Valley Oaks Planned Development

Draft Environmental Impact Report

SCH: 2007032030

Prepared For:

COUNTY OF LAKE

COMMUNITY DEVELOPMENT DEPARTMENT
255 NORTH FORBES ST., 3RD FLOOR
LAKEPORT, CA 95453

Prepared By:

PMC®

2729 PROSPECT PARK DRIVE, SUITE 220
RANCHO CORDOVA, CA 95670
P: (916) 361-8384
F: (916) 361-1574

DECEMBER 2008

COUNTY OF LAKE
COMMUNITY DEVELOPMENT DEPARTMENT
Planning Division
Courthouse - 255 N. Forbes Street
Lakeport, California 95453
Telephone 707/263-2221 FAX 707/263-2225

County of Lake
Community Development Department
255 North Forbes Street
Lakeport, California • 95453 • (707) 263-2221

NOTICE IS HEREBY GIVEN that a Draft Environmental Impact Report (DEIR) has been prepared for the Valley Oaks project and is available for a 45-day public review period pursuant to State California Environmental Quality Act (CEQA) Guidelines.

The Valley Oaks DEIR was prepared to analyze the potential environmental impacts from the development of a mixed-use development that would involve the construction of residential, commercial, and open space/park uses on approximately 150 acres of land. The project would consist of 380 detached, single family residences, a community commercial "village" to provide a full range of goods and services to meet the needs of the area, a residential care facility or assisted living facility for seniors, multi-residential housing for seniors, an integrated park and trails system with 35 percent of the site as open space. The site is located adjacent to the Hidden Valley Lake subdivision, and is within the Coyote Valley Community Growth Boundary with frontage along Hartmann Road and State Route 29.

The DEIR is currently available for public review at the following locations:

- Middletown Library, 21267 Calistoga Street, Middletown
- County of Lake Community Development Department, 255 North Forbes Street, Lakeport
- Board of Supervisors office, 255 North Forbes Street, Lakeport

The DEIR is also available online at:
www.co.lake.ca.us/Government/Directory/Community_Development.htm

Significant effects on the environment anticipated as a result of the project include impacts to aesthetics, air quality, climate change and cumulative demand for wastewater treatment.

A 45-day minimum public review period for the DEIR begins on December 1, 2008 and ends January 16, 2009. All substantive comments on environmental issues will be addressed in the Final EIR.

Written comments should be submitted to:
Lake County Community Development Department
255 North Forbes Street
Lakeport, California 95453
ATTN: Richard Coel, Director
Phone: (707) 263-2221
Fax: (707) 263-2225
richardc@co.lake.ca.us

RECEIVED
NOV 2 6 2008
LAKE COUNTY COMMUNITY
DEVELOPMENT DEPT.

DRAFT ENVIRONMENTAL IMPACT REPORT

FOR THE

VALLEY OAKS PLANNED DEVELOPMENT

SCH No. 2007032030

Prepared for:

COUNTY OF LAKE
Community Development Department
255 N. Forbes Street, 3rd Floor
Lakeport Ca. 95453

Prepared by:

PMC
2729 Prospect Park Drive, Suite 220
Rancho Cordova, CA 95670
(916) 361-8384
Fax: (916) 361-1574
www.pmcworld.com

December 2008

1.0 INTRODUCTION

1.1 Background and Purpose 1.0-1
1.2 Type of Document 1.0-1
1.3 Intended Uses of the EIR 1.0-2
1.4 Known Responsible and Trustee Agencies 1.0-3
1.5 Organization and Scope 1.0-3
1.6 Environmental Review Process 1.0-6
1.7 Comments Received on the Notice of Preparation 1.0-8
1.8 Commonly Used Terms 1.0-8

2.0 EXECUTIVE SUMMARY

2.1 Purpose and Scope of the EIR 2.0-1
2.2 Project Characteristics 2.0-1
2.3 Project Alternatives Summary 2.0-2
2.4 Areas of Controversy 2.0-3
2.5 Summary of Environmental Impacts 2.0-4

3.0 PROJECT DESCRIPTION

3.1 Regional Location 3.0-1
3.2 Project Location 3.0-1
3.3 Project Site and Vicinity 3.0-1
3.4 Project Objectives 3.0-1
3.5 Project Characteristics 3.0-2
3.6 Regulatory Requirements, Permits, and Approvals 3.0-6

4.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

4.1 Aesthetics/Light and Glare 4.1-1
4.2 Agricultural Resources 4.2-1
4.3 Air Quality 4.3-1
4.4 Biological and Natural Resources 4.4-1
4.5 Cultural and Paleontological Resources 4.5-1
4.6 Geology and Soils 4.6-1
4.7 Hazards and Human Health 4.7-1
4.8 Hydrology and Water Quality 4.8-1
4.9 Land Use 4.9-1
4.10 Noise 4.10-1

4.11 Population/Housing/Employment/Economics 4.11-1
4.12 Public Services 4.12-1
4.13 Transportation and Circulation 4.13-1
4.14 Utilities and Service Systems 4.14-1

5.0 CUMULATIVE IMPACTS SUMMARY

5.1 Introduction 5.0-1
5.2 Cumulative Setting 5.0-2
5.3 Cumulative Impact Analysis 5.0-2

6.0 ALTERNATIVES

6.1 Introduction 6.0-1
6.2 Alternative 1 – No Project Alternative 6.0-3
6.3 Alternative 2 – Open Space Preservation Alternative 6.0-10
6.4 Alternative 3 – Reduced Intensity Alternative 6.0-19
6.5 Environmentally Superior Alternative 6.0-28

7.0 LONG-TERM IMPLICATIONS OF THE PROJECT

7.1 Significant and Unavoidable Environmental Effects 7.0-1
7.2 Growth-Inducing Impacts 7.0-3
7.3 Significant Irreversible Environmental Changes/Irretrievable Commitment of Resources 7.0-4
7.4 Mandatory Findings of Significance 7.0-5

8.0 REPORT PREPARERS

APPENDICES (INCLUDED ON CD IN BACK OF DOCUMENT)

Appendix A – NOP & NOP Comments
Appendix B – Air Quality - URBEMIS Reports
Appendix C – Biological Resources Reports
Appendix D – Cultural Resources Survey
Appendix E – Geotechnical Reports
Appendix F – Phase I Environmental Site Assessment
Appendix G – Coyote Creek Hydraulic Analysis
Appendix H – Noise Report
Appendix I – Urban Decay Analysis
Appendix J – Traffic Impact Study
Appendix K – Water Supply Assessment

LIST OF TABLES

Table 1.0-1	List of NOP Comment Letters	1.0-8
Table 2.0-1	Project Impacts and Proposed Mitigation Measures	2.0-5
Table 3.0-1	Valley Oaks Proposed Land Uses	3.0-3
Table 4.0-1	Proposed and Approved Projects in the Vicinity of the Valley Oaks Planned Development	4.0-5
Table 4.1-1	Project Consistency with the Lake County General Plan Visual Resource Policies	4.1-2
Table 4.1-2	Project Consistency with the Middletown Area Plan Visual Resource Policies	4.1-4
Table 4.2-1	Leading Commodities for Gross Value of Agricultural Products in Lake County, 006	4.2-1
Table 4.2-2	Soil Capability Classification	4.2-2
Table 4.2-3	Storie Index Rating System	4.2-2
Table 4.2-4	Acres of Important Farmlands (1998 to 2006) in Lake County	4.2-5
Table 4.2-5	2002 Census of Agriculture – Farms and Land in Farms 1997 and 2002	4.2-6
Table 4.2-6	Farmland Conversion from 2004 to 2006	4.2-6
Table 4.2-7	On-site Soil Capability Classification and Storie Index Rating	4.2-7
Table 4.2-8	Project Consistency with the Lake County General Plan Agricultural Resource Policies	4.2-9
Table 4.2-9	Project Consistency with the Middletown Area Plan Agricultural Resource Policies	4.2-9
Table 4.3-1	Criteria Air Pollutants Summary of Common Sources and Effects	4.3-2
Table 4.3-2	Summary of Ambient Air Quality Standards	4.3-3
Table 4.3-3	Summary of Ambient Air Quality Data Lakeport–Lakeport Boulevard Air Quality Monitoring Station	4.3-4
Table 4.3-4	Recommendations on Siting New Sensitive Land Uses Near Air Pollutant Sources	4.3-7
Table 4.3-5	Project Consistency with the Lake County General Plan Air Quality Policies	4.3-10
Table 4.3-6	Project Consistency with the Middletown Area Plan Air Quality Policies	4.3-11
Table 4.3-7	Operational Emissions at Buildout without Mitigation	4.3-18
Table 4.3-8	Existing and Annual Project Buildout CO2 Emissions	4.3-32
Table 4.3-9	Construction Phase: Daily Emissions	4.3-32
Table 4.4-1	Special-Status Plant Species with Potential to Occur in the Project Study Area	4.4-6
Table 4.4-2	Special-Status Wildlife Species with Potential to Occur in the Project Study Area	4.4-13
Table 4.4-3	Project Consistency with Lake County General Plan Biological and Natural Resources Policies	4.4-24
Table 4.4-4	Project Consistency with the Middletown Area Plan Biological Resource Policies	4.4-26

