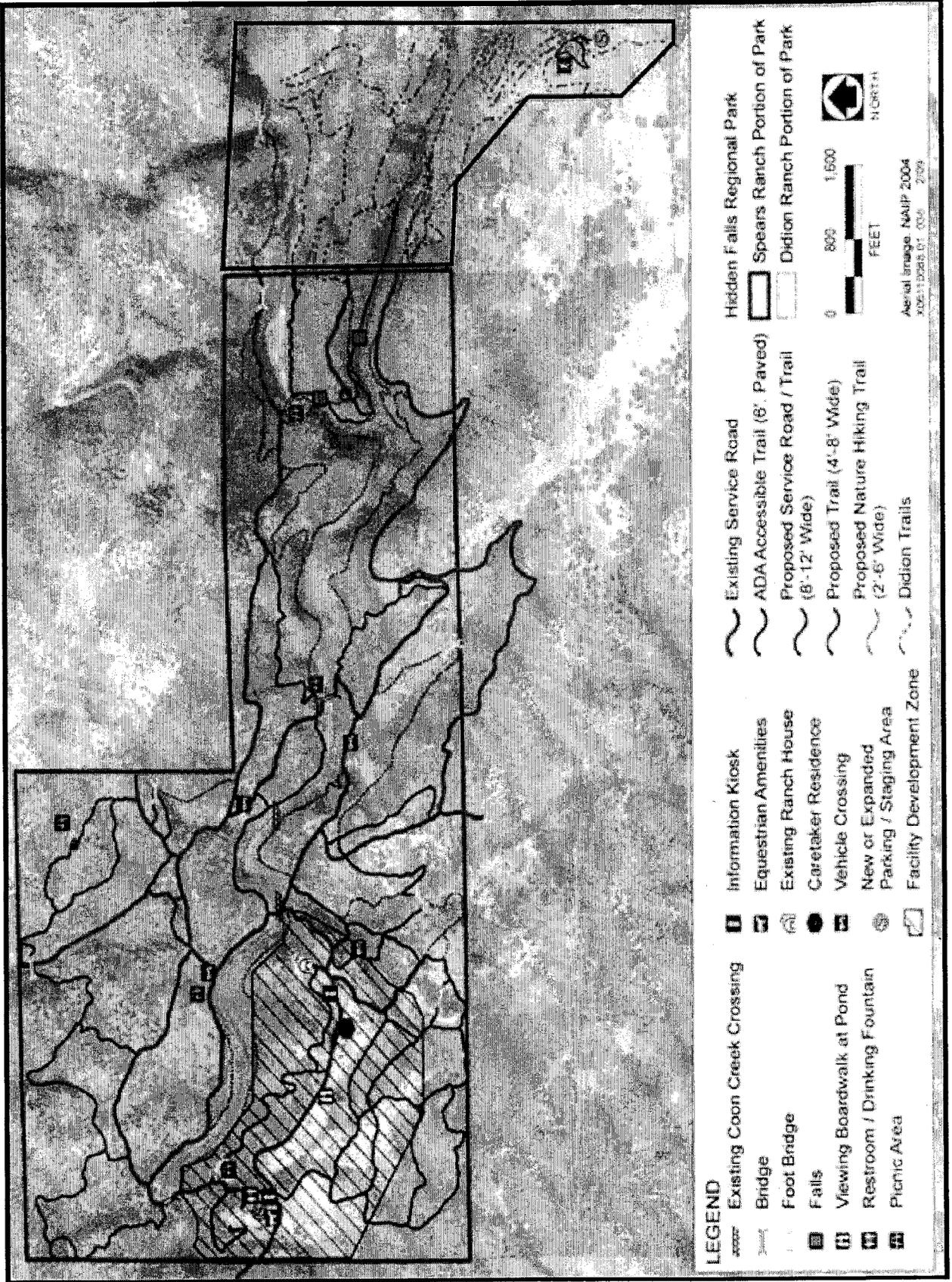
cc: Andy Fisher, Facility Services - Applicant
Michael Johnson - CDRA Director
Paul Thompson - Deputy Planning Director
Rob Sandman - County Counsel's Office
Scott Finley - County Counsel's Office
Tom Thompson - Air Pollution Control District
Sarah Gillmore - Engineering and Surveying Department
Andrew Gaber - Department of Public Works
Jill Kearney - Environmental Health Services
Bob Eicholtz - Placer County Fire
Erin Hess - US Army Corp of Engineers
James Navicky - Department of Fish and Game
Lisa Carnahan - Associate Planner
Subject/chrono files

Vicinity Map



Site Plan - Hidden Falls Regional Park

Regional Park Project



HIDDEN FALLS REGIONAL PARK DRAFT EIR

DISTRIBUTED UNDER SEPARATE COVER ON
JUNE 17, 2009

ATTACHMENT C

HIDDEN FALLS REGIONAL PARK FINAL EIR

DISTRIBUTED UNDER SEPARATE COVER ON
DECEMBER 11, 2009

ATTACHMENT D

County of Placer



NORTH AUBURN MUNICIPAL ADVISORY COUNCIL

P. O. Box 6983

Auburn, CA 95604

County Contact: Administrative Aide (530) 889-4010

November 30, 2009

Placer County Planning Commission
3091 County Center Drive #140
Auburn, CA 95603

Re: Hidden Falls Regional Park

Dear Commissioners:

At the November 10 2009, North Auburn Municipal Advisory Council meeting, a proposal was presented to develop recreation and access facilities on the 979 acre former Spear Ranch property and expand the existing parking area on the Didion Ranch portion of the Park to provide opportunities for passive recreation on the entire 1,200 acre Hidden Falls Regional Park. In addition, the project would improve access to the western portion of the property, including an on-site staging/parking area with access from Garden Bar Road.

The members of the NAMAC recommend approval of the proposal for development of Hidden Falls Regional Park as presented.

Sincerely,

Ken Gregory
Chair

cc: Placer County Board of Supervisors
~~Michael Johnson, Director, Placer County Planning Department~~
Andy Fischer, Placer County Planner

18
ATTACHMENT E

County of Placer
RURAL LINCOLN MUNICIPAL ADVISORY COUNCIL
P. O. Box 716
Lincoln, CA 95648
County Contact: Administrative Aide (530) 889-4010



November 30, 2009

RECEIVED
DEC 2 2009
PLANNING DEPT.

Placer County Planning Commission
Attn: Ken Denio, Chair
3091 County Center Drive
Auburn, CA 95603

Dear Chairman Denio and Members of the Planning Commission:

On November 16, 2009, the Rural Lincoln Municipal Advisory Council voted unanimously to recommend approval of the Hidden Falls Regional Park Project to develop phased recreation and access facilities on the 979-acre former Spears Ranch property and expand the existing parking area on the Didion Ranch portion of the park to provide opportunities for passive recreation on the entire 1,200-acre Hidden Falls Regional Park.

The Lincoln MAC appreciates your efforts in this important matter.

Sincerely,

A handwritten signature in cursive script that reads "Mark Fowler".

Mark Fowler, Chair

Cc: Supervisor Robert Weygandt
Lisa Carnahan, Placer County Planning Department

19
ATTACHMENT F

HIDDEN FALLS REGIONAL PARK PROJECT
FINDINGS OF FACT AND STATEMENT OF OVERRIDING
CONSIDERATIONS

Prepared for

Placer County Planning Commission

December 23, 2009
(Revised January 21, 2010)

Submitted by: EDAW/AECOM

TABLE OF CONTENTS

Section	Page
1 Introduction	1
2 Description of the Proposed Project	1
3 Procedural History	3
4 Alternatives.....	5
4.1 No Project Alternative (Alternative 1).....	6
4.2 Single-Track Trails Alternative (Alternative 2).....	6
4.3 Dispersed Recreation Alternative (Alternative 3).....	6
4.4 Reduced Access Alternative (Alternative 4)	7
5 General Findings	7
5.1 Soils, Geology, and Seismicity	8
5.2 Cultural Resources.....	12
5.3 Visual Resources	14
5.4 Transportation and Circulation	15
5.5 Air Quality	16
5.6 Noise.....	17
5.7 Hydrology and Water Quality.....	18
5.8 Biological Resources	23
5.9 Hazardous Materials and Hazards	31
6 Statement of Overriding Considerations	33
7 Conclusion.....	34
8 References	35

Table

10-12	Comparison of Modeled Existing and Existing Plus Project Plus Mitigation Measure 10-1 Vehicular Traffic Noise Levels	18
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1 INTRODUCTION

The Hidden Falls Regional Park Project (project) is a proposal by Placer County, Department of Facility Services (County) as lead agency under the California Environmental Quality Act (CEQA) to develop the 979-acre Spears Ranch portion of Hidden Falls Regional Park (Park). The project area is owned and managed by the County. The environmental analysis contained in the environmental impact report (EIR) provides a thorough evaluation of significant and potentially significant effects on the environment that would occur as a result of implementing the project.

When approving a project, CEQA and the State CEQA Guidelines provide that:

No public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless both of the following occur:

(a) *The public agency makes one or more of the following findings with respect to each significant effect:*

- (1) *Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.*
- (2) *Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.*
- (3) *Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.*

(b) *With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment. [Public Resources Code Section 21081]*

Because the EIR identified significant effects that would occur as a result of the project and in accordance with the provisions of the State CEQA Guidelines, the County hereby adopts these findings as part of the approval of the proposed project.

2 DESCRIPTION OF THE PROPOSED PROJECT

The proposed project is located between north Auburn and the City of Lincoln in Placer County, in the Sierra Nevada foothills approximately 40 miles northeast of Sacramento. The approximately 1,200-acre Park consists of the properties formerly known as Spears Ranch (979 acres) and Didion Ranch (221 acres). The project area is situated along Coon Creek and is south of the Bear River. Garden Bar Road is located to the west; Mt. Vernon and Mt. Pleasant Roads are to the south; Bell and Hubbard Roads are to the east; and private property is located to the north.

The proposed project will be developed by the County in a phased manner, providing recreation and access facilities on the 979-acre former Spears Ranch property and expanding the existing parking area within the Didion Ranch portion of the Park to provide opportunities for passive recreation (i.e., hiking, biking, horseback riding) on the entire 1,200-acre Hidden Falls Regional Park. In addition, the project will improve access to the western portion of the property, including an on-site staging/parking area with access from Garden Bar Road.

The County will develop various recreational/educational uses within the Park including:

1. Approximately 14 miles of new multiple-use, natural-surface trails in addition to more than 10 miles of existing ranch roads for hikers, mountain bikers, and equestrians within the Spears Ranch portion of the Park;
2. Trail and bridge connections to other public trails near the Park property (in addition to the trail network constructed on-site);
3. American's with Disabilities (ADA) accessible trails including access for ADA vehicles;
4. Development of a nature/cultural education/commercial kitchen/conference center at the existing ranch house or other suitable location within the facility development zone;
5. Bridge crossings over Coon Creek and other drainages to support the trail network, provide emergency access, and connect to the existing trail system within the Didion Ranch portion of the Park;
6. Culvert and rock-lined stream crossings over intermittent drainages to support the trails network;
7. Permanent restroom facilities with low-flow toilets, portable, holding tank and/or vault type restroom facilities, and associated septic/water systems and pipelines in addition to existing facilities and septic systems, as required to accommodate Park uses;
8. Groundwater wells for drinking water and restrooms in addition to the existing facilities, as required to accommodate Park needs;
9. Fire suppression facilities (i.e., helistops for emergency use and an emergency water system);
10. Equestrian facilities (e.g., horse watering facilities, hitching posts);
11. Picnic areas throughout the Park to accommodate use, including covered pavilions;
12. Benches and rest areas throughout the Park;
13. Enclosed bear-proof trash receptacles throughout the Park to accommodate use;
14. Suitable landscaping around parking areas and restrooms;
15. Improvements to facilitate public access to viewing areas (e.g., pond-side boardwalk);
16. A disc golf course may be developed that would generally coincide with areas of shaded fuel breaks and other upland areas where the foot traffic pattern would not impact sensitive areas and/or would be beneficial to ongoing vegetation management/fire risk reduction objectives;
17. Drinking fountains;
18. Designated fishing locations along Coon Creek and/or ponds developed in coordination with the California Department of Fish and Game (DFG);
19. New fishing ponds developed in conjunction with the fuel load reduction and/or grazing plans and in coordination with DFG;
20. Film and theater production, subject to County film permit requirements;



21. Managed hunting of legal game during times of Park closure. Hunting would be allowed for up to two 2-day seasons per year with 10 hunting permits being issued per season or through deprecation permits (e.g., for feral pigs);
22. Interpretive programs, including signage, displays, and/or guided tours;
23. A group camping area with one or more formalized fire pits, a group tent area, and/or bunkhouses for scheduled, supervised overnight use within the facility development zone;
24. Support restoration of various habitats within the Park;
25. Construction of parking areas for automobiles and horse trailers and expansion of the Didion Ranch parking area;
26. Use of the Park for grazing, educational classes, camps and field trips, and
27. Reservation-based events consistent with passive recreation and nature enjoyment such as cross-country training and meets. Reservation-based events with an aggregate of less than 200 people on-site at any given time not including regular use of the Park, would obtain reservations through the standard reservation system of the Placer County Parks Division. The County Parks Reservation System would work to ensure that event traffic in combination with day use traffic would not exceed parking capacity. To that end, event reservations may include exclusion of events during times of peak day use, restrictions on the number and type of vehicles attending events, or other suitable measures. Any events that would exceed the capacity of the on-site restrooms would need to supply portable toilets, and events that exceed 200 individuals on-site at any given time or exceed parking capacity would be required to obtain a temporary event permit from the County Community Development Resources Agency. Size, timing, duration, and other variables related to these events are not known at this time, therefore, consistent with other County Park operations, these would undergo separate environmental review as part of the permit application process.