Table 4.5-1	Project Consistency with Lake County General Plan Cultural Resources Policies	4.5-8
Table 4.5-2	Project Consistency with the Middletown Area Plan Cultural Resource Policies	4.5-10
Table 4.6-1	Magnitude and Intensity of Faults	4.6-2
Table 4.6-2	Known Faults in the Vicinity of the Project Site	4.6-3
Table 4.6-3	Soil Building Site Potential	4.6-4
Table 4.6-4	Project Consistency with the Lake County General Plan Geology and Soils Policies	4.6-6
Table 4.6-5	Project Consistency with the Middletown Area Plan Geology and Soils Policies	4.6-7
Table 4.7-1	Environmental Records and Databases Searched	4.7-3
Table 4.7-2	Orphan Hazardous Materials Sites in the Vicinity of the Proposed Project	4.7-5
Table 4.7-3	Summary of Hazardous Materials Regulatory Authority	4.7-11
Table 4.7-4	Project Consistency with the Lake County General Plan Hazardous Materials Policies	4.7-16
Table 4.7-5	Project Consistency with the Middletown Area Plan Hazardous Materials Policies	4.7-17
Table 4.8-1	Published 100-Year Discharges for Coyote Creek (Assuming No Diversion at State Route 29)	4.8-3
Table 4.8-2	Project Consistency with the Lake County General Plan Hydrology and Water Quality Policies	4.8-14
Table 4.8-3	Project Consistency with the Middletown Area Plan Hydrology and Water Quality Policies	4.8-18
Table 4.9-1	Project Consistency with the Lake County General Plan Land Use Policies	4.9-3
Table 4.9-2	Project Consistency with the Middletown Area Plan Land Use Policies	4.9-7
Table 4.10-1	Ambient Noise Level Monitoring Data	4.10-4
Table 4.10-2	State of California Land Use Compatibility for Community Noise Environments	4.10-5
Table 4.10-3	Land Use Compatibility for Community Noise Lake County General Plan	4.10-6
Table 4.10-4	Project Consistency with the Lake County General Plan Noise Policies	4.10-8
Table 4.10-5	Project Consistency with the Middletown Area Plan Noise Policies	4.10-10
Table 4.10-6	Typical Construction Equipment Noise Levels	4.10-13
Table 4.10-7	Representative Vibration Source Levels for Construction Equipment	4.10-17
Table 4.11-1	Population Growth Between 1990 and 2000	4.11-2
Table 4.11-2	Age Characteristics for Hidden Valley Lake 1990-2000	4.11-2
Table 4.11-3	Household Trends	4.11-3
Table 4.11-4	Household Size – Owner Occupied	4.11-4
Table 4.11-5	Housing Tenure	4.11-4
Table 4.11-6	Housing Unit Trends	4.11-5
Table 4.11-7	Housing Unit Occupancy and Type of Occupancy or Vacancy	4.11-5

Table 4.11-8 Home Sales – 2006 through 2008 ..... 4.11-6
Table 4.11-9 Employment in Hidden Valley Lake in 2000 ..... 4.11-6
Table 4.11-10 Project Consistency with the Lake County General Plan Population and Housing Policies 4.11-7
Table 4.12.1-1 Project Consistency with the Lake County General Plan Fire Protection and Emergency Medical Services Policies 4.12-5
Table 4.12.1-2 Project Consistency with the Middletown Area Plan Fire Protection and Emergency Medical Services Policies 4.12-6
Table 4.12.2-1 Project Consistency with the Lake County General Plan Law Enforcement Services Policies 4.12-13
Table 4.12.2-2 Project Consistency with the Middletown Area Plan Law Enforcement Services Policies 4.12-14
Table 4.12.3-1 Current Enrollment and Existing Facility Capacity (2006) 4.12-17
Table 4.12.3-2 Project Consistency with the Lake County General Plan Public School Policies 4.12-20
Table 4.12.3-3 Project Consistency with the Middletown Area Plan Public School Policies 4.12-21
Table 4.12.4-1 Project Consistency with the Lake County General Plan Park and Recreation Policies 4.12-25
Table 4.12.4-2 Project Consistency with the Middletown Area Plan Park and Recreation Policies 4.12-25
Table 4.13-1 Intersection Level of Service Criteria 4.13-3
Table 4.13-2 Existing (2006) Intersection Level of Service Calculations 4.13-4
Table 4.13-3 Project Consistency with the Lake County General Plan Transportation and Circulation Policies 4.13-6
Table 4.13-4 Project Consistency with the Middletown Area Plan Transportation and Circulation Policies 4.13-8
Table 4.13-5 Trip Generation Summary 4.13-11
Table 4.13-6 Trip Generation Comparison 4.13-12
Table 4.13-7 Applied Trip Distribution Assumptions by Land Use 4.13-14
Table 4.13-8 Summary of Existing Plus Project Level of Service Calculations 4.13-15
Table 4.13-9 Design Queue Lengths 4.13-17
Table 4.13-10 Summary of Future (2016) Level of Service Calculations 4.13-21
Table 4.13-11 Summary of Future (2026) Level of Service Calculations 4.13-21
Table 4.13-12 Summary of Future (2016) plus Project Level of Service Calculations 4.13-22
Table 4.13-13 Summary of Future (2026) plus Project Level of Service Calculations 4.13-23
Table 4.14.1-1 Historical Average Daily Water Demand by Non-Residential Use (1995–2000) 4.14-2
Table 4.14.1-2 Project Consistency with the Lake County General Plan Water Service Policies 4.14-4
Table 4.14.1-3 Project Consistency with the Middletown Area Plan Water Service Policies 4.14-6
Table 4.14.1-4 Proposed Project's Estimated Water Demand 4.14-9

Table 4.14.2-1 Project Consistency with the Lake County General Plan Wastewater Service Policies 4.14-13
Table 4.14.2-2 Project Consistency with the Middletown Area Plan Wastewater Service Policies 4.14-14
Table 4.14.2-3 Projected Wastewater Flows 4.14-15
Table 4.14.3-1 Project Consistency with the Lake County General Plan Solid Waste Service Policies 4.14-19
Table 4.14.4-1 Project Consistency with Lake County General Plan Electrical, Gas, and Telecommunications Policies 4.14-24
Table 6.0-1 Reduced Intensity Alternative 6.0-19
Table 6.0-2 Comparison of Alternatives to the Proposed Project 6.0-28

LIST OF FIGURES

Figure 3.0-1 Regional Location
Figure 3.0-2 Project Vicinity
Figure 3.0-3 Site Plan
Figure 4.1-1 Existing View from SR 29
Figure 4.1-2 Valley Oaks Project View from SR 29
Figure 4.1-3 Existing View from Coyote Valley Elementary Schoo
Figure 4.1-4 Valley Oaks Project View from Coyote Valley Elementary School
Figure 4.1-5 Existing View from Hidden Valley Lake Subdivision
Figure 4.1-6 Valley Oaks Project View from Hidden Valley Lake Subdivision
Figure 4.2-1 Important Farmlands
Figure 4.2-2 Soil Types
Figure 4.2-3 Williamson Act Lands
Figure 4.4-1 Habitat Types in the Project Area
Figure 4.4-2 Recorded Occurrences of Special Status Species within 1 Mile of Project Site
Figure 4.8-1 Drainage Features in the Project Area
Figure 4.8-2 Existing 10'x5' Arch Culvert at SR 29
Figure 4.8-3 Existing 10.5'x7' CMPA Culvert
Figure 4.8-4 Coyote Creek Dam Spillway

Figure 4.8-5 Coyote Valley Groundwater Basin

Figure 4.8-6 Floodplain Map

Figure 4.8-7 Hidden Valley Lake, Dam Inundation Area

Figure 4.8-8a Tentative Grading, Drainage and Utility Plan Commercial Portion

Figure 4.8-8b Tentative Grading, Drainage and Utility Plan Phase 1

Figure 4.8-8c Tentative Grading, Drainage and Utility Plan Phases 2 & 3

Figure 4.8-8d Tentative Grading, Drainage and Utility Plan Phases 4 & 5

Figure 4.8-8e Tentative Grading, Drainage and Utility Plan Phase 6

Figure 4.9-1 Existing General Plan Designations

Figure 4.9-2 Existing Zoning Designations

Figure 4.9-3 Proposed General Plan Designations

Figure 4.9-4 Proposed Zoning Designations

Figure 4.10-1 Typical Noise Levels

Figure 4.10-2 Noise Monitoring Location

Figure 4.10-3 Traffic Noise Contours

Figure 4.11-1 Shopping Center Trade Area Map

Figure 4.13-1 Study Area Roadways

Figure 4.13-2 Lane Configurations with Project

Figure 4.13-3 Project Traffic Volumes

Figure 4.13-4 Existing Plus Project Traffic Volumes

Figure 4.13-5 Future 2016 (Without Project) Traffic Volumes

Figure 4.13-6 Future 2026 (Without Project) Traffic Volumes

Figure 4.13-7 Future plus Project 2016 Traffic Volumes

Figure 4.13-8 Future plus Project 2026 Traffic Volumes

Figure 4.14.1-1 Existing HVLCSD Water System and Facilities

Figure 6.0-1 Alternative 2 Open Space Preservation Alternative

1.0 INTRODUCTION

This section summarizes the purpose of the Environmental Impact Report (EIR) for the Valley Oaks Planned Development project. This section describes the environmental procedures that are to be followed according to the California Environmental Quality Act (CEQA); discusses the intended uses of the EIR; describes the EIR's scope and organization, contact person, and impact terminology; and provides definitions of commonly used terms and acronyms utilized throughout this EIR.

1.1 BACKGROUND AND PURPOSE

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, State CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. State CEQA Guidelines 15051(b) states:

> b) If the project is to be carried out by a nongovernmental person or entity, the lead agency shall be the public agency with the greatest responsibility for supervising or approving the project as a whole.
>
> 1) The lead agency will normally be the agency with the general governmental powers, such as a city of county, rather than an agency with a single or limited purpose such as an air pollution control district or a district which will provide public serve or public utility to the project.

Lake County, acting as lead agency, has prepared this Draft EIR to provide the public, County decision-makers, and responsible and trustee agencies with information about the potentially significant environmental effects of the proposed Valley Oaks Planned Development project. As described in the provisions of State CEQA Guidelines Section 15121(a), an EIR is a public informational document that assesses potentially significant environmental effects of the proposed project, as well as identifies mitigation measures and alternatives to the proposed project that could reduce or avoid any significant environmental impacts. Public agencies are charged with the duty to consider and minimize the significant environmental impacts of proposed development where feasible, and an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

CEQA requires the preparation of an environmental impact report prior to approving any project which may have a significant effect on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action which has the potential to result in a direct physical change or a reasonably foreseeable indirect physical change in the environment (State CEQA Guidelines Section 15378(a)). With respect to the Valley Oaks project, the County has determined that this development application is a "project" within the definition of CEQA.

1.2 TYPE OF DOCUMENT

The State CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a Project EIR pursuant to State CEQA Guidelines Section 15161. Project EIRs are defined by State CEQA Guidelines (Section 15161) as:

> The most common type of EIR examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development of the project. The EIR shall examine all phases of the project including planning, construction, and operation.

By preparing a Project EIR, the County intends to allow the entire project, if approved by the County Board of Supervisors, to proceed without additional CEQA compliance, absent the kinds of changed circumstances or project modifications that trigger the preparation of a subsequent EIR, supplemental EIR, or addendum (see State CEQA Guidelines, Sections 15162–15164).

This Draft EIR utilizes technical information provided by the project applicant (Kimco Development, Inc.), the Lake County General Plan and Zoning Code, the Lake County General Plan Background Report, information gathered from federal, state, and local agencies, as well as any other data supported by the State CEQA Guidelines (see Section 15148 [Citation] and 15150 [Incorporation by Reference]). By utilizing these provisions of the State CEQA Guidelines, the County, in preparing this Draft EIR, has been able to make maximum feasible and appropriate use of this technological information.

1.3 INTENDED USES OF THE EIR

This Draft EIR (DEIR) is intended to evaluate the environmental impacts of the project to the greatest extent possible. This DEIR, prepared in accordance with State CEQA Guidelines Section 15126, should be used as the primary environmental document to evaluate all planning and permitting actions associated with the project. These actions include, but are not limited to, the following:

- General Plan Amendment from Agriculture and Rural Residential to Suburban Residential and Community Commercial;
- Rezone of the project site from A-SC-FF (Agriculture–Scenic Combining District–Floodway Fringe Combining District) and RR-SC-FF (Rural Residential–Scenic Combining District–Floodway Fringe Combining District) to PDR-SC-FF (Planned Development Residential–Scenic Combining District–Floodway Fringe Combining District) and PDC-SC-FF (Planned Development Commercial-Scenic Combining District–Floodway Fringe Combining District);
- A Sphere of Influence Amendment and Annexation to the Hidden Valley Lake Community Services District (HVLCSD);
- Approval of a Specific Plan of Development and a General Plan of Development;
- Approval of the Public Facilities Financing Plan (PFFP) for the project;
- Approval of tentative and final maps;
- Improvement plans;
- Grading plans;
- Building permits;
- Granting of a Development Agreement to the project applicant; and
- Adoption of a Mitigation Monitoring and Reporting Program, if the project is approved.

Other discretionary approvals that may be required by other governmental agencies may include, but are not limited to, the following:

- Water quality permitting (NPDES and water quality certifications) under the Clean Water Act by the Central Valley Regional Water Quality Control Board (CVRWQCB) and State Water Resources Control Board.
- Wetland fill and streambed alteration permits under Section 404/401 of the Clean Water Act by the U.S. Army Corps of Engineers.
- Approval of infrastructure details for water supply and wastewater facilities by the Hidden Valley Lake Community Services District.

1.4 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

"Responsible agency" means 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. For the purpose of CEQA, the term "responsible agency" includes all California public agencies other than the lead agency that have discretionary approval power over the project or an aspect of the project. The following agencies are identified as potential responsible agencies:

- Hidden Valley Lake Community Services District (HVLCSD)
- Central Valley Regional Water Quality Control Board (CVRWQB)
- California Department of Fish and Game (CDFG)
- Lake County Air Quality Management District (LCAQMD)
- Lake County Local Agency Formation Commission (LAFCo)
- Middletown Unified School District (MUSD)

"Trustee agency" means a state agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the State of California. The only known possible trustee agency is the California Department of Fish and Game (CDFG).

Although not subject to California law, and thus outside the definitions of "responsible agency" or "trustee agency," the United States Army Corps of Engineers (USACOE) and the United States Fish and Wildlife Service (USFWS) will also be called upon to grant approvals – under federal law – necessary for the development of the project area. These agencies have no duties under CEQA but rather are governed by a variety of federal statutory schemes, such as the Clean Water Act, which governs the dredging and filling of waters of the United States (e.g., some wetlands), and the Endangered Species Act, which requires USACOE to consult with USFWS as part of the review process for any wetland or fill permits that may be required.

1.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a brief summary of the proposed actions and its consequences, a description of the project, a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The environmental issues addressed in this Draft EIR were established through environmental documentation of existing projects located in the vicinity and private and public agency responses to the Notice of

SECTION 8.0 – REPORT PREPARERS

This section lists all authors and agencies that assisted in the preparation of the EIR by name, title, and company or agency affiliation.

APPENDICES

This section includes all notices and correspondence pertinent to the EIR, as well as technical materials prepared and used to support the analysis. Appendices are included on a CD at the back of the DEIR.

1.6 ENVIRONMENTAL REVIEW PROCESS

NOTICE OF PREPARATION AND INITIAL STUDY

In accordance with Section 15082 of the State CEQA Guidelines, the County prepared a Notice of Preparation/Initial Study (NOP/IS) for the project on March 7, 2007. In accordance with the State CEQA Guidelines, the County was identified as the lead agency for the proposed project. The NOP/IS was circulated to the public, local, state, and federal agencies, and other interested parties to solicit comments on the proposed project. The issues and concerns identified in responses to the NOP/IS document are addressed in this Draft EIR. The NOP/IS comments are presented in **Appendix A**. The Initial Study completed for the proposed project concluded that the preparation of an EIR would be required for the project. The NOP/IS is also included in **Appendix A**. The County also held a scoping meeting for the project on March 15, 2007. Concerns and comments received during the scoping meeting were considered during preparation of the Draft EIR.