3 PROCEDURAL HISTORY

WHEREAS, the need to designate land for and promote the development and expansion of public and private recreational facilities to serve the needs of residents and visitors has been identified in the Placer County General Plan; and

WHEREAS, the applicant proposes to provide passive recreation and access facilities on the 979- acre former Spears Ranch property and expand the existing parking area on the Didion Ranch portion of the Hidden Falls Regional Park to provide opportunities for passive recreation (i.e., hiking, biking, horseback riding) on the entire 1,200-acre Hidden Falls Regional Park in western Placer County; and

WHEREAS, the County issued a notice of preparation to prepare an EIR for the Hidden Falls Regional Park Project on June 14, 2007; held a public scoping meeting for the Hidden Falls Regional Park Project on June 28, 2008; prepared a Draft EIR and released it for public comment on June 16, 2009; received public comments on the Draft EIR through July 31, 2009; held a public hearing on the Draft EIR on July 9, 2009; prepared responses to all significant environmental issues raised in public comments; published and released the Final EIR on December 11, 2009, and due to a publication error, re-published and released the Final EIR on January 12, 2010; and

WHEREAS, the Planning Commission gave notice of a public hearing to consider and act upon the Final EIR for the project, and public hearings were duly held before the Planning Commission on January 14, 2010 and continued to January 28, 2010; and

WHEREAS, after holding public hearings, the Planning Commission duly considered the Final EIR as prepared for the project (which includes the Draft EIR dated June 16, 2009 and the Final EIR, dated January 12, 2010), the comments of the public, both oral and written, and all written materials in the record connected therewith.

NOW, THEREFORE, BE IT RESOLVED, by the Planning Commission of the County of Placer as follows:

1. The foregoing statements of procedural history are correct and accurate.
2. The Final EIR has been prepared in accordance with all requirements of State CEQA Guidelines.
3. The Final EIR was presented to and reviewed by the Planning Commission. The Final EIR was prepared under the supervision of the County and reflects the independent judgment of the County. The Planning Commission has reviewed the Final EIR, and bases the findings stated below on such review and other substantial evidence in the record.
4. The County finds that the Draft EIR considers a reasonable range of potentially feasible alternatives, sufficient to foster informed decision making, public participation and a reasoned choice. Thus, the alternatives analysis in the Draft EIR is sufficient to carry out the purposes of such analysis under State CEQA Guidelines.
5. The Planning Commission hereby certifies the Final EIR as complete, adequate and in full compliance with CEQA and as providing an adequate basis for considering and acting upon the Project Approval and makes the following specific findings with respect thereto.
6. The Planning Commission agrees with the characterization of the Draft EIR and Final EIR with respect to those impacts identified as "less than significant" and finds that those impacts have been described accurately and are less than significant as so described in the Draft EIR and Final EIR. This finding does not apply to impacts identified as significant or potentially significant that are reduced by mitigation measures to a level characterized in the Draft EIR and Final EIR as less than significant or impacts characterized in the Draft EIR and Final EIR as significant and unavoidable. Each of those impacts and the mitigation measures adopted to reduce them are dealt with specifically in the findings below.
7. The Planning Commission agrees with the characterization of the Draft EIR and Final EIR with respect to Impact 7-1, "Long-Term Changes in Visual Resources Associated with the Improvements to Garden Bar Road," that is identified as significant and unavoidable. Implementation Mitigation Measures 7-1: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts, and 12-8: Protect Oak Woodland Habitat would reduce this impact; however, this impact would remain significant and unavoidable because no other screening options along Garden Bar Road are available and revegetation of the disturbed areas would not reduce visual impacts in the short-term. Implementation of the Reduced Access Alternative would reduce this impact to a less-than-significant level; however, the Reduced Access Alternative would not meet the project objective to provide adequate opportunities to a wide variety of Park users without overburdening the functional capacity of the site and appurtenant roadway system. Implementation of this alternative could overburden the existing Didion Ranch entrance and Mears Road because all traffic related to use of the Park would use the Didion Ranch entrance. In addition, this alternative would provide less recreational benefit than the proposed project. Therefore, no feasible mitigation is available to fully reduce the visual impacts along Garden Bar Road.
8. All mitigation measures proposed in the Draft EIR and Final EIR are adopted and incorporated into the Project.

24

9. Hunting is also being proposed for up to two 2-day seasons per year with 10 hunting permits being issued per season or through depredation permits. Typical noise levels resulting from gunfire are approximately 120–140 dBA at 6 inches (Kardous, et al. 2003). Accounting for intervening topography and vegetation as well as distance, noise resulting from gunshots within the Park would not exceed the Placer County Noise Ordinance maximum noise level standards within 0.5-mile of any sensitive receptor. However, maintaining a 0.5-mile hunting buffer from nearby residences is not feasible and it is unlikely that actual gunfire within the Park would exceed these standards at 0.5-mile because of topography, background noise, and other factors. Hunting of legal game at the Park shall conform to the Placer County Noise Ordinance. If necessary, acoustical surveys or modeling would be conducted prior to on-site hunting of legal game to determine the distance restriction between hunting areas and the nearest sensitive receptors in accordance with the Placer County Noise Ordinance. Also, hunter education will be provided to advise permitted hunters about the location of adjacent land uses and areas of the Park to minimize potential noise impacts. The County would ensure that all authorized hunters entering the Park are properly educated and licensed in accordance with DFG laws and apprised of any specific requirements of the Placer County Noise Ordinance including restricted areas near adjacent land uses.
10. The Mitigation Monitoring and Reporting Plan (“MMRP”) will apply to all mitigation measures adopted with respect to the Project pursuant to all of the project approvals and will be implemented.
11. The mitigation measures and the MMRP have been incorporated into the Conditions of Approval for the Conditional Use Permit and have thus become part of and limitation upon the entitlement conferred by the Conditional Use Permit and other project approvals.
12. The descriptions of the impacts in these findings are summary statements. Reference should be made to the Draft EIR and Final EIR for a more complete description.
13. The Department of Facility Services is directed to file a Notice of Determination with the County Clerk within five (5) working days in accordance with Public Resources Code section 21152(a) and CEQA Guidelines section 15094.

4 ALTERNATIVES

In accordance with the Section 15126.6 of the State CEQA Guidelines, a range of reasonable alternatives to the project that could feasibly attain the basic project objectives but would avoid or substantially lessen any of the significant effects of the project was addressed in the Draft EIR. The Draft EIR considered the following four alternatives to the project: No Project Alternative, Single-Track Trails Alternative, Dispersed Recreation Alternative, and Reduced Access Alternative.

The No-Project Alternative is environmentally superior to the project. The environmentally superior alternative among the other alternatives is the Reduced Access Alternative. The Reduced Access Alternative would be environmentally superior to the proposed project with regard to biological resources; visual resources; air quality; noise; soils, geology, and seismicity; hydrology and water quality; and hazardous materials and hazards. The Reduced Access Alternative would be superior to the Single-Track Trails Alternative with regard to visual resources, and the Dispersed Recreation Alternative with regard to visual resources; biological resources; cultural resources; soils, geology, and seismicity; and hydrology and water quality.

The No-Project Alternative would not attain any of the project’s objectives. The Single-Track Trails Alternative, Dispersed Recreation Alternative, and Reduced Access Alternative would only partially meet the project objectives. A description of these alternatives is provided below.

4.1 NO PROJECT ALTERNATIVE (ALTERNATIVE 1)

A comprehensive evaluation of the No-Project Alternative, as required by Section 15126.6(e) of the State CEQA Guidelines, was included in the Draft EIR. The No Project Alternative assumes that the proposed trail system and other recreational facilities would not be constructed. Existing trails within the Didion Ranch portion of the Park would continue to be used for recreation, and the Spears Ranch portion of the Park would not be open to the public. The project area would continue to be managed by the County according to the goals set forth in the Placer Legacy Program.

Although this alternative would not result in environmental impacts to biological resources; cultural resources; visual resources, transportation and circulation; air quality; noise; soils, geology, and seismicity; hydrology and water quality; public services and utilities; and hazardous materials and hazards would not occur, it would not meet any of the project objectives and would not meet the demand for recreational facilities in Placer County, specifically hiking, biking, equestrian trail riding, and nature/cultural interpretation and education. Therefore, even if this alternative were selected, it is likely that at some point in the future recreation development would occur and environmental impacts similar to those of the project would result. Because this alternative would not be consistent with the project objectives or meet the demand for recreational facilities in Placer County, this alternative has been rejected from further consideration.

4.2 SINGLE-TRACK TRAILS ALTERNATIVE (ALTERNATIVE 2)

For the Single-Use Trails Alternative, the proposed natural-surface trails and recreational facilities would be constructed as described for the proposed project; however, the trails would be designed as narrower hiking trails, not multiple-use trails. There would be no equestrian facilities (e.g., watering troughs, tie rails) within the Spears Ranch portion of the property, and the parking area constructed on the Spears Ranch portion of the property would be smaller and would not include larger spaces for horse trailers. Public access would be provided for automobiles via Garden Bar Road and Mears Drive; however, no horse trailers would be allowed access to the Spears Ranch portion of the Park. The existing trails in the Didion Ranch portion would continue to be multiple-use. Improvements would be made to Garden Bar Road to allow access by automobiles, but no additional road improvements would be made to accommodate horse trailers. Garden Bar Road would continue to be used by County staff for maintenance and for access by emergency vehicles.

Although this alternative would result in less environmental impact to soils, geology, and seismicity; hydrology and water quality; biological resources; visual resources; transportation and circulation; air quality; hazards and hazardous materials; and noise, it would not meet the project objectives to provide recreation opportunities for a wide variety of Park users and a provide multiple-use trail system. Therefore, even if this alternative were selected, it is likely that at some point in the future multiple-use trail development would occur within the county and environmental impacts similar to those of the project would result. Because this alternative would not be consistent with the project objectives or meet the demand for recreational facilities in Placer County, this alternative has been rejected from further consideration.

4.3 DISPERSED RECREATION ALTERNATIVE (ALTERNATIVE 3)

For the Dispersed Recreation Alternative, no recreational facilities would be constructed; however, the proposed Park would be open to the public. The Park would be multiple-use under this alternative and hiking, biking, and equestrian use would be allowed, but recreation would be dispersed throughout the Park and would not follow any constructed trails; volunteer trails would be expected to develop. Under this alternative, a gravel parking area would be provided on the Spears Ranch portion of the Park and the paved parking area would continue to be available on the Didion Ranch portion of the Park. No motorized access would be provided beyond designated parking areas. Access to the Park would be provided for automobiles and horse trailers via Garden Bar Road and Mears Drive.

Although this alternative would result in less environmental impact to air quality, public services, and transportation and circulation, it would not meet the project objectives to provide recreation opportunities for a wide variety of park users and a provide multiple-use trail system. Therefore, even if this alternative were selected, it is likely that at some point in the future multiple-use trail development would occur and environmental impacts similar to those of the project would result. In addition, operation of this alternative would have more of an impact on cultural resources; geology, soils, and seismicity; hydrology and water quality; and biological resources than the proposed project. Because this alternative would not be consistent with the project objectives or meet the demand for recreational facilities in Placer County and would have more of an impact on some resource areas, this alternative has been rejected from further consideration.

4.4 REDUCED ACCESS ALTERNATIVE (ALTERNATIVE 4)

Under the Reduced Access Alternative, the proposed natural-surface multiple-use trails and related recreational amenities would be constructed as described for the proposed project; however, no public access to the Park would be provide via Garden Bar Road. Automobile, equestrian, and bus access would continue to be provided via Mears Drive and the existing Didion Ranch parking area would be expanded to accommodate increased use. If access is only provided via Mears Drive, the Didion Ranch parking area would need to be expanded beyond the proposed expansion under the proposed project to accommodate the increase in use. Garden Bar Road would continue to be used by County staff for maintenance and for emergency vehicle access.

This alternative would result in less environmental impact to soils, geology, and seismicity; hydrology and water quality; biological resources; visual resources; air quality; hazards and hazardous materials; and noise. However, this alternative would not meet the project objective to provide adequate opportunities to a wide variety of Park users without overburdening the functional capacity of the site and appurtenant roadway system. Implementation of this alternative could overburden the existing Didion Ranch entrance and Mears Road because all traffic related to use of the Park would use the Didion Ranch entrance. In addition, this alternative would provide less recreational benefit than the proposed project, because the less public access and parking would be provided for the Park.

5 GENERAL FINDINGS

The County has reviewed the Final EIR for the proposed project, consisting of the Responses to Comments on the Draft EIR, revised sections of the Draft EIR, and the MMRP. The County has also considered the public record on the project. In addition to this Statement of Findings, the public record for the proposed project is composed of the following elements (a full reference list is provided in Chapter 17.0 of the Draft EIR):

- ▶ *Traffic Safety Study—EIR, Hidden Falls Regional Park Project, Placer County, California, August 7, 2008.*
- ▶ *Traffic Impact Analysis—EIR. Hidden Falls Regional Park Project, Placer County, California. April 23, 2008.*
- ▶ *Water Demand Calculation Report—EIR. Hidden Falls Regional Park Project, Placer County, California. April 7, 2009.*
- ▶ *Draft Environmental Impact Report for the Hidden Falls Regional Park Project, June 16, 2009 (State Clearinghouse # 2007062084).*
- ▶ *Final Environmental Impact Report for the Hidden Falls Regional Park Project, December 11, 2009 (State Clearinghouse # 2007062084).*
- ▶ *Placer County General Plan, adopted August 16, 1994.*

Pursuant to Public Resources Code Section 21081, for each significant effect identified in the Draft EIR, the County must make one or more of the findings stated on page 1-1.