DRAFT EIR

This document constitutes the Draft EIR (DEIR). The DEIR contains a description of the project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives. Concurrent with the release of the DEIR, the County will file a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (Public Resources Code, Section 21161).

PUBLIC NOTICE/PUBLIC REVIEW

Concurrent with the NOC, the County will provide public notice of the availability of the DEIR for public review and invite comment from the general public, agencies, organizations, and other interested parties. According to State CEQA Guidelines Section 15105, the public review and comment period should be no less than thirty (30) days nor longer than sixty (60) days. The review period in this case is 45 days. A longer period, such as 60 days, is normally reserved for unusually large or complex projects. Public comment on the DEIR will be accepted both in written form and orally at public hearings. Notice of the time and location of the hearing will be published prior to the hearing. All comments or questions regarding the DEIR should be addressed to:

Richard Coel, Director
County of Lake
Community Development Department
255 North Forbes Street, 3rd Floor
Lakeport, CA 95453
richardc@co.lake.ca.us

Emails sent to any other address will not be accepted

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to all significant environmental issues raised in written and oral comments received during the public review period and to oral comments made at any public hearing.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The County Planning Commission and County Board of Supervisors will review and consider the Final EIR. If the Planning Commission finds that the Final EIR is "adequate and complete," the Planning Commission may make a recommendation to the Board to certify the Final EIR. The rule of adequacy generally holds that the EIR can be certified if it (1) shows a good faith effort at full disclosure of environmental information, and (2) provides sufficient analysis to allow decisions to be made regarding the project in contemplation of its environmental consequences.

Upon review and consideration of the Final EIR, the Planning Commission and/or Board of Supervisors may take action to approve, revise, or reject the project. A decision to approve the project would be accompanied by written findings in accordance with CEQA Guidelines Section 15091 (Findings) and, if applicable, Section 15093 (Statement of Overriding Considerations). A Statement of Overriding Considerations requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve a project. A mitigation monitoring and reporting program (MMRP), as described below, would also be adopted for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. The MMRP will be designed to ensure that these measures are carried out during all phases of the project's implementation.

MITIGATION MONITORING AND REPORTING PROGRAM

Public Resources Code Section 21081.6(a) requires lead agencies, at the time of project approval, to adopt an MMRP to describe measures that have been adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The specific "reporting or monitoring" program required by CEQA is not required to be included in the EIR; however, it will be presented to County decision-makers for adoption. Throughout the EIR, however, mitigation measures have been clearly identified and presented in language that will facilitate establishment of a monitoring and reporting program. Any mitigation measures adopted by the Board of Supervisors as conditions for approval of the project will be included in the MMRP to ensure and verify compliance.

1.7 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The County received numerous comments and letters on the NOP for the Valley Oaks Planned Development project. The letters received on the content of the NOP are summarized below (see **Table 1.0-1**). A full copy of each letter received that addressed an environmental issue that should be addressed in the DEIR is provided in **Appendix A** of this DEIR.

TABLE 1.0-1
LIST OF NOP COMMENT LETTERS

Agency or Interested Party	Date	Summary of Comment
Lake County Department of Agriculture	3-12-07	The project site would be developed on Class I-IV soils; this is in opposition to Sections 1.1 and 1.2 of the Agricultural Resources portion of the Lake County General Plan.
California Highway Patrol	3-20-07	The CHP addressed concerns regarding potential increased traffic collisions at the intersection of Hartmann Road and State Route (SR) 29 due to the proposed signalized Arabian Lane /SR 29 intersection. The CHP identified that impacts to the Arabian Lane/SR 29 intersection could be lessened with signal lights at the SR 29/Hartmann Road intersection or by moving Arabian Lane to the north.
Lake County Air Quality Management District	4-06-07	The EIR should address issues related to construction dust and diesel exhaust, as well as long-term project impacts. These include vehicle emissions increases and related to commute hours, residential activities, wood smoke, proximity to mapped NOA areas, and mitigation measures for each impact such as bike paths and sidewalks within the community and any potential for connection to trails outside the community (connection to Middletown for bicycles and walkers) as an offset to the increased emissions that will result. The EIR should also look at design features, such as solar panel installation, throughout the project. The subject property is located near a mapped area known to contain serpentine rock and/or soils, which commonly contain regular amounts of asbestos. The District and State of California Air Resources Board regulate surfacing and construction activities regarding serpentine. An approved serpentine dust control plan is required should serpentine be discovered during construction.

1.8 COMMONLY USED TERMS

Identified below are common terms used throughout this document. A complete list of acronyms and abbreviations is also provided.

TERMS

Applicant – Any person or other legal entity who applies to the County to develop or improve any portion of the real property within the project boundaries. The term "applicant" shall include all successors in interest.

Developer – Any person or other legal entity that performs actual construction activities which convert the project site to urban uses. Such activities include, but are not limited to, grading, building construction, and installation of infrastructure.

Draft EIR (DEIR) – Draft Environmental Impact Report.

Final EIR (FEIR) – Final Environmental Impact Report.

General Plan – The General Plan of Lake County.

Project – The development or improvement of the project site, as defined by the project application.

Project Applicant – Any person or other legal entity who is an "applicant" as defined herein.

Project Site – The real property described by the project application.

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ACBM	asbestos-containing building material
af/yr	acre-feet per year
ASTM	American Society for Testing and Materials
ATCM	Air Toxic Control Measure
BLM	Bureau of Land Management
BMP	best management practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal-EPA	California Environmental Protection Agency
CalFire	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CCTS	Central California Taxonomic System
CDFG	California Department of Fish and Game
CDHS	California Department of Health Services

CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFP	California Fully Protected
cfs	cubic feet per second
CGP	Construction General Permit
CHABA	Committee of Hearing, Bio-Acoustics, and Bio-Mechanics
CHP	California Highway Patrol
CIWMB	California Integrated Waste Management Board
CLOMR	Conditional Letter of Map Revision
c/mvm	collisions per million vehicle miles
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CSC	California Species of Concern
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CVGWB	Coyote Valley Groundwater Basin
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEIR	Draft Environmental Impact Report

DOC	Department of Conservation
DPM	diesel-exhaust particulate matter
DSOD	Division of Safety of Dams
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
ERP	Emissions Reduction Plan
FCAA	Federal Clean Air Act
FE	Federally Endangered
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FMMP	Farmland Mapping and Monitoring Program
FSC	Federal Species of Concern
FT	Federally Threatened
gpd	gallons per day
GPS	Global Positioning System
HAPs	hazardous air pollutants
HVLCSD	Hidden Valley Lake Community Services District
Hz	hertz
IWMP	Integrated Waste Management Plan
LAFCo	Local Agency Formation Commission
LCAB	Lake County Air Basin
LCAQMD	Lake County Air Quality Management District

LCCWP	Lake County Clean Water Program
LCGWMP	Lake County Groundwater Management Plan
LCSD	Lake County Sheriff's Department
L_{dn}	annual day-night sound level
L_{eq}	equivalent sound level
LIM	Land Inventory and Monitoring
L_{max}	maximum sound level
LOMR	Letter of Map Revision
LOS	level of service
L_p	percentile sound level
MAP	Middletown Area Plan
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
MEP	maximum extent practicable
mgd	million gallons per day
mg/L	milligrams per liter
MUSD	Middletown Unified School District
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NESHAPs	National Emission Standards for HAPs
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NOC	Notice of Completion
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service

NRHP	National Register of Historic Places
NSPS	New Source Protection Standards
NTR	National Toxics Rule
O_3	ozone
OES	Office of Emergency Services
OHWM	ordinary high water mark
OSFM	Office of the State Fire Marshal
OSHA	U.S. Occupational Safety & Health Administration
Pb	lead
PCB	polychlorinated biphenyl
PDC	Planned Development Commercial
PDR	Planned Development Residential
PFFP	Public Facilities Financing Plan
PG&E	Pacific Gas & Electric Company
PM	particulate matter
$PM_{2.5}$	particulate matter < 2.5 microns in diameter
PM_{10}	particulate matter 2.5 to 10 microns in diameter
ppv	peak particle velocity
PUE	Public Utility Easement
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gasses
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Soil Conservation Service
SE	State Endangered
SIP	State Implementation Program

SLCFPD	South Lake County Fire Protection District
SO_2	sulfur dioxide
SOI	sphere of influence
SR 29	State Route 29
SRA	State Responsibility Area
SRRE	Source Reduction and Recycling Element
ST	State Threatened
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Program
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TDS	total dissolved solids
TMDL	Total Maximum Daily Load
TPZ	Tree Protection Zone
TSCA	Toxic Substances Control Act
UBC	Uniform Building Code
UCMP	University of California Museum of Paleontology
UFC	Uniform Fire Code
USACOE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
US EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
WRCC	Western Regional Climate Center

WWTP	wastewater treatment plant
VELB	valley elderberry longhorn beetle

2.0 Executive Summary

This section of the Draft Environmental Impact Report (DEIR) provides an overview of the project and the environmental analysis contained herein. For additional details regarding specific issues, please consult the appropriate section in Chapter 4.0, Environmental Setting, Impacts, and Mitigation Measures.