After reviewing the public record, as composed of the aforementioned elements, the County hereby makes the following findings regarding the significant effects of the proposed project, pursuant to Public Resources Code Section 21081 and Section 15091 of the State CEQA Guidelines.

5.1 SOILS, GEOLOGY, AND SEISMICITY

SIGNIFICANT EFFECT: CONSTRUCTION- AND OPERATION-RELATED EROSION HAZARDS (IMPACT 5-1)

Based on soil types and topography, the excavation and grading of soil could result in erosion during project construction, particularly during periods of strong winds or storm events. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts to construction- and operation-related erosion hazards.

Mitigation Measure 5-1: Obtain Authorization for Construction and Operation Activities from the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required.

A: Implement Stormwater BMPs.

Water quality BMPs shall be designed according to the *Stormwater Best Management Practice Handbooks for Construction, for New Development and Redevelopment* (CSQA 2003).

Storm drainage from on- and off-site impervious surfaces (including roads) shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, or filters for entrapment of sediment, debris and oils/greases, and other identified pollutants, as approved by the County. BMPs shall be designed at a minimum in accordance with the *Guidance Document for Volume and Flow-Based Sizing of Permanent Post-Construction Best Management Practices for Stormwater Quality Protection* (Placer Regional Stormwater Coordination Group 2005).

No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by appropriate regulatory authorities.

All BMPs shall be maintained as required to ensure effectiveness.

B: Obtain RWQCB Permit and Implement Construction BMPs.

Projects with ground disturbance exceeding 1 acre that are subject to construction storm water quality permit requirements of the National Pollutant Discharge Elimination System (NPDES) program shall obtain such permit from the Regional Water Quality Control Board and shall obtain evidence of a state-issued Waste Discharge Identification number or filing of a Notice of Intent and fees prior to start of construction.

This project is located within the area covered by the County's municipal stormwater quality permit, pursuant to the NPDES Phase II program. Project-related storm water discharges are subject to all applicable requirements of said permit. BMPs shall be designed to mitigate (minimize, infiltrate, filter, or treat) storm water runoff in accordance with "Attachment 4" of Placer County's NPDES Municipal Stormwater Permit (State Water Resources Control Board NPDES General Permit No. CAS000004).

Construction (temporary) BMPs for the project include, but are not limited to:

- ▶ Use temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils;
- ▶ Store materials and equipment to ensure that spills or leaks cannot enter the storm drain system or surface water;
- ▶ Use water for dust control;
- ▶ Construct sediment control basins;
- ▶ Regular sweeping of entry and exit areas to minimize off-site sediment transport;
- ▶ Install traps, filters, or other devices at drop inlets to prevent contaminants from entering storm drains; and
- ▶ Use barriers, such as straw bales, perimeter silt fences, or placement of hay bales, to minimize the amount of uncontrolled runoff that could enter drains or surface water.

C: Implement Post-Development BMPs.

Post-development (permanent) BMPs for the project include, but are not limited to:

- ▶ The project will have an effective system of erosion and sedimentation control, consisting of vegetative and structural measures and management practices, to reduce the damage of erosion and costly clean-up procedures.
- ▶ Following trail construction, wattles/fiber rolls and/or gravel-filled bags will remain in place until permanent stabilization measures have proven successful.
- ▶ For the duration of the project, storm drainage within ditch systems associated with switchback construction will have stabilized ditch protection. This will consist of filter fabric, mulch, or a 3-inch gravel base.
- ▶ Plan development to fit the particular topography, soils, waterways, and natural vegetation of the site, to avoid the creation of erosion problems on the site.
- ▶ Reduce erosion hazards and runoff volumes and velocity by limiting the length and steepness of slopes. Slopes subject to erosion should not be steeper than 2:1 horizontal to vertical.
- ▶ Break up long steep slopes by benching, terracing, or diversion structures.
- ▶ Use existing vegetation to control erosion to (a) shield the soil surface from rain, (b) increase infiltration, (c) reduce velocity of runoff and (d) hold soil in place and act as a filter.
- ▶ Time the project so that grading and construction occur during the normal dry season to the extent feasible.
- ▶ The County shall also consult with the RWQCB to acquire the appropriate regulatory approvals that may be necessary to obtain Section 401 water quality certification.

Implementation of the above mitigation measure would reduce Impact 5-1 (Construction- and Operation-Related Erosion Hazards) to a less-than-significant level because the County will prepare and implement a SWPPP and BMPs and will obtain a RWQCB permit that will prevent or reduce the amount of soil eroding and entering area waterways.

SIGNIFICANT EFFECT: RISKS TO PEOPLE FROM NATURALLY OCCURRING ASBESTOS (IMPACT 5-2)

Disturbance of naturally occurring asbestos fibers could create a health hazard. The project area is located in an area that is moderately likely to contain naturally occurring asbestos, and disturbance of soil during construction could expose workers to asbestos. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on exposing people to asbestos.

Mitigation Measure 9-1: Conduct On-Site Soil Testing and Prepare and Implement an Asbestos Dust Control Plan, If Needed.

Prior to the start of construction activities, the County shall test the on-site soils for the presence of asbestos. If asbestos is not present in on-site soils, no further measured would be required. If asbestos is determined to be present on-site, the County shall prepare and implement an asbestos dust control plan as described below.

The project shall comply with PCAPCD Rule 228 for fugitive dust control. In addition, the County shall prepare an asbestos dust control plan for approval by PCAPCD as required in Section 93105 of the California Health and Safety Code, "Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations." The asbestos dust control plan shall specify measures, such as periodic watering to reduce airborne dust and ceasing construction during high winds to ensure that no visible dust crosses the property line. The County shall submit the plan to the County Planning Department for review and PCAPCD for review and approval before construction of the first project phase. Approval of the plan must be received from PCAPCD before any asbestos-containing rock (serpentine) can be disturbed. Upon approval of the asbestos dust control plan by PCAPCD, the County shall ensure that construction contractors implement the terms of the plan throughout the construction period.

Implementation of the above mitigation measure would reduce Impact 5-2 (Risks to People from Naturally Occurring Asbestos) to a less-than-significant level because the County will conduct on-site soil testing for asbestos and, if present, the County will prepare and implement an asbestos dust control plan that will protect workers from exposure to asbestos.

SIGNIFICANT EFFECT: RISKS TO PEOPLE AND STRUCTURES CAUSED BY STRONG SEISMIC GROUND SHAKING OR FAULT RUPTURE (IMPACT 5-3)

The project area has the potential to be affected by shock waves resulting from earthquakes in distant areas that display greater seismic activity. Although all project facilities would be designed and constructed in accordance with the current design requirements for the California Building Code and the project area is not located in an

Alquist-Priolo Earthquake Fault Zone, the project could construct buildings or structures across an active fault. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on people and structures from seismic ground shaking.

Mitigation Measure 5-2: Obtain and Implement Seismic Engineering Design Recommendations.

- a. Prior to issuance of grading permits, the applicant shall obtain the services of a qualified, licensed geotechnical engineer to examine for traces of the Bear Mountain fault within the project area. If traces of the Bear Mountain fault cross the project area, a qualified, licensed geotechnical engineer shall develop engineering design recommendations for the project area. The recommendations shall include calculation of seismic shaking hazards using the appropriate computer modeling software, and shall include specific structural design recommendations to minimize potential damage to buildings and structures from seismic events. The recommendations shall also include an examination of the traces of the Bear Mountain fault system within the project area, including surface reconnaissance, and shall make recommendations for building foundation and infrastructure design accordingly. All appropriate design recommendations shall be implemented during the project design and construction phases.
- b. No structures intended for human occupancy shall be constructed within a 100-foot-wide no building zone over the Bear Mountain fault traces. However, following completion of the seismic study required in (a) above, the no building zone may be modified if recommended by the geotechnical engineer.
- c. Prior to issuance of grading permits, the County shall obtain the services of a qualified, licensed geotechnical engineer to prepare a comprehensive final geotechnical report for the entire project area with specific design recommendations sufficient to ensure the safety of soil conditions, project structures, and site occupants. The report shall include project design and construction recommendations to address:
 - Site preparation and grading, including surface and subsurface prep work, engineered fill materials, fill placement and compaction, trench backfill, and surface drainage;
 - Foundation requirements specific to the location of each component of the proposed project;
 - Concrete slabs-on-grade, both interior and exterior;
 - Retaining and below grade walls; and
 - Pavements.

The seismic engineering design recommendations shall be incorporated into the project design. The County shall insure adequate field inspection during construction.

Implementation of the above mitigation measure would reduce Impact 5-3 (Risks to People and Structures Caused by Strong Seismic Ground Shaking or Fault Rupture) to a less-than-significant level because the County will

implement applicable seismic engineering design recommendations that will ensure any buildings for human occupancy will not fail during seismic events.

5.2 CULTURAL RESOURCES

SIGNIFICANT EFFECT: POTENTIAL FOR LOSS OF OR DAMAGE TO POTENTIALLY SIGNIFICANT CULTURAL RESOURCES (IMPACT 6-1)

Nine potentially significant cultural resources and one significant cultural resource have been documented within the Spears Ranch portion of the Park. The proposed project has the potential to damage or destroy these cultural resources, either directly by construction or by increased public use. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts to potentially significant cultural resources.

Mitigation Measure 6-1: Modify Project Plans to Avoid Potentially Significant Cultural Resources and Actively Monitor Resources for Indirect Effects.

The County will prepare detailed design of trails, roads, and other Park facilities to ensure that direct effects associated with project implementation avoids all significant and potentially significant documented cultural resources in the project area. As part of the County's ongoing operational responsibility, usage trends that threaten any potentially significant documented cultural resources will be actively managed to avoid damage. If designing such trails and facilities to avoid potential impacts is not feasible or if management of Park usage indicates potential impacts to significant or potentially significant cultural resources, an approved treatment plan shall be drafted and implemented to mitigate the significant impacts. Such a plan may include one or more of the following elements:

- ▶ vegetation removal and surface inspection;
- ▶ ethnographic studies or Native American consultation, or both;
- ▶ subsurface testing; and
- ▶ if necessary, data recovery.

Implementation of the above mitigation measure would reduce Impact 6-1 (Potential for Loss of or Damage to Potentially Significant Cultural Resources) to a less-than-significant level because Park facilities would be designed to avoid all known significant cultural resources thereby avoiding impacts to significant cultural resources.

SIGNIFICANT EFFECT: POTENTIAL FOR DISTURBANCE OF UNDISCOVERED CULTURAL RESOURCES (IMPACT 6-2)

The project vicinity is known to contain numerous historic and prehistoric resources. In addition, buried traces of historic-era activity and early Native American occupation that remain undocumented may be present within and

in the vicinity of proposed trails. Ground-disturbing activities during construction of trails and Park facilities could disturb undiscovered cultural resources. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts to known and undiscovered cultural resources.

Mitigation Measure 6-2: Protect Previously Unknown Cultural Resources.

Given the potential for subsurface deposits, if undocumented resources are encountered during construction, all destructive work in the vicinity of the find shall cease until a qualified professional archaeologist can assess the significance of the find and, if appropriate, provide recommendations for treatment. Appropriate measures for treatment may include no action, avoidance of the resource through relocation of Park facilities, subsurface testing, and potentially data recovery. For any such discovery, a memorandum documenting the results of the evaluation shall be provided to the County by the archaeologist, and the County shall forward the memorandum to the California Department of Parks and Recreation and the State Historic Preservation Officer.

Implementation of the above mitigation measure would reduce Impact 6-2 (Potential for Disturbance of Known and Undiscovered Cultural Resources) to a less-than-significant level because if any cultural resources are discovered during construction appropriate measures would be taken to avoid impacts to the cultural resources.

SIGNIFICANT EFFECT: POTENTIAL FOR DISTURBANCE OF UNKNOWN HUMAN INTERMENTS (IMPACT 6-3)

Although no evidence of human interments was found in documentary research or during the archaeological inventory evidence of prehistoric and historic use of the project area has been found. If undiscovered human remains are present, ground-disturbing activities during construction of trails and other Park facilities could adversely affect presently unmarked human interments. This would be *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts to unknown human interments.

Mitigation Measure 6-3: Stop Potentially Damaging Work if Human Remains are Uncovered During Construction.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the construction contractor or the County, or both, shall immediately halt potentially damaging excavation in the area of the burial and notify the County coroner and a qualified professional archaeologist to determine the nature of the remains. The coroner shall examine all discoveries of human remains



within 48 hours of receiving notice of a discovery on private or state lands, in accordance with Section 7050(b) of the Health and Safety Code. If the coroner determines that the remains are those of a Native American, he or she shall contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). After the coroner's findings are presented, the County, the archaeologist, and the NAHC-designated Most Likely Descendant (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed.

Upon the discovery of Native American remains, the procedures above regarding involvement of the County coroner, notification of the NAHC, and identification of a MLD shall be followed. The County shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours after being granted access to the site to complete a site inspection and make recommendations. A range of possible treatments for the remains may be discussed: nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment. Assembly Bill (AB) 2641 (Chapter 863, Statutes of 2006) suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641 includes a list of site protection measures and states that the County shall comply with one or more of the following measures:

- ▶ Record the site with the NAHC or the appropriate Information Center.
- ▶ Utilize an open-space or conservation zoning designation or easement.
- ▶ Record a document with the county in which the property is located.

The County or its authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The County or its authorized representative may also reinter the remains in a location not subject to further disturbance if it rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner. Adherence to these procedures and other provisions of the California Health and Safety Code and AB 2641 would reduce potential impacts on human remains to a less-than-significant level.

Implementation of the above mitigation measure would reduce Impact 6-3 (Potential for Disturbance of Unknown Human Interments) to a less-than-significant level because if any human interments are discovered, work will cease until appropriate actions are taken to protect the cultural resources.

5.3 VISUAL RESOURCES

SIGNIFICANT EFFECT: LONG-TERM CHANGES IN VISUAL RESOURCES ASSOCIATED WITH THE IMPROVEMENTS TO GARDEN BAR ROAD (IMPACT 7-1)

The proposed project would widen Garden Bar Road which would require removal of existing trees. The removal of trees would result in a substantial physical change to the visual environment of the road and would occur within close proximity of viewers, including adjacent residents. This would be a *significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effect of the project, but not to a less-than-significant level; this impact would remain significant and unavoidable.

Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the implementation of other mitigation measures or alternatives that could reduce the impact to a less-than-significant level.

Facts in Support of Finding

Although all disturbed areas will be revegetated and restored to address degradation of the visual quality along Garden Bar Road, no other feasible mitigation is available to fully mitigate the visual impacts of the project. The following mitigation measures would reduce this impact to the greatest extent feasible, but not to a less-than-significant level. This impact would remain significant and unavoidable.

Mitigation Measure 7-1: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts.

To address the potential degradation of visual quality resulting from tree removal, the County shall revegetate and restore all disturbed areas. Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate initial growth. To the extent feasible, restoration of trees and shrubs shall reduce visual impacts for affected properties. Revegetation of disturbed areas shall promote restoration of vegetation over time that is as consistent as feasible with the surrounding natural landscape, recognizing constraints of the right-of-way and available space. The County shall prepare a restoration and revegetation plan that implements actions intended to mitigate the impacts on trees and vegetation removed along Garden Bar Road. The plan will be prepared in conjunction with detailed roadway engineering design, so that precise areas of disturbance are known and the revegetation process can be coordinated with roadway implementation. Portions of the revegetation plan may be implemented on adjacent property outside the County road right-of-way by agreements with willing property owners.

Mitigation Measure 12-8: Protect Oak Woodland Habitat.

If removal of native trees larger than 5 inches dbh is required during construction of the proposed project, the County shall compensate for removal of those trees by paying in-lieu fees into the County approved oak woodland preservation fund as stipulated in the Placer County Tree Ordinance and in consultation with a certified arborist.

Implementation of the above mitigation measures would reduce Impact 7-1 (Long-Term Changes in Visual Resources Associated with the Improvements to Garden Bar Road); however, this impact would remain significant and unavoidable because no other screening options for Garden Bar Road are available and revegetation of the disturbed areas would not reduce visual impacts in the short-term. Implementation of the Reduced Access Alternative would reduce this impact to a less-than-significant level; however, the Reduced Access Alternative would not meet the project objective to provide adequate opportunities to a wide variety of park users without overburdening the functional capacity of the site and appurtenant roadway system. Implementation of this alternative could overburden the existing Didion Ranch entrance and Mears Road because all traffic related to use of the Park would use the Didion Ranch entrance. In addition, this alternative would provide less recreational benefit than the proposed project. Therefore, no feasible mitigation is available to fully reduce the visual impacts along Garden Bar Road.

5.4 TRANSPORTATION AND CIRCULATION

SIGNIFICANT EFFECT: INCREASE IN TRAFFIC RELATED TO RESERVATION-BASED EVENTS IN THE PARK (IMPACT 8-4)

Reservation-based events at the Park could cause an increase in automobile, truck, and bus traffic in addition to regular Park use. Use of Garden Bar Road by buses and/or delivery trucks could impact traffic flow along the road. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts to event-related traffic.

Mitigation Measure 8-1: Implement Traffic Control Measures During Park Reservation-based Events.

Reservation-based events (involving less than 200 people on-site at a given time) would be regulated by the County Parks Division Reservation System. The Reservation System would include, but not be limited to, applicable restrictions on:

- ▶ event start and end times so as to minimize impacts to traffic along Garden Bar Road and not to exceed peak usage capacity or coincide with scheduled use of the road by school buses;
- ▶ regulation of number and types of vehicles so as not to exceed parking capacity (i.e., 50 paved stalls and 20 truck and trailer gravel stalls) in combination with daily use;
- ▶ the range of vehicle sizes allowed on Garden Bar Road during Phases 1 and 2 to be determined by the County Department of Public Works. Vehicles exceeding the maximum unrestricted size on Garden Bar Road shall be subject to County-imposed traffic controls;

The County may also regulate the days and/or times of reservation-based events to avoid peak days or times such as holiday weekends, as necessary.

Implementation of the above mitigation measure would reduce Impact 8-4 (Increase in Traffic related to Reservation-Based Events in the Park) to a less-than-significant level because event traffic would be controlled with restrictions placed on events by the County to minimize traffic impacts.

5.5 AIR QUALITY

SIGNIFICANT EFFECT: EXPOSURE OF SENSITIVE RECEPTORS TO EMISSIONS OF TOXIC AIR CONTAMINANTS (IMPACT 9-3)

The proposed project would not expose sensitive receptors to substantial emissions of TACs during project construction because construction emissions would be temporary and would rapidly dissipate with distance from the source. However, construction workers and surrounding residents could be exposed to dust from asbestos rock and soils during project construction. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on exposure of people to toxic air contaminants.

Mitigation Measure 9-1: Conduct On-Site Soil Testing and Prepare and Implement an Asbestos Dust Control Plan, If Needed.

Discussed above under Impact 5-2: Risks to People from Naturally Occurring Asbestos.

Implementation of the above mitigation measure would reduce Impact 9-1 (Exposure of Sensitive Receptors to Emissions of Toxic Air Contaminants) to a less-than-significant level because the County would comply with fugitive dust control measures and implement an asbestos dust control plan, if necessary, that will protect workers from exposure to asbestos and TACs.

5.6 NOISE

SIGNIFICANT EFFECT: INCREASES IN TRANSPORTATION-RELATED NOISE LEVELS (IMPACT 10-3).

Short-term construction of the proposed Park would not result in a noticeable (i.e., 3 dBA or greater) increase in traffic noise levels along area roadways. Noise increases associated with construction traffic would be temporary and would occur during the less noise-sensitive daytime hours. Long-term traffic associated with project operation would not exceed Placer County standards but would result in a noticeable (i.e., 3 dBA or greater) increase in traffic noise levels along area roadways. Short- and long-term traffic-generated noise levels would not exceed applicable Placer County noise standards; however, long-term traffic would increase ambient noise at nearby existing noise-sensitive receptors. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from transportation-related noise levels.

Mitigation Measure 10-1: Restrict General Public Traffic to 6 a.m. to 30 Minutes after Sunset.

The County shall restrict all long-term general public traffic to 6 a.m. to 30 minutes after sunset by ensuring that the Park gates are closed and locked at these times. With implementation of Mitigation Measure 10-1 traffic noise level increases on Garden Bar Road North would be reduced below a substantial amount (3 dBA or more), as shown in Table 10-12.

**Table 10-12
Comparison of Modeled Existing and Existing Plus Project Plus Mitigation Measure 10-1
Vehicular Traffic Noise Levels**

Roadway Segment and Location	Average Daily Traffic		CNEL (dBA) 50 Feet from Centerline of Near Travel Lane		
	Existing	Existing plus Project	Existing	Existing plus Project plus Mitigation Measure 10-1	Net Change
Weekday					
Garden Bar Road ¹ , north of Mt. Pleasant Road	285	476	47.9	49.2	1.3
Garden Bar Road, south of Mt. Pleasant Road	885	969	54.8	55.2	0.2
Mt. Pleasant Road, west of Garden Bar Road	375	457	53.4	54.3	0.5
Mt. Pleasant Road, east of Garden Bar Road	910	1,000	57.2	57.7	0.2
Mears Drive ¹ , north of Mt. Vernon Road	377	441	49.1	49.8	0.4
Weekend					
Garden Bar Road ¹ , north of Mt. Pleasant Road	260	605	47.5	50.4	2.3
Garden Bar Road, south of Mt. Pleasant Road	715	867	53.9	54.8	0.5
Mt. Pleasant Road, west of Garden Bar Road	310	458	52.5	54.3	1.0
Mt. Pleasant Road, east of Garden Bar Road	710	872	56.1	57.1	0.5
Mears Drive ¹ , north of Mt. Vernon Road	314	429	48.3	49.7	0.8
<p>Notes: CNEL = community noise equivalent level; dBA = A-weighted decibels. Traffic noise levels were modeled using the Federal Highway Administration traffic noise model (FHWA 1988) based on traffic volumes obtained from the traffic report prepared for this project (Chapter 8.0, "Transportation and Circulation"). Calculated noise levels do not consider any shielding or reflection of noise by existing structures, vegetation, or terrain features, nor do they consider noise contribution from other sources. See modeling results in Appendix E further detail. ¹ Assumes that 75% of project-generated traffic would access the project site via North Garden Bar Rd and that 25% of project-generated traffic would access the project site via Mears Drive. Source: Modeling performed by EDAW in 2008.</p>					

Implementation of the above mitigation measure would reduce Impact 10-1 (Increases in Transportation-Related Noise Levels) to a less-than-significant level because the County would restrict transportation-related noise to less sensitive daytime hours that would reduce the disturbance to nearby residents.

5.7 HYDROLOGY AND WATER QUALITY

SIGNIFICANT EFFECT: POTENTIAL FOR SHORT-TERM, CONSTRUCTION-RELATED SOIL EROSION AND IMPAIRMENT OF WATER QUALITY (IMPACT 11-1).

Project construction could cause short-term degradation of water quality. Areas where vegetation would be removed and topography altered could be subject to erosion from rain and wind. In addition, accidental spills of construction-related contaminants could occur during construction in the project area. Both of these mechanisms could carry soil and construction-related contaminants to on-site drainages before they are ultimately discharged to Coon Creek. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from construction-related erosion.

Mitigation Measure 11-1: Prepare and Implement a Grading and Drainage Plan.

The County shall prepare and submit Grading and Drainage Plans (Plans) and specifications (per the requirements of Section II of the Land Development Manual that are in effect at the time of submittal) for review and approval of work associated with structural design, hydrology associated with the bridges, and grading/drainage associated with the facility development zone. The Plans shall show all conditions affecting those facilities as well as pertinent topographical features. All existing and proposed utilities and easements, on-site and adjacent to those facilities, which may be affected by planned construction, shall be shown on the plans. The County shall pay plan check and inspection fees as applicable.

All proposed grading, drainage improvements, vegetation, tree impacts, and tree removal associated with the Park access road, parking areas, and bridges shall be shown on the Plans and all work shall conform to provisions of the County Grading Ordinance (Section 15.48, formerly Chapter 29, Placer County Code) and the Placer County Flood Control District's Stormwater Management Manual. No grading, clearing, or tree disturbance shall occur until the Plans are approved and any required temporary construction fencing has been installed and inspected by a member of the Design Review Committee. All cut/fill slopes included in the Plans shall be at 2:1 (horizontal:vertical) maximum unless a soils report supports a steeper slope and Design Review Committee concurs with said recommendation.

In addition, a drainage report in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual that are in effect at the time of submittal shall be prepared and submitted with the Plans. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: written text addressing existing conditions, the effects of the improvements, all appropriate calculations, a watershed map, increases in downstream flows, proposed on- and off-site improvements and drainage easements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used both during construction and for long-term post-construction water quality protection. Best Management Practice (BMP) measures shall be provided to reduce erosion, water quality degradation, and prevent the discharge of pollutants to stormwater to the maximum extent practicable.

Although the facility development zone is generally in the southwestern portion of the Park, including the previously disturbed area surrounding the existing ranch house and the proposed parking areas, the exact location of individual facilities could vary within this zone. Therefore, it is not practical to prepare the drainage plan prior to project approval. In addition, routine maintenance shall be performed on Park facilities to reduce erosion to the extent possible and to repair weather-related damage that could contribute to erosion.

Implementation of the above mitigation measure would reduce Impact 11-1 (Potential for Short-Term, Construction-Related Soil Erosion and Impairment of Water Quality) to a less-than-significant level because the County would prepare and implement a grading drainage plan that would prevent or reduce the amount of soil entering area waterways.

SIGNIFICANT EFFECT: POTENTIAL FOR LONG-TERM SOIL EROSION AND IMPAIRMENT OF WATER QUALITY (IMPACT 11-2).

Use of the proposed trail system and extreme weather events could cause long-term degradation of water quality from soil erosion and creek sedimentation. The introduction of impervious surfaces on-site such as the access road and parking areas has the potential to alter existing absorption rates and increase runoff of surface water into Coon Creek and other drainages on-site. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measures that would reduce to less-than-significant levels the project's impacts from long-term erosion.

Mitigation Measure 5-1: Obtain Authorization for Construction and Operation Activities from the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required.

Discussed above under Impact 5-1: Construction- and Operation-Related Erosion Hazards.

Mitigation Measure 11-1: Prepare and Implement a Grading and Drainage Plan.

Discussed above under Impact 11-1: Potential for Short-Term, Construction-Related Soil Erosion and Impairment of Water Quality.