2.1 PURPOSE AND SCOPE OF THE EIR

This EIR will provide a reasonably thorough analysis of the potential environmental effects associated with the implementation of the Valley Oaks Planned Development project, pursuant to the California Environmental Quality Act (CEQA). This EIR analysis focuses on potential environmental impacts related to aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and human health, hydrology and water quality, land use, noise, population and housing, public services, transportation and traffic, and utilities and service systems. Issues that were determined to be less than significant in the Notice of Preparation (NOP) are not discussed further in this EIR. The NOP is attached as **Appendix A.**

2.2 PROJECT CHARACTERISTICS

The project proposes the following development:

- Construction of approximately 380 detached single-family homes on approximately 50.46 acres, 3.54 acres of attached or detached medium density housing, and 2.53 acres of medium density senior housing.

- Development of five "village commercial" parcels that encompass approximately 43.18 acres of the project site, including 105,000 to 120,000 square feet of retail space that includes a grocery store, drug and general merchandise store, and other retail uses; and 85,000 to 110,000 square feet of commercial uses that include a movie theater, motel, and general office uses. The village commercial area would also include a 49-bed senior care/assisted living facility.

- Creation of recreational open space opportunities consisting of a 19.82-acre linear park, a 3.26-acre centrally located active recreation park, a 0.5-acre open space park, and a 5.31-acre frontage trail and park area along SR 29.

The project applicant has identified the following project objectives:

- To provide for:

  - A well-planned development consisting of ±380 detached single-family lots, a minimum of 6,000 square feet in size (inclusive of sidewalk easement and public utility easement).

  - A community commercial village which provides a full range of goods and services to meet the needs of the residents of Middletown and the greater community of Lake County. A portion of the village commercial may include mixed use, i.e., residential over office/retail.

  - A medium density residential area having a density of up to ±15 units per acre (small lot and/or attached).

- A multi-family residential parcel to be designed and developed for senior housing.
- A residential care and/or assisted living facility.
- Project and public open space.

- To permit design flexibility in the development of the site in order to be responsive to the unique physical characteristics of the site, achieve a mix of housing types and a range of commercial services, ensure compatibility with the character of the surrounding neighborhood, and provide public and private amenities within the boundaries of the project.
- To enhance the historic, natural feature of the site and create additional wildlife habitat.
- To address and reduce seasonal flooding including the off-site areas of Spy Glass and Fish Hook in Hidden Valley Lake.
- To establish assessments for both the residential and commercial components of the project in order to provide maintenance of the project roadways, maintenance of the proposed River Park along Hartmann Road and Putah Creek, and financial assistance to the local fire district.
- To provide employment and retail business, service, and professional office location opportunities.
- To provide recreational opportunities and alternative means of transportation by creating a linear park along Coyote Creek, pedestrian and bicycle linkages to the adjoining school, pedestrian/bicycle linkages to the existing and proposed trail system, and, pedestrian and bicycle linkages to the proposed River Park, commercial development along Hartmann Road and, if desired by the residents, Hidden Valley Lake subdivision.

2.3 PROJECT ALTERNATIVES SUMMARY

The purpose of the EIR alternatives analysis is to describe a range of reasonable alternatives to the proposed project that could feasibly obtain most of the basic objectives of the project and to evaluate the comparative merits of the alternatives (CEQA Guidelines, Section 15126.6(a)). An EIR need not consider every conceivable alternative to a project, nor is it required to consider alternatives that are infeasible. The discussion of alternatives shall focus on those which are capable of avoiding or substantially lessening any significant effects of the project, even if they impede the attainment of the project objectives to some degree or would be more costly (CEQA Guidelines Section 15126.6 (b)).

No Project Alternative: The "No Project" alternative is required by CEQA Guidelines Section 15126.6(e). A no project alternative is required to examine the impacts which might occur if the site remains in its present condition, meaning the project is not built and the environmental setting of the project site remains the same. In this case, the site's existing land uses of a former Arabian horse ranch with associated structures and one additional rural residence would stay intact. Implementation of the No Project Alternative would eliminate the majority of environmental impacts identified in each technical section included in Sections 4.1 through 4.14 of this EIR. There would be fewer environmental impacts resulting from this alternative than from the proposed project as the site would be left in its present condition, even with development

planned for the project site by the Middletown Area Plan. However, this alternative would not meet any of the project objectives identified in Section 3.0, Project Description.

Open Space Preservation Alternative: The intent of this alternative is to cluster the single-family residential units in smaller areas and to preserve open space resources. This alternative would cluster 135 units into 11 acres, resulting in a 12.2 dwelling unit per acre density. This would move the 73 single-family residential units that are between Coyote Park and Coyote Valley Elementary School, combining them with the single-family units adjacent to the medium density residential units located along the realigned Hartmann Road and the area north of the Coyote Creek Linear Park and adjacent to Arabian Lane. This would result in additional medium density residential units, which are generally smaller in size than single-family homes. This area also encompasses the commercial area that is termed Village IV, so the commercial use would be eliminated, and residential units would be clustered on that site as well. The area between Coyote Park and Coyote Valley Elementary School would remain in its existing condition, resulting in no ground disturbance. This open area is approximately 15.2 acres in size.

Reduced Intensity Alternative: The Reduced Intensity Alternative would result in the same 150-acre project site being developed, but would include a portion of the single-family residential development on larger parcels and eliminate the multi-family, residential care facility and senior living/multi-family components, in order to reduce overall vehicle trips and air quality related impacts. The location and size of the commercial uses would remain the same as the proposed project. This alternative would keep the lots that are adjacent to the Hidden Valley Lake subdivision at the same general size as the proposed project, resulting in approximately 77 residential lots at approximately 6,000 square feet each, which is consistent with the Middletown Area Plan Policy 5.1j which states that "any lots that are proposed adjacent to the Hidden Valley Lake Subdivision shall be designed with average lot widths similar to (or greater than) the abutting HVL lots' average widths." The remainder of the single-family dwelling units would be constructed on larger lots at approximately 11,000 square feet per lot. This would result in approximately 231 single-family dwelling units and an overall density of approximately 3.4 dwelling units per acre, compared to an overall density of 6.8 dwelling units per acre for the proposed project. This alternative would also include the realignment of Coyote Creek to allow for the Coyote Creek Linear Park and residential development on the northeastern portion of the site. The parks and open space component of this alternative would be slightly smaller than the proposed project and would include approximately 27.2 acres of parks, open space, and landscaped buffers. This alternative would include the Coyote Creek Linear Park, neighborhood parks, and a 50-foot landscaped buffer along SR 29, as required as a provision of Policy 5.1j of the Middletown Area Plan. This alternative also assumes 20 percent of the site designated for roadways, utility and maintenance easements, and public rights-of-way. This alternative would result in approximately 308 dwelling units with an overall average density of approximately 3.4 dwelling units per acre.

State CEQA Guidelines Section 15126.6(c) provides details regarding the consideration of ranges of alternatives. The alternatives analysis presented in this EIR provides an adequate range of alternatives for consideration under the requirements of CEQA. Please refer to Section 6.0, Alternatives, of this DEIR for a more detailed discussion of the alternatives analyzed for the proposed project.

2.4 AREAS OF CONTROVERSY

Lake County was identified as the lead agency for the proposed project. In accordance with Section 15082 of the State CEQA Guidelines, the County prepared and distributed a NOP for the Draft EIR that was circulated for public review in March 2007. The NOP included a summary of

probable effects on the environment with the implementation of the project. The March 2007 NOP is presented in **Appendix A.** Concerns raised in response to the NOP were considered during preparation of the Draft EIR and are also presented in **Appendix A** and summarized in **Table 1.0-1.** A public scoping meeting to receive comments on the NOP was held on March 15, 2007, at the Coyote Valley Elementary School.

2.5 SUMMARY OF ENVIRONMENTAL IMPACTS

Table 2.0-1 displays a summary of impacts and proposed mitigation measures that would avoid or minimize potential impacts. In the table, the level of significance is indicated both before and after the implementation of each mitigation measure.

For detailed discussions of all project-level mitigation measures, refer to Sections 4.1 through 4.14 of this DEIR.