Implementation of the above mitigation measures would reduce Impact 11-2 (Potential for Long-Term Soil Erosion and Impairment of Water Quality) to a less-than-significant level because the County would implement erosion and sediment control measures and prepare a drainage plan that would prevent or reduce amount of soil entering area waterways.

SIGNIFICANT EFFECT: CHANGE IN THE QUALITY OF GROUNDWATER RELATED TO INSTALLATION OF A SEPTIC SYSTEM (IMPACT 11-3).

Operation of two septic systems is proposed as part of the project. There is the potential that installing an on-site septic system could change the quality of the groundwater in the Spears Ranch portion of the Park, if the septic system is not sited properly. Although suitable soils have been identified on-site, the potential still exists for changes in groundwater quality to occur. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on groundwater quality.

Mitigation Measure 11-2: Implement Groundwater Protection through a Transient Non-community Water System Permit.

A Hidden Falls Regional Park Groundwater Systems Operation Procedure is in place for the existing well serving the restroom and facilities at the Didion Ranch parking area. Pump performance and system leakage inspections are part of the regular maintenance routine under this procedure. One Park staff member is trained and tasked with water sampling at monthly intervals. The County employs qualified plumbers and electricians to correct any system failures. The Placer County Parks Division, which is a division of the Department of Facility Services, operates the well and distribution system serving the public facilities at the existing Didion Ranch parking area under a Transient Non-community Water System Permit administered by the Placer County Environmental Health Division.

A separate permit would be obtained to include any additional wells that serve public facilities within Spears Ranch portion of the Park, and the conditions of the permit would be implemented to protect groundwater. The siting of any additional wells shall comply with the Placer County Water Well Construction Ordinance (Placer County Code Subchapter 8, effective July 19, 1990), and California Well Standards, Department of Water Resources Bulletin 74-90, June 1991.

A Groundwater Systems Operation Procedure or applicable equivalent would be prepared for any additional wells and adhered to as part of the permit conditions and ongoing operation. The objectives of the procedure shall be to ensure that:

- ▶ Water sources are not at risk of contamination from either tampering, pollutant discharge into the well head area, or latent groundwater contaminants.
- ▶ The responsible management agency has the technical capacity to operate the system to public health standards.

The procedure would include the following elements:

- ▶ The minimum horizontal distance between any additional wells and any sewer line or storm drain main or lateral shall be 50 feet. The minimum horizontal distance between any additional wells and septic tanks or leach fields shall be 100 feet.
- ▶ A Bacteriological and Chemical Monitoring and Reporting Program, approved by the Placer County Environmental Health Division.
- ▶ An operations and maintenance program including inspection of the distribution system and well head assembly.
- ▶ An emergency operations and repair program.

If well-monitoring samples show that groundwater quality is deteriorating, prompt actions shall be initiated to remedy problems, as specified by the Placer County Environmental Health Division and/or Central Valley RWQCB. These actions could include but would not be limited to the use of injection wells or other recharge methods, closing the well and chlorinating the water, decommissioning the well and re-siting, or other water treatment alternatives such as construction of an on- or off-site water treatment plant. Some of these actions may be subject to additional CEQA analysis and other regulatory compliance.

Implementation of the above mitigation measure would reduce Impact 11-3 (Change in the Quality of Groundwater related to Installation of a Septic System) to a less-than-significant level, because the Groundwater Systems Operation Procedure would enable the project applicant(s) to acquire the data and information necessary

to manage the groundwater resource such that adverse impacts do not occur. This would enable detection of any negative changes to groundwater quality or quantity.

SIGNIFICANT EFFECT: CHANGE IN THE SUPPLY AND AVAILABILITY OF GROUNDWATER THROUGH WITHDRAWALS, INTERCEPTION, OR LOSS OF RECHARGE CAPACITY (IMPACT 11-4).

While soil compaction from constructed facilities could slightly impede recharge in localized areas, less than 5 acres of the project area would be developed with impervious surfaces. Installation of groundwater wells for uses related to the proposed facilities could increase the demand for groundwater; however, project-related groundwater demand would not be substantial and is similar to yield rates found in private wells in the project vicinity. The proposed project-related water needs include water necessary for fire suppression and the *2009 Water Demand Calculation Report* did not evaluate project requirements related to fire suppression. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measures that would reduce to less-than-significant levels the project's impacts on groundwater supply.

Mitigation Measure 11-2: Implement Groundwater Protection through a Transient Non-community Water System Permit.

Discussed above under Impact 11-3: Change in the Quality of Groundwater related to Installation of a Septic System.

Mitigation Measure 11-3: Calculate Water Demands for Fire Suppression.

If groundwater is to be used for emergency fire suppression water, the County shall amend the April 7, 2009, Water Demand Calculation Report (Placer County 2009) to include fire suppression water requirements. If it is found that fire suppression requirements combined with water demands for other proposed uses is consistent with yields found in nearby private wells (1.3 to 7 gpm) then no further mitigation is required. If fire suppression requirement surpasses yields found in nearby private wells, one of the following shall be done:

- ▶ modify proposed uses at each well location to be consistent with available water that would not surpass similar yields of nearby wells;
- ▶ utilize Nevada Irrigation District raw irrigation water sources including but not limited to existing canals and ponds, new ponds, and/or irrigation fed underground storage tanks;
- ▶ fill storage tanks during off-peak periods when use is limited (i.e. winter and nighttime periods);
- ▶ import water needed to meet fire suppression requirements for emergency storage tanks via water trucks so that this water is not being pulled from the wells.

Implementation of the above mitigation measures would reduce Impact 11-4 (Change in the Supply and Availability of Groundwater through Withdrawals, Interception, or Loss of Recharge Capacity) to a less-than-significant level because the proposed water demands would not be developed beyond the available groundwater

capacity and the County would acquire the data and information necessary to manage the groundwater resource such that adverse impacts do not occur.

5.8 BIOLOGICAL RESOURCES

SIGNIFICANT EFFECT: POTENTIAL DISTURBANCE OF AQUATIC HABITATS AND THE NATIVE FISH COMMUNITY (IMPACT 12-1).

Several native fish species, including special-status steelhead and fall-/late fall-run chinook salmon, are known to use aquatic habitats in Coon Creek within or immediately downstream of the project area. Implementation of the proposed project could result in temporary and long-term degradation of aquatic habitats, loss of instream cover, and increased injury or mortality of fishes because of increased angling pressure. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measures that would reduce to less-than-significant levels the project's impacts on aquatic habitats and the native fish community.

Mitigation Measure 5-1: Obtain Authorization for Construction and Operation Activities from the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required.

Discussed above under Impact 5-1: Construction- and Operation-Related Erosion Hazards.

Mitigation Measure 11-1: Prepare and Implement a Grading and Drainage Plan.

Discussed above under Impact 11-1: Potential for Short-Term, Construction-Related Soil Erosion and Impairment of Water Quality.

Mitigation Measure 12-1: Implement Measures to Protect Aquatic Habitats and the Native Fish Community.

The County and its primary construction contractor shall implement the following measures to reduce impacts on aquatic habitats and the native fish community in the project area:

- ▶ All in-water construction activities shall be conducted during months when sensitive fish species are less likely to be present or less susceptible to disturbance (i.e., April 15 - October 15 or as directed by DFG).
- ▶ The County shall obtain and implement the conditions of a streambed alteration agreement. DFG shall be consulted regarding potential disturbance to fish habitat, including SRA habitat, as part of the process for obtaining a streambed alteration agreement, pursuant to Section 1602 of the California Fish and Game Code. Affected habitats shall be replaced and/or rehabilitated to the extent feasible and practicable. The acreage of riparian habitat that would be removed shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with DFG regulations and as specified in the streambed alteration agreement. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to DFG. Minimization and compensation measures adopted through the permitting process shall be implemented.

- ▶ The County shall consult and coordinate with DFG to develop regulations and limits for angling in Coon Creek, restrict angling activities while adult steelhead and salmon are present, and coordinate on enforcement of the area to monitor and regulate fishing activities.

Mitigation Measure 12-2: Replace, Restore, or Enhance Affected Jurisdictional Waters of the United States and Waters of the State.

Prior to construction, the County shall obtain a verified wetland delineation from USACE. Based on the results of the verified delineation, the County shall commit to replace, restore, or enhance on a “no net loss” basis, in accordance with USACE and the Central Valley RWQCB, the acreage of all waters of the United States and wetland habitats that would be affected by implementation of the project. Wetland restoration, enhancement, and/or replacement shall be at a location and by methods agreeable to USACE, DFG, and the Central Valley RWQCB, as determined during the Sections 404, 1602, and 401 permitting processes.

The County shall either obtain credits from an approved mitigation bank, at a rate determined by USACE, to replace lost wetland values at a 1:1 ratio, or shall prepare and submit a wetland mitigation and monitoring plan to USACE for the creation of jurisdictional waters at a mitigation ratio no less than 1 acre of created water of the United States, including wetlands, for each acre filled. The mitigation plans shall demonstrate how the USACE criteria for jurisdictional waters will be met through implementation. The wetland mitigation and monitoring plan shall include the following:

- ▶ target areas for creation,
- ▶ a complete biological assessment of the existing resources on the target areas,
- ▶ specific creation and restoration plans for each target area,
- ▶ performance standards for success that will illustrate that the compensation ratios are met, and
- ▶ a monitoring plan, including schedule and annual report format.

The County shall secure the following permits and regulatory approvals, as necessary, and implement all permit conditions before implementation of any construction activities associated with the proposed project.

- ▶ Authorization for the fill of jurisdictional waters of the United States shall be secured from USACE through the CWA Section 404 permitting process before any fill is placed in jurisdictional wetlands. Timing of compliance with the specific conditions of the 404 permit shall be in accordance with conditions specified by USACE as part of permit issuance. In its final stage and once approved by USACE, this mitigation plan shall detail proposed wetland restoration, enhancement, and/or replacement activities that would ensure no net loss of jurisdictional wetlands function and services in the project vicinity. As required by Section 404, approval and implementation of the wetland mitigation and monitoring plan shall ensure no net loss of jurisdictional waters of the United States, including jurisdictional wetlands.
- ▶ Water quality certification pursuant to Section 401 of the CWA is required as a condition of issuance of the 404 permit. Before construction in any areas containing wetland features, the County shall obtain water quality certification for the project. Any measures required as part of the issuance of water quality certification shall be implemented.

Implementation of the above mitigation measures would reduce Impact 12-1 (Potential Disturbance of Aquatic Habitats and the Native Fish Community) to a less-than-significant level because the County will implement measures to reduce erosion entering area waterways, obtain and comply with permit conditions, and replace, restore, or enhance all jurisdictional waters.

SIGNIFICANT EFFECT: POTENTIAL DISTURBANCE OF CALIFORNIA RED-LEGGED FROG (IMPACT 12-2).

Suitable habitat for California red-legged frog exists within the project area. Construction and operation of proposed trails, bridges, septic system, and structures across or adjacent to stock ponds, creeks with backwaters,

and freshwater marshes could degrade and possibly result in removal of aquatic habitat or could result in physical injury to red-legged frog. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on California red-legged frog.

Mitigation Measure 12-3: Implement Measures to Protect California Red-Legged Frog.

The County and its primary contractor shall implement the following measures to reduce impacts on California red-legged frogs:

- ▶ Before any work in or within 200 feet of aquatic habitat, the County shall determine whether aquatic habitat is occupied by California red-legged frog, in consultation with USFWS. This determination may be supported by a habitat assessment for California red-legged frog prepared according to USFWS guidelines (USFWS 2006) as revised, and focused surveys if recommended by USFWS. If aquatic habitat in the project area is not occupied by California red-legged frog, there would be no impacts on this species and no further mitigation would be required.
- ▶ If aquatic habitat in the project area is occupied by California red-legged frog, the County shall minimize impacts on California red-legged frog by implementing the following measures:
 - Worker awareness training shall be provided to construction crews working in California red-legged frog habitat. At a minimum, the training shall include a description of California red-legged frog and its habitat and their importance, general measures that are being implemented to conserve California red-legged frog as such measures relate to the project, and the boundaries within which construction activities shall occur.
 - Suitable California red-legged frog habitat shall be surveyed 2 weeks before the start of construction activities. If California red-legged frogs, tadpoles, or eggs are found, they may be moved from the project area only with regulatory agency approval. If California red-legged frogs are not identified, construction may proceed.
 - Exclusionary fencing (i.e., silt fences) shall be installed no more than 200 feet around all areas that are within or adjacent to California red-legged frog habitat.
 - A USFWS-approved biologist shall be present at active project areas until the removal of California red-legged frog, instruction of workers, and habitat disturbance have been completed. After this time, the County shall designate a person to monitor on-site compliance with all minimization measures.
 - If any work area will be temporally dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 5 millimeters. Water shall be released downstream at an appropriate rate to maintain downstream flows during construction and in such a manner as to prevent erosion. Dewatering structures shall be removed upon completion of the project.
 - Guidelines shall be implemented to protect water quality and prevent erosion, as outlined in the best management practices (BMPs) in Mitigation Measure 11-1, "Obtain Authorization for Construction

Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required.”

- The County shall compensate for permanently lost habitat by developing and/or implementing a habitat creation/restoration plan for California red-legged frog. This plan shall, at a minimum, compensate for lost habitat on an acre-for-acre basis, and it shall include verifiable performance criteria and remediation measures developed with USFWS during the Section 7 consultation process.

Implementation of the above mitigation measure would reduce Impact 12-2 (Potential Disturbance of California Red-Legged Frog) to a less-than-significant level because surveys will be conducted for California red-legged frog and measures such as worker awareness training will be implemented to protect red-legged frog habitat. In addition, the County will compensate for any permanently lost habitat.

SIGNIFICANT EFFECT: POTENTIAL DISTURBANCE OF FOOTHILL YELLOW-LEGGED FROG AND NORTHWESTERN POND TURTLE (IMPACT 12-3).

Habitat for foothill yellow-legged frog and northwestern pond turtle occurs in the project area. Construction of trails across drainages could degrade aquatic habitat or could result in physical injury to yellow-legged frog and pond turtle. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project’s impacts on Foothill yellow-legged frog and northwestern pond turtles.

Mitigation Measure 12-4: Implement Measures to Protect Foothill Yellow-Legged Frog and Northwestern Pond Turtle.

The County and its contractor shall implement the following measures to reduce impacts on foothill yellow-legged frogs and northwestern pond turtles:

- ▶ Construction of foot bridges and trails across smaller drainages shall occur when the drainages are dry, to the extent feasible.
- ▶ Before any work in Coon Creek, the County shall determine, in consultation with DFG, whether aquatic habitat at work sites would support foothill yellow-legged frog and/or northwestern pond turtle habitat. If no aquatic habitat for foothill yellow-legged frog or northwestern pond turtle habitat occurs at a work site, there would be no impacts on these species and no further mitigation is required.
- ▶ If aquatic habitat for foothill yellow-legged frog and/or northwestern pond turtle is present at work sites, the County shall minimize impacts on these species by implementing the following measures:
 - Worker awareness training shall be provided to construction crews working in foothill yellow-legged frog and northwestern pond turtle habitat. At a minimum, the training shall include a description of foothill yellow-legged frog and northwestern pond turtle and their habitats and their importance, general measures that are being implemented to conserve foothill yellow-legged frog and northwestern pond turtle as such measures relate to the project, and the boundaries within which construction activities shall occur.



- Suitable foothill yellow-legged frog and northwestern pond turtle aquatic habitat shall be surveyed within 2 weeks before the start of construction activities. If northwestern pond turtles or foothill yellow-legged frogs, tadpoles, or eggs are found, they may be moved from the project area only with DFG approval. If neither northwestern pond turtle nor foothill yellow-legged frog is identified, construction may proceed.
- A qualified biologist holding the appropriate permits shall be present at active work sites until the removal of foothill yellow-legged frog and northwestern pond turtle, instruction of workers, and habitat disturbance have been completed. After this time, the County shall designate a person to monitor on-site compliance with all minimization measures.
- If any work site will be temporally dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 5 millimeters. Water shall be released downstream at an appropriate rate to maintain downstream flows during construction and in such a manner as to prevent erosion. Dewatering structures shall be removed upon completion of the project.
- Guidelines shall be implemented to protect water quality and prevent erosion, as outlined in the BMPs in Mitigation Measure 11-1, "Obtain Authorization for Construction Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required."

Implementation of the above mitigation measure would reduce Impact 12-3 (Potential Disturbance of Foothill Yellow-Legged Frog and Northwestern Pond Turtle) to a less-than-significant level because surveys would be conducted and measures such as worker awareness training to avoid foothill yellow-legged frog and northwestern pond turtle would be implemented.

SIGNIFICANT EFFECT: POTENTIAL DISTURBANCE OF NESTS OF RAPTORS AND OTHER BIRDS (IMPACT 12-4).

Trees and other vegetation in and adjacent to the project area provide potential nest sites for raptors and migratory birds. Removal of trees or other vegetation during construction and maintenance of trails and fuel breaks and for road improvements could destroy or disturb nests, resulting in loss of eggs or young. Use of the Park by reservation-based events may also cause nest failure. Use of trails could cause potential temporary disturbance to golden eagle nest sites. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on raptors and other birds.

Mitigation Measure 12-5: Implement Measures to Protect Raptors and Other Nesting Birds.

The County and its contractors shall implement the following measures to reduce impacts on raptors and other nesting birds:

- ▶ If trees larger than 5 inches dbh must be removed, then the following mitigation measures shall be implemented:



- Tree removal shall be completed in accordance with the Placer County Tree Ordinance.
 - For any construction activities that take place between March 1 and August 31 (raptor breeding season), preconstruction or pre-event surveys for active raptor nests shall be conducted no more than 2 weeks prior to the start of the activity. If no active raptor nests are found, no further mitigation is required. If any active raptor nests are identified during surveys, then impacts on active raptor nests shall be avoided by establishing minimum buffers of 500 feet (0.25 mile for golden eagle) until young have fledged or the nest is otherwise no longer active. These buffers may be reduced if a qualified biologist determines that such a reduction would not risk failure of a nest.
- ▶ If active golden eagle nests are located within 0.25-mile of public trails or roads, the County shall:
- Notify DFG of the nest; and
 - Cooperate with DFG in implementation of measures to protect the nests during nesting.

Implementation of the above mitigation measure would reduce Impact 12-4 (Potential Disturbance of Nests of Raptors and Other Birds) to a less-than-significant level because surveys would be conducted and a 0.25-mile buffer would be maintained if any construction activities take place during the breeding season.

SIGNIFICANT EFFECT: POTENTIAL DISTURBANCE OF DENS AND INDIVIDUAL RINGTAILS (IMPACT 12-5).

Trees along riparian portions of the project area such as Coon Creek that are 5 inches or greater dbh and are hollow or have large cavities provide potential den sites for ringtail. Removal of such trees or other vegetation during trail construction and for road improvements could destroy dens, resulting in potential loss of adults and/or young. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project’s impacts on dens and individual ringtails.

Mitigation Measure 12-6: Implement Measures to Protect Ringtail and Townsend’s Big-Eared Bat.

The County and its contractor shall implement the following measures to protect Townsend’s big-eared bat and ringtail:

- ▶ A qualified biologist shall conduct pre-construction surveys to identify bat hibernation roost and maternity sites and potential ringtail den sites in suitable habitat within 100 feet of proposed trails (i.e., those areas directly affected by trail construction). For bats, roost habitat surveys should focus on locations of mine tunnels, caves, abandoned buildings, and rock crevices; for ringtail, potential den site surveys should focus on locations of trees 5 inches dbh or greater in riparian areas.
- ▶ The County shall avoid locating trails within 100 feet of bat roosts and ringtail dens. If avoidance is not possible, the County shall survey those locations to determine if they are occupied by the target species. If sites are not occupied, they may be sealed or removed in accordance with the following specifications:

- Potential Townsend’s big-eared bat nursery roosts may be sealed from September through March, before the nursery season. The County shall verify that the potential roost is not occupied immediately before sealing it.
- Potential Townsend’s big-eared bat hibernation roosts may be sealed from April through October, prior to before the hibernation season. The County shall verify that the potential roost is not occupied immediately before sealing it.
- Potential ringtail den sites may be removed only from September through April. The County shall verify that the potential den is not occupied immediately before sealing it.

Implementation of the above mitigation measure would reduce Impact 12-5 (Potential Disturbance of Dens and Individual Ringtails) to a less-than-significant level because surveys would be conducted and nursery and hibernation roosts and/or dens would be sealed before the nursery season to ensure Townsend’s big-eared bats and ringtails are not adversely affected by construction or use of the Park.

SIGNIFICANT EFFECT: POTENTIAL DISTURBANCE OF TOWNSEND’S BIG-EARED BAT HABITAT OR INDIVIDUALS (IMPACT 12-6).

Limited habitat for Townsend’s big-eared bats occurs in the project area. Construction of trails, bridges, and structures could result in the disturbance of Townsend’s big-eared bat maternity or winter roosts. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project’s impacts on Townsend’s big-eared bats.

Mitigation Measure 12-6: Implement Measures to Protect Ringtail and Townsend’s Big-Eared Bat.

Discussed above under Impact 12-5: Potential Disturbance of Dens and Individual Ringtails.

Implementation of the above mitigation measure would reduce Impact 12-6 (Potential Disturbance of Townsend’s Big-Eared Bat Habitat or Individuals) to a less-than-significant level because surveys would be conducted and nursery and hibernation roosts and/or dens would be sealed before the nursery season to ensure Townsend’s big-eared bats and ringtails are not adversely affected by construction or use of the Park.

SIGNIFICANT EFFECT: POTENTIAL LOSS OF BRANDEGEE’S CLARKIA (IMPACT 12-7).

Populations of Brandegee’s clarkia were documented in the Spears Ranch portion of the Park. Construction of trails, fuel breaks, parking areas, and road improvements along Garden Bar Road could potentially disturb known populations of Brandegee’s clarkia. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on Brandegee's clarkia.

Mitigation Measure 12-7: Implement Measures to Protect Brandegee's Clarkia.

The County and its contractor shall implement the following measures to protect Brandegee's clarkia populations:

- ▶ The locations of known Brandegee's clarkia occurrences in the project area shall be clearly marked for avoidance by construction crews before the commencement of project construction activities.
- ▶ If construction activities cannot avoid Brandegee's clarkia occurrences, then prior to commencement of construction, the following measures shall be implemented:
 - Information on Brandegee's clarkia occurrences in the project area shall be recorded on California Native Species Field Survey Forms and submitted to the CNDDDB.
 - Seed from Brandegee's clarkia populations shall be collected and redistributed into suitable habitat by a qualified botanist. Seed shall be distributed over an area twice the size of the affected area. Because Brandegee's clarkia is an annual plant that is tolerant of some disturbance, this measure will allow the perpetuity of populations in the project area and minimize the impact of project activities.

Implementation of the above mitigation measure would reduce Impact 12-7 (Potential Loss of Brandegee's Clarkia) to a less-than-significant level because surveys would be conducted and if disturbance would occur the seeds would be collected and replanted to reduce impacts of the species in the project area.

SIGNIFICANT EFFECT: IMPACTS ON WATERS OF THE UNITED STATES AND WATERS OF THE STATE (IMPACT 12-8).

A preliminary wetland delineation identified approximately 31.5 acres of potentially jurisdictional waters of the United States and waters of the state on the Spears Ranch property and along Garden Bar Road. Although the majority of this area would be avoided and not affected by project implementation, installation of stream crossings and bridges, viewing boardwalks, and trail construction in the project area and road improvements along Garden Bar Road could result in the fill of jurisdictional waters of the United States and waters of the state, including wetlands. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on waters of the United States and waters of the State.

Mitigation Measure 12-2: Replace, Restore, or Enhance Affected Jurisdictional Waters of the United States and Waters of the State.

Discussed above under Impact 12-1: Potential Disturbance of Aquatic Habitats and the Native Fish Community.

Implementation of the above mitigation measure would reduce Impact 12-8 (Impacts on Waters of the United States and Waters of the State) to a less-than-significant level because the County would restore, replace, or enhance all affected jurisdictional waters.

SIGNIFICANT EFFECT: IMPACTS ON OAK WOODLAND HABITAT (IMPACT 12-9).

The proposed project may result in the removal of trees that are 5 inches dbh or larger from oak woodland habitat. Native oak trees are protected under the Placer County Tree Ordinance and SB 1334. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts on oak woodland habitat.

Mitigation Measure 12-8: Protect Oak Woodland Habitat

Discussed above under Impact 7-1: Long-Term Changes in Visual Resources Associated with the Improvements to Garden Bar Road.

Implementation of the above mitigation measure would reduce Impact 12-9 (Impacts on Oak Woodland Habitat) to a less-than-significant level because the County would pay in-lieu fees that would compensate for replacing any native trees larger than 5 inches dbh that are removed.

5.9 HAZARDOUS MATERIALS AND HAZARDS

SIGNIFICANT EFFECT: POTENTIAL FOR RELEASE OF HAZARDOUS MATERIALS DURING CONSTRUCTION OR OPERATION (IMPACT 14-2).

Park construction and maintenance equipment may use small amounts of hazardous materials. The proposed project would comply with all applicable federal and state regulations pertaining to handling of hazardous materials and worker health and safety; however, accidental spills or other releases of small amounts of hazardous materials could occur during construction or operation of the Park. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.



Facts in Support of Finding

The County adopted the following mitigation measures that would reduce to less-than-significant levels the project's impacts from the release of hazardous materials

Mitigation Measure 5-1: Obtain Authorization for Construction and Operation Activities from the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required.

Discussed above under Impact 5-1: Construction- and Operation-Related Erosion Hazards.

Mitigation Measure 14-1: Implement Measures to Reduce Hazards Associated with Potential Releases of Hazardous Materials.

The County shall ensure that the following measures are implemented before project construction begins:

- ▶ The County or the County's contractor shall prepare and implement an accidental-spill prevention and response plan for storage and use of hazardous materials during trail construction and maintenance. This plan shall identify measures to prevent accidental spills from leaving the area and methods for responding to and cleaning up spills before neighboring properties are exposed to hazardous materials.
- ▶ The County shall ensure that any employee handling hazardous materials is trained in the safe handling and storage of hazardous materials and is trained to follow all applicable regulations with regard to such hazardous materials.
- ▶ The primary construction contractor shall identify a staging area where hazardous materials will be stored during construction, in accordance with applicable state and federal regulations.

Implementation of the above mitigation measures would reduce Impact 14-2 (Potential for Release of Hazardous Materials during Construction or Operation) to a less-than-significant level because an accidental-spill prevention and response plan that would prevent or reduce the amount of soil entering area waterways and ensure that hazardous materials handling is in compliance with applicable regulations.

SIGNIFICANT EFFECT: POTENTIAL EXPOSURE OF PEOPLE TO HAZARDOUS MATERIALS (IMPACT 14-4).