TABLE 2.0-1
PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
4.1 Aesthetics/Light and Glare					
Impact 4.1.1	Implementation of the proposed project could result in the alteration of views to a scenic vista or views from a state scenic highway.	LTS	None required.		LTS
Impact 4.1.2	Implementation of the proposed project could substantially degrade the existing visual character of the site.	PS	**MM 4.1.2a**	Prior to improvement plan approval, a landscape plan shall be submitted and approved by Lake County that includes details regarding screening of the project site from vehicles traveling on SR 29, as well as detailed plans for the commercial parking areas. Landscaping should consist of native vegetation and features characteristic of the area.	SU
			Timing/Implementation:	Prior to improvement plan approval.	
			Enforcement/Monitoring:	Lake County Community Development Department	
			MM 4.1.2b	All project hardscape features, such as parking lots and new non-native softscape features, shall be designed to blend with existing landscape characteristics to the maximum extent feasible. Such features shall be screened as much as possible from off-site views through the use of native vegetation, landscaping, natural features, and other appropriate screening measures.	
			Timing/Implementation:	Prior to approval of grading and improvement plans and landscape plan.	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
			Enforcement/Monitoring: Lake County Community Development Department	
Impact 4.1.3	The installation of street lighting and other lights associated with commercial and residential development could change the night sky in the vicinity of the project and could adversely affect surrounding uses.	LTS	None required.	LTS
Impact 4.1.4	Implementation of the proposed project would result in the addition of sources of daytime glare through the addition of 488 residential units and 30 acres of commercial units.	PS	**MM 4.1.4** Design standards for the project shall prohibit the use of reflective or glare-producing materials in structures, facilities, and infrastructure associated with development of the project and shall encourage the use of landscaping and other design features to minimize the potential for glare. Timing/Implementation: Prior to improvement plan and landscape plan approval; included in project design standards Enforcement/Monitoring: Lake County Community Development Department	LTS
Impact 4.1.5	Implementation of the proposed project, along with existing, recently approved, proposed, and reasonably foreseeable development in the region, could result in cumulative impacts to aesthetic resources.	LTCC	None required.	LTCC
Impact 4.1.6	Implementation of the proposed project would contribute to cumulative increases in nighttime lighting and daytime glare levels in the area.	LTCC	None required.	LTCC
4.2 Agricultural Resources				
Impact 4.2.1	Implementation of the proposed project would result in the conversion of approximately 138	LTS	None required.	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

	Impact	Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
	acres of Farmland of Local Importance and development of non-agricultural uses on land containing prime soils (Class I and II, if irrigated).				
Impact 4.2.2	Implementation of the proposed project would result in the conversion of agriculturally zoned lands to residential, commercial, and open space uses.	LTS	None required.		LTS
Impact 4.2.3	Implementation of the proposed project could result in the conversion of farmland to non-agricultural uses.	LTS	None required.		LTS
Impact 4.2.4	The proposed project, in combination with existing, recently approved, proposed, and reasonably foreseeable projects in the area, could contribute to the cumulative loss of agricultural land in Lake County.	LTCC	None required.		LTCC
4.3 Air Quality					
Impact 4.3.1	Implementation of the proposed project could result in the release of construction-generated emissions that could exceed applicable ambient air quality standards at nearby receptors.	PS	**MM 4.3.1**	The applicant of the proposed project shall be required to prepare an Emissions Reduction Plan (ERP). The ERP shall be submitted to LCAQMD for review and approval prior to groundbreaking. The ERP shall include all measures recommended by LCAQMD, at the time of development, for the control of fugitive and mobile-source emissions associated with on-site construction activities sufficient to ensure that project-generated emissions would not exceed applicable air quality standards at nearby receptors. At a minimum, these measures shall include, but are not limited to, the following:	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Fugitive Dust Emissions • All disturbed areas, including storage piles, that are not being actively used shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover. • Temporary traffic control shall be provided as appropriate during all phases of construction to improve traffic flow (e.g., flag person). • All material excavated, stockpiled, or graded shall be sufficiently watered to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering shall occur at least twice daily for actively disturbed areas, preferably in the mid-morning and after work is completed each day. • All on-site unpaved roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. The paving of roadways shall occur as early in the construction phase as possible to limit fugitive emissions associated with vehicle travel on unpaved surfaces. • Onsite vehicle speeds on unpaved surfaces shall be limited to 15 mph. • All land clearing, grading, earth moving or excavation activities on the project site	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		shall be suspended when winds exceed 20 miles per hour. • All inactive portions of the development site shall be seeded and watered until a suitable grass cover is established. Seeding shall be with an approved native seed mix. • When materials are transported offsite, all material shall be covered and effectively wetted to limit visible dust emissions, or at least 6 inches of freeboard space from the top of the container shall be maintained. • All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. • Wheel washers shall be installed where vehicles enter and exit unpaved roads onto paved roads, or trucks and any equipment leaving the site each trip shall be washed off, as necessary, to prevent the track-out of material onto adjacent roadways. • Cleared vegetation shall be treated by legal means other than open burning, such as chipping, shredding, or grinding. **Mobile-Source Emissions** • Diesel-powered construction equipment to be used onsite shall be model year 1996, or newer, or shall use low-sulfur	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		content diesel fuel of 15 ppm, or less, by weight. • The primary contractor shall be responsible to ensure that all construction equipment is properly tuned and maintained, in accordance with manufacturer's specifications. • Off-road construction equipment shall not be left idling for periods in excess of 5 minutes when not in use. • Construction equipment operating onsite shall be equipped with two to four degree engine timing retard or pre-combustion chamber engines. • Catalytic converters shall be installed on gasoline-powered equipment, in accordance with manufacturer's specifications. • Diesel catalytic converters, diesel oxidation catalysts, and diesel particulate filters as certified and/or verified by the EPA or California shall be installed, if available. • Diesel-powered equipment should be replaced by electric equipment whenever feasible. • Idling of heavy-duty diesel trucks during loading and unloading shall be limited to five minutes; auxiliary power units should be used whenever possible. Timing/Implementation: Implemented prior to and during	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
				construction. Enforcement/Monitoring: Lake County Community Development Department; LCAQMD.	
Impact 4.3.2	Construction activities associated with implementation of the proposed project could result in short-term diesel exhaust emissions as well as the potential disturbance of asbestos-containing soils.	PS	MM 4.3.2	In the event that asbestos-containing soils are unearthed during the construction process, an Asbestos Hazard Dust Mitigation Plan shall be prepared to minimize and control potential asbestos dust emissions. In accordance with state requirements, an Asbestos Hazard Dust Mitigation Plan shall be submitted to the LCAQMD within fourteen (14) days of the discovery of naturally-occurring asbestos, serpentine, or ultramafic rock. The LCAQMD shall be contacted to determine the specific control measures to be included in the Asbestos Hazard Dust Mitigation Plan. This plan must be reviewed and approved by the LCAQMD. Timing/Implementation: Implemented during construction. Enforcement/Monitoring: Lake County Community Development Department; LCAQMD.	LTS
Impact 4.3.3	Implementation of the proposed project may result in operational emissions that exceed applicable significance thresholds.	S	MM 4.3.3	The applicant shall implement the following measures to reduce long-term emissions of criteria air pollutants. • Implement measures exceeding Title 24 energy efficiency standards by 10% or more or comply with EPA/DOE Energy Star Home energy standards. • Provide separate, safe, and convenient	SU