Although there have been no recorded releases of toxic materials in the project area, the Asbestos Building Material and Lead-Based Paint Survey Report concluded that several on-site buildings likely contain asbestos containing materials and lead based paint. In addition, several remnant mining or prospecting resources are located on-site that could contain hazardous materials. This would be a *potentially significant* impact.

Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment. This mitigation would reduce the significant effects of the project to a less-than-significant level.

Facts in Support of Finding

The County adopted the following mitigation measure that would reduce to less-than-significant levels the project's impacts from exposure of people to hazardous materials.

Mitigation Measure 14-2: Prepare and Implement a Safety Hazard Plan and Conduct Soil Sampling.

To avoid health risks to construction workers, Placer County shall require the contractor to prepare and implement a site health and safety plan if areas containing hazardous materials are to be disturbed. This plan will outline measures that will be employed to protect construction workers and the public from exposure to hazardous materials during remediation, demolition, and construction activities. The County shall consult with the contractor to determine the measures to be employed at the site, which could include posting notices, limiting access to the site, monitoring the air quality, watering, and installation of wind fences. Contractors shall be required to comply with state health and safety standards for all demolition work, including compliance with OSHA and Cal/OSHA requirements regarding exposure to ACMs and LBP.

For any prospecting or mining resources (Abandoned Mine Lands) that are in close proximity to a project facility, a Phase 2 Limited Soil Sampling (soil sampling) shall be conducted to determine if there are any elevated concentrations of constituents of concern present on-site. If soil sampling is required and indicates elevated concentrations of constituents of concern in soil in the project area, Placer County Environmental Health Services (EHS) will refer this project to the California State Department of Toxic Substances Control (DTSC) Voluntary Cleanup Agreement (VCA) program for further review and/or assessment. Any remedial action required by DTSC shall be conducted during the entitlement process (i.e. conditional use permit). The project applicant will be required to complete any remedial action required by DTSC and provide EHS with a “No Further Action” or equivalent letter from DTSC with regard to residual contamination from the past mining uses.

The soil sampling results shall be reviewed by Placer County Environmental Health Services. If the soil sampling results are above the CHHSLs, then Placer County Environmental Health Services would refer the project to the DTSC. DTSC requires the project proponent to enter their Voluntary Cleanup Agreement (VCA) program. The VCA typically requires more soil testing to determine the scope of the contamination area. Furthermore, DTSC may require a Preliminary Endangerment Assessment (PEA) and/or a removal action workplan (RAW). The PEA is used to discuss the health risks associated with hazardous materials site releases and the RAW is used to specifically detail the areas of the project area to have soil removed and the contaminated soils disposal at an appropriate solid waste facility. Following soils removal, DTSC issues a “No Further Action” letter indicating that the project site is safe.

In addition, the contractor shall prepare and implement a site plan that identifies necessary remediation activities appropriate for proposed land uses, including excavation and removal of on-site contaminated soils, and redistribution of clean fill material within the project area. The plan shall include measures that ensure the safe transport, use, and disposal of contaminated soil and building debris removed from the project area. In the event that contaminated groundwater is encountered during site excavation activities, the contractor shall report the contamination to appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminants before discharge into the sanitary sewer system. The contractor shall be required to comply with the plan and with applicable local, state, and federal laws.

Implementation of the above mitigation measure would reduce Impact 14-4 (Potential Exposure of People to Hazardous Materials) to a less-than-significant level because the County will implement a safety hazard plan and conduct soil sampling to ensure workers are not exposed to contaminated soils or other hazardous materials.

6 STATEMENT OF OVERRIDING CONSIDERATIONS

As discussed in Section 5 of these CEQA Findings, the Final EIR concludes that the proposed project, even with the incorporation of all feasible mitigation measures and consideration of alternatives, will nonetheless cause a significant direct unavoidable impact on the following resource:

- ▶ Aesthetics – Long-Term Changes in Visual Resources Associated with the Improvements to Garden Bar Road

Placer County has also adopted all feasible mitigation measures with respect to these impacts, which further lessen the impact but would not reduce it below a level of significance.

Under CEQA, before a project which is determined to have a significant, unmitigated environmental effect can be approved, the public agency must consider and adopt a “statement of overriding considerations” pursuant to CEQA Guidelines Sections 15043 and 15093. As the primary purpose of CEQA is to fully inform the decision makers and the public as to the environmental effects of a proposed project and to include feasible mitigation measures and alternatives to reduce any such adverse effects below a level of significance, CEQA nonetheless recognizes and authorizes the approval of projects where not all adverse impacts can be fully lessened or avoided. However, that agency must explain and justify its conclusion to approve such project through the statement of overriding considerations, setting forth the proposed project’s general social, economic, policy, or other public benefits that support the agency’s informed conclusion to approve the proposed project.

Placer County finds that the proposed project meets the following stated project objectives – which have substantial social, economic, policy and other public benefits – justifying its approval and implementation, notwithstanding the fact that not all environmental impacts were fully reduced below a level of significance:

The proposed project will provide for the following:

- ▶ Creation of an open space park consistent with the goals of the Placer Legacy Open Space and Agricultural Preservation Program (Placer Legacy Program).
- ▶ Adequate opportunities to a wide variety of Park users to access a breadth of features within Hidden Falls Regional Park intended for public passive recreational and educational access without overburdening the natural resources and functional capacity of the site and appurtenant roadway system.
- ▶ Protection of open space and blue oak woodland habitat for special-status species within Placer County.
- ▶ Design of a multiple-use, natural-surface trail system that will provide recreational opportunities for the residents of Placer County, while maintaining safety for Park users, visitors, and nearby residents.
- ▶ Development of a project that minimizes the need for maintenance, thereby reducing long-term costs and environmental impacts.
- ▶ Development of a project that supports the future ability to create natural, cultural, and historic education and interpretive opportunities for youth and adults, fostering stewardship and environmental awareness.

7 CONCLUSION

The mitigation measures listed in conjunction with each of the findings set forth above, as implemented through the MMRP, have eliminated or reduced, or will eliminate or reduce to a level of insignificance, all adverse environmental impacts, except for those described above in Section 6.

Taken together, the Final EIR, the mitigation measures, and the MMRP provide an adequate basis for approval of the Hidden Falls Regional Park Project.

8 REFERENCES

- California Stormwater Quality Association (CSQA). 2003 (January). *California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development and Redevelopment*.
- Federal Highway Administration. 1988. Traffic Noise Prediction Computer Model. Washington, DC.
- Placer County. 2009 (April 7). *Water Demand Calculation*. Prepared by Carlton Engineering, Inc. Shingle Springs, CA.
- Placer Regional Stormwater Coordination Group. 2005 (May 25). *Guidance Document for Volume and Flow-Based Sizing of Permanent Post-Construction Best Management Practices for Stormwater Quality Protection*. <<http://www.placer.ca.gov/Departments/Works/StrmWtr/~media/dpw/npdes/documents/BMPSizing%20pdf.ashx>> Accessed: January 12, 2009.
- U.S. Fish and Wildlife Service. 2006. Designation of Critical Habitat for the California Red-Legged Frog, and Special Rule Exemption Associated With Final Listing for Existing Routine Ranching Activities; Final Rule. *Federal Register* Vol. 71, No. 71, April 13, 2006.



**COUNTY OF PLACER
PLANNING COMMISSION**

**ACTION
AGENDA
DATE**

January 14, 2010

**OFFICE OF
Planning Department**
3091 County Center Drive Suite 140
AUBURN, CALIFORNIA 95603
TELEPHONE: 530/745-3000
FAX: 530/745-3080
www.placer.ca.gov

Meeting was held in the Planning Commission Chambers, 3091 County Center Drive, Dewitt Center, located at the corner of Bell Road and Richardson Drive, Auburn CA 95603

10:00 am **FLAG SALUTE**

*10:00 hearing
begins*

ROLL CALL: Ken Denio(Chairman), Gerry Brentnall(Vice Chairman), Richard Johnson (Secretary), Harry Crabb, Mickey Gray, Jeffrey Moss and Larry Sevison
All commissioners present.

VOTE OF PLANNING COMMISSION OFFICERS:

Commissioners voted 7:0 to have the following order:

- a. Selected 2010 Chairman: *Gerry Brentnall*
- b. Selected of 2010 Vice Chair: *Richard Johnson*
- c. Selected of 2010 Secretary: *Harry Crabb*

10:04 am

REPORT FROM THE PLANNING DIRECTOR

Michael Johnson, Agency Director reported on the activities throughout the County. On January 12, 2010 at the Board of Supervisor hearing District 5 (Supervisor Montgomery) requested that a portion of District 5 be added back into the PCCP boundaries. The Board voted unanimously to add the boundary. Staff is preparing the final document and will be sending it to state and federal agencies for review. On the January 28th agenda the Planning Commission will hear the Atwood 80 a 65-lot planned residential development off Atwood in Auburn; a subdivision modification for a Tahoe cabin addition; an Extension of Time for a Ski Lift at Northstar and a Zoning Text Amendment for Medical Marijuana dispensaries. Also at the Board's February 9th meeting they will hear an appeal for the General Plan Amendment for the Caldwell property and a third party appeal of the Saint Josephs Church previously heard by the Planning Commission. Staff is busy working on several Zoning Text Amendment including a hens and fowl ordinance in residential areas, special setbacks for solar panels as well as working on the implementation of the housing element, housing fee waivers, and TRPA MOU regarding second units in the Tahoe Basin.

Gerry Brentnall commented that Loren Clark gave an excellent presentation on the PCCP at the last meeting and it was well received.

PUBLIC COMMENT - Following the consideration of any correspondence and/or

10:08 am

reports, the public was offered the opportunity to discuss with the Planning Commission, matters not included on the current agenda.

No Public Comment was received.

1) 10:05 am
10:08 am to
10:50 am end

**DRAFT ENVIRONMENTAL IMPACT REPORT (PEIR 20070164)
RANCHO DEL ORO
SUPERVISORIAL DISTRICT 4 (UHLER)**

*Paul Thompson
sitting in for EJ
Ivaldi*

Provide an opportunity for public to comment on the Rancho Del Oro Draft EIR. The proposed project includes a Rezone and Tentative Subdivision Map on a 119 acre parcel located in Granite Bay. The subject parcel is currently zoned RS-AG-B-100 PD= .83 and is designated as Rural Low Density Residential, .9 to 2.3 acre minimum in the Granite Bay Community Plan. The applicants are requesting that the subject parcel be rezoned to RS-B-42 DL 0.83 to allow for the development of approximately 89 single-family residential lots. The proposed project would also include nine open space lots. The applicant is also proposing entry gates for the subdivision.

*Public comments
were received on
the Draft EIR
and will be
responded to in
the Final EIR.*

Project Location: The project is located on Olive Ranch Road opposite Rollingwood Subdivision, 1/4 mi east of Cavitt-Stallman Road in the Granite Bay area.

APN: 046-090-012

Total Acreage: 117.51 acres

Zoning: RS-AG-B-100 PD = 0.83 (Residential Single Family, combining Agriculture combining a minimum Building Site of 100,00 square feet (or a 2.3 acre min), combining Planned Residential Development of .83 dwelling units per acre)

Community Plan Area: Granite Bay Community Plan

MAC Area: Granite Bay MAC

Applicant: A.R. Associates

Owner: Tsakopoulos Investments

County Staff:

Planning: EJ Ivaldi (530) 745-3147

Engineering and Surveying: Rebecca Taber (530) 745-3110

Environmental Health: Jill Kearney (530) 745-2300

2) 10:35 am
10:50 am to
11:24 am end

**CONDITIONAL USE PERMIT (PCPA 20090391)
HIDDEN FALLS REGIONAL PARK
FINAL ENVIRONMENTAL IMPACT REPORT(PEIR - T20070444)
SUPERVISORIAL DISTRICT 2 (WEYGANDT)
SUPERVISORIAL DISTRICT 5 (MONTGOMERY)**

*Unanimously
Continued to
January 28, 2010
@ 11:00 am*

Consider a request from Placer County Facility Services for approval of a Conditional Use Permit to add approximately 979 acres to the existing 221 acre Hidden Falls Regional Park and construct improvements that include an access and parking area off Garden Bar Road, road improvements along Garden Bar Road, an expansion of the existing parking lot, construction of a multi-use trail system, and implementation of other passive recreational facilities that would be located within the park. The Planning Commission will also consider certification of the Final Environmental Impact Report prepared for the project.

7:0

*Public comments
were received.*

Project Location: The project area is located along portions of Coon and Deadman Creeks south of the Bear River and Big Hill Road, north of Mt. Vernon and Mt. Pleasant Roads, east of Garden Bar Road and west of Bell and Hubbard Roads between North Auburn and the City of Lincoln.

APNs: 026-072-045, 026-072-047, 026-072-049-510, 026-072-050-510, 026-072-

054, 026-072-055, 026-072-056, 026-072-057, 026-072-062, 026-072-063, 026-072-076, 026-080-065, 026-080-066, 026-080-067, 026-080-068, 026-080-069, 026-080-070, 026-080-071, 026-080-072, 026-080-091

Total Acreage: 1,200 acres

Zoning: O (Open Space), F-B-X-50 acre minimum (Farm combining a minimum Building Site of 50 acres)

Community Plan Area: Placer County General Plan

MAC Area: Rural Lincoln MAC and North Auburn MAC

Owner/Applicant: Placer County Facility Services, Parks Division

County Staff:

Parks: Andy Fisher (530) 886-4901

Planning: Lisa Carnahan (530) 745-3067

Engineering and Surveying: Sarah Gillmore (530) 745-3110

Environmental Health: Jill Kearney (530) 745-2300

3) 10:55 am

*11:32 am to
12:50 end*

Commission supported staff's recommendation subject to the findings and in the staff report. Property owner was present and given 30 (thirty) days from the date of order to clean up property.