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		bicycle and pedestrian paths connecting residential, commercial, and office uses. • Implement a development pattern that eliminates physical barriers such as walls, berms, landscaping, and slopes between residential and non-residential uses that impede bicycle or pedestrian circulation. • Install EPA Energy Star (high reflectance) roofing materials/underlayment to reduce building heat absorption and summer energy costs. • Position structures in a predominantly north-south facing direction and plant deciduous shade trees and bush species near structures in such an arrangement to shade and cool structures during warmer seasons yet allow for solar heating and wind breaks during cooler months. • Provide grass paving or reflective surfaces for unshaded parking lot areas, driveways, or fire lanes that reduce standard asphalt paving by 10% or more. • Plant deciduous shade trees in parking lots. • Landscape with native drought-resistant species (plants, trees, and bushes) to reduce the demand for gas powered landscape maintenance equipment. • Provide heating systems powered by electricity or propane to serve as the primary heating source. • Prohibit the use of wood-burning	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		fireplaces or stoves. • Incorporate passive solar space heating designs and solar water heaters into residential and commercial units. • Install low nitrogen oxide (NOx) energy-efficient heating and other appliances, such as on-demand water heaters, cooking equipment, refrigerators, furnaces, and boiler units. • Install a gas outlet for use with outdoor cooking appliances, such as a gas barbecue. Install a gas outlet in any proposed fireplaces, including outdoor recreational fireplaces or pits. • Electrical outlets should be installed on the exterior walls of all residential and commercial buildings to promote the use of electric or battery operated yard and landscaping equipment. • Encourage mixed land use and local services to reduce or eliminate vehicle trips by promotion of pedestrian or bicycle trips. • Provide rideshare incentives and infrastructure improvements, such as construction of a park and ride lot. • Road and parking structures shall be paved. Use of reflective paving materials such as Portland concrete or reflective coatings is recommended. • To reduce emissions of airborne particulate matter associated with	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
			vehicles traveling on unpaved surfaces during the construction phases, roadways shall be paved as early in the construction process as possible. Timing/Implementation: Prior to and during project construction. Enforcement/Monitoring: Lake County Community Development Department.	
Impact 4.3.4	Implementation of the proposed project would not contribute to localized concentrations of mobile-source CO that would exceed applicable ambient air quality standards.	LTS	None required.	LTS
Impact 4.3.5	Implementation of the proposed project may result in the exposure of receptors to odorous emissions located in the vicinity of commercial land uses.	PS	**MM 4.3.5** The following measures shall be implemented: • Land uses that have the potential to emit objectionable odorous emissions (e.g., dry cleaning establishments, restaurants, and gasoline stations) shall be located as far away as possible from existing and proposed sensitive receptors or downwind of nearby receptors. • If an odor-emitting facility, as determined by the LCAQMD, is to occupy space in the commercial area, odor control devices shall be installed to reduce the exposure of receptors to objectionable odorous emissions. The LCAQMD shall be consulted to determine applicable/feasible control devices to be installed. Timing/Implementation: Implemented prior to approval of	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
			Tentative Map or approval of general and specific plans of development. Enforcement/Monitoring: Lake County Community Development Department; LCAQMD.	
Impact 4.3.6	Implementation of the proposed project would not result in increased exposure of existing or planned sensitive receptors to stationary or mobile-source TACs that would exceed applicable standards.	LTS	None required.	LTS
Impact 4.3.7	Implementation of the proposed project would not contribute to localized concentrations of mobile-source CO that would exceed applicable ambient air quality standards.	LTCC	None required.	LTCC
Impact 4.3.8	Long-term operation of the proposed project would result in increased emissions that, if uncontrolled, would exceed applicable significance thresholds.	CC	Implementation of mitigation measures **MM 4.3.1** and **MM 4.3.3** would substantially reduce short-term and long-term operational emissions of the project, respectively. However, even with implementation of the proposed mitigation measures, predicted emissions of PM_{10} from mobile sources would still be anticipated to exceed the LCAQMD significance threshold of 150 lbs/day.	CC and SU
Impact 4.3.9	Implementation of the proposed project would result in the cumulative increase of greenhouse gasses including CO_2 emitted into the atmosphere.	CC	None available.	CC and SU
4.4 Biological and Natural Resources				
Impact 4.4.1	Implementation of the proposed project would result in the disturbance of approximately 150 acres of habitat that supports common plant and wildlife species.	LTS	None required.	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
Impact 4.4.2	Implementation of the proposed project may adversely affect a small population of the state and federally endangered Burke's goldfields.	PS	MM 4.4.2	Per the U.S. Fish and Wildlife (USFWS) guidelines for mitigation credit for a 2007 Programmatic Biological Opinion based in nearby Sonoma County, a minimum of 100 individual plants is required for a site to be considered occupied by Burke's goldfields. Should future monitoring efforts detect a significant number of extant Burke's goldfield plants of at least 100 individuals within the site's wetlands, the following is required: a. In the late spring prior to the filling of the site's existing seasonal wetlands, seeds shall be manually collected from all observed Burke's goldfield plants on-site and properly stored for subsequent translocation into the mitigation wetlands in the same year. Prior permission for seed collection shall be obtained from the California Department of Fish and Game (CDFG) and USFWS. Additionally, topsoil shall be salvaged from the seasonal wetlands and used as inoculum within the mitigation wetlands. b. In order to provide a supplemental source of Burke's goldfield seeds for distribution into the mitigation wetlands, seeds shall also be collected from the nearest off-site population of Burke's goldfields, located approximately 6.5 miles from the project area. Collection from this site shall require prior permission from CDFG, USFWS, and the landowner. As part of the seed collection	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU =Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		permit application, seed and soil inoculum collection and storage procedures shall be provided to CDFG and USFWS. c. Establishment success for Burke's goldfields within the mitigation wetlands shall be monitored for a 5-year period following seeding. Annual counts of goldfields shall be conducted by a qualified botanist in each mitigation pool and the locations of all newly established sub-populations shall be mapped with a GPS receiver. Annual photo documentation shall also be conducted. Results and photos shall be provided to the USFWS and CDFG in a written monitoring report at the end of each monitoring year (i.e., by December 31). Translocation shall be considered successful if a population of at least 100 plants is established within one or more of the mitigation wetlands by Year 5 without supplemental seeding after Year 1. Timing/Implementation: Prior to project construction and during the creation of the mitigation wetlands Enforcement/Monitoring: Lake County Community Development Department	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
Impact 4.4.3	Implementation of the proposed project would result in the loss or disturbance of valley oak stands, including 13 individual valley oak (*Quercus lobata*) trees.	PS	MM 4.4.3a	The following measures shall be employed by the project applicant in order to protect valley oak habitat: • Valley oak trees shall be planted with two inches of diameter at breast height (dbh) for each inch dbh of isolated oak tree removed. • Oak tree plantings shall include a mix of sizes. As a guideline, approximately 25% of plantings should be a 24-gallon box size, approximately 50% should be a 15-gallon box size, and approximately 25% should be a 5-gallon or 1-gallon box size. • Valley oak trees shall be planted within the Coyote Creek floodplain to increase valley oak habitat and riparian vegetation. • Valley oak trees shall be planted in association with the parks to create additional valley oak habitat in areas where these trees can tolerate the higher water regime. • The project applicant shall develop a maintenance and monitoring plan for ensuring the success of valley oak plantings. Monitoring shall occur for 7 years and shall include the replacement of oak mitigation trees that become diseased or die during the monitoring period. Any replacement trees shall be monitored for a total of 7 years	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		commencing from their planting date. Mitigation shall be considered successful when a minimum of 80% of the planted oak trees survive for 7 years. • The maintenance and monitoring plan shall include cages for each seedling, identifying a weed control schedule, and outline a watering regime for the plantings. • The removal of oak trees on residential lots shall be discouraged, except for diseased, dead, or dying trees or trees designated for removal by a certified arborist. Removal of oak trees shall require prior approval by the Community Development Department Director. Tree removal activities by homeowners on their lots shall be subject to the oak tree preservation measures outlined above. Replanting shall occur at a similar ratio as trees removed by project development. That is, 2 inches dbh shall be planted for each 1 inch dbh specimen removed. The minimum size for planted trees shall be a 24-inch box. Replanting shall occur within the Valley Oaks project site unless it can be demonstrated to the Community Development Department Director that such replanting is not feasible. Timing/Implementation: During construction activities Enforcement/Monitoring: Lake County Community Development Department; Lake	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		County Department of Public Works MM 4.4.3b The following measures shall be employed by the project applicant in order to protect individual valley oak trees remaining on the site from direct and indirect impacts during project construction, other than the 13 valley oaks that are planned for removal: • Adhere to the General Tree Preservation Guidelines and Pruning Standards as outlined in the Tree Inventory for the Valley Oaks Subdivision (Horticultural Associates, 2006). • Establish a Tree Protection Zone (TPZ) around any tree or group of trees to be retained. The TPZ is a circle equal to the largest radius of a protected tree's drip line plus one foot. The radius is measured from the trunk at the base of the tree to the greatest extent of the tree's drip line. Cutting of branches in order to reduce the size of the TPZ is prohibited. • Demarcate the TPZ of any protected trees using orange construction fencing that shall remain in place for the duration of construction activities on the project site. • Minimize construction related activities within the TPZ to those activities that can be done by hand. No heavy equipment or machinery shall be operated within the TPZ, in order to prevent soil compaction. Grading is prohibited within the TPZ. Trenching within the	