5:1

Commissioner Moss - no

Commissioner Crabb - absent

NUISANCE ABATEMENT

THOMAS AND TONI CASTLEMAN- 975 WHITE OAK DRIVE-COLFAX SUPERVISORIAL DISTRICT 5 (MONTGOMERY)

Consider a request from the Building Department-Code Enforcement Division, for authorization to hire a contractor/vendor to clean up and remove excessive amount of open storage of vehicles and correct current conditions of the property that are in violation of the applicable codes which include: 1) excessive numbers of vehicles stored, 2) unlicensed and/or inoperable vehicle storage exceeding 200 square feet, 3) storage of vehicles not licensed to an owner, tenant, or resident, 4) storage of unregistered/inoperable vehicles within the front setback area, 5) storage of vehicle numbers in excess of five (5).

Project Location: Project is located at 975 White Oak Drive in the Colfax area.

APN: 099-120-012

Total Acreage: 3 acres

Zoning: RS-AG-B-X 3 ac min (Residential Single Family, combining Agriculture, combining minimum Building Site of 3 acres)

Community Plan Area: Colfax Community Plan

MAC Area: Weimar/Applegate/Colfax MAC

Owner: Thomas and Toni Castleman

County Staff:

Building: Code Enforcement Officer Kathy Wisted (530) 745-3053

MEETING ADJOURNED 12:50 pm



**COUNTY OF PLACER
PLANNING COMMISSION**

**ACTION
AGENDA
DATE**

January 28, 2010

**OFFICE OF
Planning Department**
3091 County Center Drive Suite 140
AUBURN, CALIFORNIA 95603
TELEPHONE: 530/745-3000
FAX: 530/745-3080
www.placer.ca.gov

Meeting was held in the Planning Commission Chambers, 3091 County Center Drive, Dewitt Center, located at the corner of Bell Road and Richardson Drive, Auburn CA 95603

10:00 am

FLAG SALUTE

10:00 am

meeting begins

ROLL CALL: Gerry Brentnall (Chairman)[*absent*], Richard Johnson (Vice Chairman), Harry Crabb (Secretary), Mickey Gray, Jeffrey Moss, Larry Sevison and Ken Denio

REPORT FROM THE PLANNING DIRECTOR

Paul Thompson, Deputy Planning Director, for Michael Johnson CDRA Director reported on the Board's meeting last Tuesday where the Planning Services Division reported the Planning's General Fund work program for the balance of this fiscal year. The Board gave staff direction to go ahead with the Placer County Conservation Plan, Granite Bay Community Plan, Housing Element update, Tahoe Basin second units, Affordable Housing fee waiver, Emergency shelters/Transitional and supportive housing, and Zoning Text Amendments pertaining to structural setbacks, temporary agricultural events, fowl and hen ordinance and medical marijuana.

Commissioner Sevison asked for the dates for Planning Commission meeting in February. Paul Thompson indicated that on February 11th, the Commission will hear Livingston Concrete and the Gondola North Subdivision; and on February 25th, there will be a public hearing to receive comments on Bohemia Draft EIR.

Commissioner Sevison also commented that he attended the TRPA Governing Board meeting on January 27th regarding the Kings Beach Core Improvement project. TRPA voted unanimously to approve the three lanes with a roundabout alternative. He complimented Commission on making the right recommended choice and complimented County staff for helping with the project.

PUBLIC COMMENT - Following the consideration of any correspondence and/or reports, the public was offered the opportunity to discuss with the Planning Commission, matters not included on the current agenda.

No Public Comment was received.

1) 10:05 am

10:05 begin

10:10 end

*Unanimously
approved an
Extension of Time
for 2-years on the
Conditional Use
Permit, including*

**EXTENSION OF TIME – CONDITIONAL USE PERMIT(PCPB 20060496)
NORTHSTAR-AT-TAHOE S SKI POD
PREVIOUSLY ADOPTED MITIGATED NEGATIVE DECLARATION
SUPERVISORIAL DISTRICT 5 (MONTGOMERY)**

Consider a request from Trimont Land Company on behalf of CNL Income Northstar, LLC for approval of an Extension of Time for a Conditional Use Permit to construct a high-speed lift with detachable quad, a new ski trail, and snow making alignments to the "Backside" terrain at the Northstar-at-Tahoe Ski Resort. The Planning

CEQA and Use Permit findings

6:0

Commissioner Brentnall absent

Commission must also determine that no further environmental review be required based on the previously adopted Mitigated Negative Declaration.

Project Location: The project is located on the backside of the Northstar-at-Tahoe Ski Area in the Martis Valley area.

APN: 080-260-013

Zoning: FOR-B-X-160 ac. min. (Forestry, combining minimum Building Site of 160 acres)

Total Acreage: Approximately 616.9 acres

Community Plan Area: Martis Valley Community Plan

MAC Area: None

Owner: CNL Income Northstar, LLC

Applicant: Trimont Land Company, Attn: Jerusha Hall, 11025 Pioneer Drive, Suite 100, Truckee CA 96161 (530) 559-2136

County Staff:

Planning - Steve Buelna (530) 581-6285

Engineering & Surveying – Rebecca Taber (530) 745-3110

Environmental Health - Jill Kearney (530) 745-2300

2) 10:10 am

10:10 am begin

10:16 end

Steve Buelna sitting in for Stacy Wydra

Unanimously approved the subdivision modification subject to the conditions of approval, including CEQA and subdivision modification findings

6:0

Commissioner Brentnall absent

SUBDIVISION MODIFICATION (PSM 20090380)

DOUGHERTY CABIN ADDITION

CATEGORICALLY EXEMPT

SUPERVISORIAL DISTRICT 5 (MONTGOMERY)

Consider a request from William and Joan Dougherty for approval of a Subdivision Modification to allow for a 28-foot front setback where a 40-foot front setback is required in order to permit construction of a 462 square foot bedroom, bathroom and closet addition to an existing 1,235 square foot single-family residence. Of the 462 square foot addition, approximately 183 square feet is proposed within the 40-foot setback. The Planning Commission will also consider a finding of a Categorical Exemption Section 18.36.050, Class 3 (A) – New construction or conversion of small structures – Placer County Environmental Review Ordinance (CEQA Guidelines Section 15303).

Project Location: The project is located at 758 Chapel Lane in Tahoe City.

APN: 094-251-005

Total Acreage: .34 acres

Zoning: Plan Area Statement 171-Tavern Heights Residential

Community Plan Area: Placer County General Plan

MAC Area: North Tahoe Regional Advisory Council

Owner/Applicant: William and Joan Dougherty

County Staff:

Planning: Stacy Wydra (530) 581-6288

Engineering and Surveying: Sharon Boswell (530) 745-3110

Environmental Health: Jill Kearney (530) 745-2300

3) 10:20 am

10:21 am begin

11:19 am end

Unanimously approve certification of Final EIR, Tentative Map,

TENTATIVE SUBDIVISION MAP/CONDITIONAL USE

PERMIT/VARIANCE (PSUB 20090417)

ATWOOD 80

FINAL ENVIRONMENTAL IMPACT REPORT (PEIR 20040246)

SUPERVISORIAL DISTRICT 3 (HOLMES)

Consider a request from Andregg Geomatics on behalf of Atwood Ranch LLC, for a 65-lot Planned Residential Development on a ±79.4-acre parcel on Atwood Road,

Conditional Use Permit and Variance with modifications to condition 143a. allowing front structural setback of 40 feet, and adding Parks Division conditions, including CEQA and Tentative Map/Use permit/ and Variance findings

6:0

Commissioner Brentnall absent

west of the DeWitt Center, in the North Auburn area. The custom lot sizes range from ±25,100 to ±55,700 square feet in area. The primary access to the site will be on Atwood Road, approximately 0.75 miles west of Richardson Drive; a secondary emergency access will be constructed northwest of the site to Joeger Road. The development includes the creation of five Open Space Lots totaling approximately 25 acres: two lots along the Atwood Road frontage to provide a landscape buffer; two lots along Deadman’s Ravine to protect and preserve the wildlife, riparian and stream corridor; and a ±13-acre lot in the northeast portion of the site to preserve and protect site oak woodlands. Site improvements include the construction of site roadways and the installation of utilities, including an onsite sewer system, an offsite lift station and a sewer connection to Bell Road. The Planning Commission will also consider a Variance to reduce the front setback requirement of 30 feet from edge of easement to 7 feet to allow for the sewer lift station and the certification of the Final Environmental Impact Report (FEIR) for the project.

Project Location: The project is located on the northside of Atwood Road, .5 miles west of the Dewitt Center, in the Auburn area.

APN: 051-070-009

Total Acreage: 76.81 acres

Zoning: RS-AG-B-40 PD=1 (Residential Single-Family, combining minimum Agriculture, combining Building Site of 40,000 square feet, combining Planned Residential Development of 1 unit per acre)

Community Plan Area: Auburn/Bowman Community Plan

MAC Area: North Auburn MAC

Applicant: Andregg Geometrics

Owner: Atwood Ranch LLC

County Staff:

Planning: Mike Wells (530) 745-3024

Engineering and Surveying: Rick Eiri (530) 745-3110

Environmental Health: Jill Kearney (530) 745-2300

Break

11:19 am begin 11:23 end

4) 11:00 am

11:23 begin

12:55 end

Two motions:

1) Hunting to be prohibited other than that allowed by deprivation permit.

4:2

Commissioner Moss and Commissioner Denio - No Commissioner Brentnall absent

CONDITIONAL USE PERMIT (PCPA 20090391)

HIDDEN FALLS REGIONAL PARK

FINAL ENVIRONMENTAL IMPACT REPORT (PEIR - T20070444)

SUPERVISORIAL DISTRICT 2 (WEYGANDT)

SUPERVISORIAL DISTRICT 5 (MONTGOMERY)

(THIS ITEM WAS CONTINUED FROM THE JANUARY 14, 2010 PLANNING COMMISSION HEARING)

Consider a request from Placer County Facility Services for approval of a Conditional Use Permit to add approximately 979 acres to the existing 221 acre Hidden Falls Regional Park and construct improvements that include an access and parking area off Garden Bar Road, road improvements along Garden Bar Road, an expansion of the existing parking lot, construction of a multi-use trail system, and implementation of other passive recreational facilities that would be located within the park. The Planning Commission will also consider certification of the Final Environmental Impact Report prepared for the project.

Project Location: The project area is located along portions of Coon and Deadman Creeks south of the Bear River and Big Hill Road, north of Mt. Vernon and Mt. Pleasant Roads, east of Garden Bar Road and west of Bell and Hubbard Roads

2) Approve

Conditional Use Permit and certify

EIR based on EIR and CUP findings in the packet and incorporating the no hunting motion also modify condition 1 u. to indicate no hunting other than by a deprivation permit.

5:1
Commissioner Moss - no
Commissioner Brentnall absent

Lunch Break

between North Auburn and the City of Lincoln.
APNs: 026-072-045, 026-072-047, 026-072-049-510, 026-072-050-510, 026-072-054, 026-072-055, 026-072-056, 026-072-057, 026-072-062, 026-072-063, 026-072-076, 026-080-065, 026-080-066, 026-080-067, 026-080-068, 026-080-069, 026-080-070, 026-080-071, 026-080-072, 026-080-091

Total Acreage: 1,200 acres
Zoning: O (Open Space), F-B-X-50 acre minimum (Farm combining a minimum Building Site of 50 acres)

Community Plan Area: Placer County General Plan
MAC Area: Rural Lincoln MAC and North Auburn MAC
Owner/Applicant: Placer County Facility Services, Parks Division

County Staff:
Parks: Andy Fisher (530) 886-4901
Planning: Lisa Carnahan (530) 745-3067
Engineering and Surveying: Sarah Gillmore (530) 745-3110
Environmental Health: Jill Kearney (530) 745-2300

12:55 pm – 1:30 pm

5) 1:00 pm
1:30 pm begin
2:13 pm end

**ZONING TEXT AMENDMENT (ZTA 20090393)
MEDICAL MARIJUANA COLLECTIVES, COOPERATIVES OR DISPENSARIES**

Recommendation to the Board of Supervisors the staffs proposal to define and disallow medical marijuana collectives, cooperatives or dispensaries to operate in the County and clarify that the production and composting of cannabis is not included in the definition of “Crop Production” or “Agricultural processing” within the existing code.

Consider providing a recommendation to the Board of Supervisors on a request from the Placer County Planning Department to amend Chapter 17, Article 17.04, Section 17.04.030 and Article 17.06, Section 17.06.050 to the Placer County Code. The proposed amendments will define and disallow medical marijuana collectives, cooperatives or dispensaries to operate in the County. In addition, the proposed amendments will clarify that the production and composting of cannabis is not included in the definition of “Crop Production” or “Agricultural processing” within the existing County Code. Under the California Environmental Quality Act (CEQA) guidelines, continuing administrative activities do not constitute a project and are therefore exempt from review (CEQA Section 15282; Placer County Environmental Review Ordinance Section 18.36.010)(B)(3).

County Staff:
Planning: Jennifer Dzakowic (530) 745-3008

5:1
Commissioner Gray – no
Commissioner Brentnall absent

MEETING ADJOURNED – 2:13 PM