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		TPZ, when permitted, may be conducted only with hand tools or as otherwise directed by a certified arborist, in order to avoid root injury. • Roots less than 1 inch in diameter may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked, or damaged area. Major roots over 1 inch in diameter may not be cut without the approval of an arborist. Major roots 3 inches or greater encountered within the tree's drip line during excavation shall not be cut, and exposed roots must be kept moist and covered with earth as soon as possible. Severed roots 1 to 2 inches in diameter shall be cut cleanly, trimmed, treated with pruning compound, and covered as soon as possible. Support roots inside the drip line must be protected. • No construction materials, equipment, heavy machinery, oil, gas, or chemicals shall be stored within the TPZ of any protected tree. • No wires, unless needed to support a tree, or signs other than small tree identification signs shall be attached to any tree. • Lake County shall halt all construction activities within the TPZ of protected trees if these guidelines are violated. Construction shall not resume until the violations have been remedied to the	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		satisfaction of a certified arborist. Timing/Implementation: During project construction Enforcement/Monitoring: Lake County Community Development Department; Lake County Department of Public Works	
Impact 4.4.4 Implementation of the proposed project could result in disturbance and direct loss of habitat for the federally threatened valley elderberry longhorn beetle (VELB) (Desmocerus californicus dimorphus).	PS	**MM 4.4.4a** Under the USFWS conservation guidelines (USFWS, 1999), all elderberry shrubs and trees with a stem diameter of an inch or more at ground level impacted by a proposed project shall be transplanted to a conservation area. The planting area of each transplanted elderberry shall be at least 1,800 square feet. In addition, each elderberry transplanted or impacted shall also be replaced at a ratio ranging from 1:1 to 8:1 depending on the size of the transplanted elderberry, the initial habitat association, and the presence or absence of exit holes. Because all of the elderberry trees within the project site are located in upland habitat, riparian mitigation ratios are not applicable (LSA, 2008). According to LSA Associates, the proposed mitigation area for the Valley Oaks project totals approximately 16.2 acres and shall be located along the proposed relocated and restored Coyote Creek riparian corridors, permanently protected and managed under conservation easements. These protected riparian corridors shall contain the 4.2 acres of designated VELB conservation areas. The value of the relocated elderberries as valley longhorn beetle habitat would be greatly	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		enhanced because they shall be located in restored riparian woodland with a diverse association of other native plant species. In addition, their value to other wildlife species would be increased by their association with other native plants in a riparian environment (LSA, 2008). Timing/Implementation: During construction activities Enforcement/Monitoring: Lake County Community Development Department **MM 4.4.4b** Transplanting and trimming of elderberry shrubs shall be subject to the following minimization measures: a. A qualified biological monitor shall be on-site for the duration of the transplanting of the elderberry plant to ensure that no unauthorized take of VELB occurs. If unauthorized take occurs, the monitor shall have the authority to stop work until corrective measures have been completed. The monitor shall immediately report any unauthorized take of VELB or its habitat to the USFWS. b. The affected elderberry plants shall be transplanted during the non-growing season (November through the first two weeks in February), when plants are dormant. This would reduce shock to the plants and increase transplantation success. c. The plants shall be cut back 3 to 6 feet from the ground or to 50% of its height	

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		(whichever is taller) by removing branches and stems above this height. The trunks and all stems measuring 1.0 inch or greater in diameter at ground level shall be replanted. Any leaves remaining on the plants shall be removed. d. Holes of adequate size to receive the transplants shall be excavated in the conservation areas. e. Plants shall be excavated with a Vermeer spade, backhoe, front-end loader, or other suitable equipment, with as much of the root ball removed as possible, and immediately replanted in the conservation area. The plants shall be moved by their root balls only, with the root balls secured by wire and wrapped with burlap. The burlap shall be dampened with water, as necessary, to keep the root balls wet. Care shall be taken to ensure that soil is not dislodged from the roots of the transplant. If the sites receiving the transplant do not have adequate soil moisture, the soil shall be pre-wetted a day or two before transplantation. To increase the likelihood of survival, the plants shall be excavated from their current locations and moved to the conservation area on the same day. f. The root balls shall be transplanted so that the tops are level with the existing	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		ground. The soil shall be sufficiently compacted to prevent settlement. Five additional elderberry plantings (cuttings or seedlings) and up to five associated native species plantings shall also be planted within each 1,800 square foot area. The transplants and each new planting shall have their own watering basins measuring at least 3 feet in diameter. Watering basins shall have a continuous berm measuring approximately 8 inches wide at the base and 6 inches high. g. No fertilizers or supplements shall be used when watering the plantings, nor shall the stem tips be painted with pruning substances, as the effects of these compounds on VELB are unknown. h. The transplants shall be monitored daily during the first two weeks after transplantation to ascertain whether additional watering is necessary. If the soil is sandy and well drained, the plants may require watering weekly or twice monthly. If the soil is clayey and poorly drained, it may not be necessary to water after the initial saturation. Most plants would require watering through the first 1 to 2 dry seasons following planting. This shall be accomplished through use of a temporary drip irrigation system. Timing/Implementation: During construction activities and project operation	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Enforcement/Monitoring: Lake County Community Development Department **MM 4.4.4c** A mix of native plants typically associated with elderberry plants in healthy riparian communities shall be used (e.g., *Populus fremontii*, Fremont cottonwood; *Salix* spp., willow; *Acer macrophyllum*, big leaf maple; valley oak; *Fraxinus latifolia*, Oregon ash; *Rosa californica*, California rose; *Rubus californica*, California blackberry; *Rubus parviflorus*, thimbleberry). Native plantings shall consist of riparian-associated tree and shrub species obtained from local stock in the planting ratios included in the proposed *Valley Elderberry Longhorn Beetle Assessment and Mitigation Plan*. Native plantings shall be monitored with the same survival criteria used for elderberry plantings. If feasible, the conservation areas shall also be planted or seeded with native herbaceous species to discourage the establishment of unwanted non-native weedy species. Timing/Implementation: During construction activities Enforcement/Monitoring: Lake County Community Development Department **MM 4.4.4d** The conservation easement lands and associated VELB conservation areas shall be protected as native riparian habitat. The conservation easement lands may be transferred to a resource agency or appropriate private organization for long term management. A map and written details identifying the specific VELB conservation	

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		areas shall be submitted to the USFWS, which must approve the conservation area prior to implementation of the conservation program. In addition, a true, recorded copy of the deed transfer, conservation easement, or deed restriction protecting the conservation area in perpetuity shall be provided to the USFWS before project implementation. a. The project applicant shall ensure that all necessary funding is provided for completion of the mitigation, monitoring, and reporting measures. Long-term management and monitoring of the conservation easement lands shall be funded through a permanent funding mechanism such as homeowner association (HOA) fees, Geological Hazard Abatement District (GHAD) taxes, or Landscape and Lighting District taxes. The project applicant shall fund an endowment adequate to pay for management and monitoring costs until such time as the permanent funding source is established. b. The conservation easement lands shall be subject to the following management guidelines: **Weed control:** Weeds and other non-native plants shall be removed at least once a year or at the discretion of the USFWS. Mechanical techniques shall be used unless the USFWS approves the use of herbicides.	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Pesticide and Toxicant Control: Measures shall be taken to ensure that no pesticides enter the VELB conservation areas. No spraying shall be allowed within 100 feet of the area. **Litter Control:** No dumping of trash or other material shall be allowed. Any trash or other foreign material deposited in the conservation area shall be removed within 10 working days of discovery. **Fencing:** A 3- to 4- foot tall fence shall be erected around the VELB conservation areas to prevent people and dogs from trespassing into the area. **Signs:** Prominent signs shall be placed and maintained in perpetuity at the conservation areas, unless otherwise stipulated by the USFWS. The signs shall note that the sites are habitat for the federally threatened VELB and, if appropriate, shall include information on the beetle's natural history and ecology. Signs shall be submitted to the USFWS for approval, and shall be repaired or replaced within 10 working days if they are found to be damaged or destroyed. **Allowable/Prohibited Uses:** Use of the VELB conservation area shall be restricted to monitoring and maintenance activities conducted by USFWS approved biologists and maintenance personnel. No people or dogs shall be allowed	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		inside the VELB conservation area.	
		MM 4.4.4e The materials and methods to be used in monitoring VELB habitat shall be submitted to the USFWS for approval before the program is implemented. Any required federal permits shall be obtained prior to the initiation of field studies. The population of VELB, the general condition of the conservation areas, and the condition of the conservation plantings within the conservation area shall be monitored over a 5-year period as per the following guidelines: 1. Surveys for the presence of VELB shall be conducted by a qualified biologist at least twice a year between February 14 and June 30, and shall include: a. The number of beetles observed (if any), their condition, behavior, and precise locations. Beetles shall be counted visually only (i.e., no mark-recapture or other methods involving capture shall be used). b. A census of beetle exit holes in elderberry stems, noting their precise locations and estimated ages. c. An evaluation of the elderberry plants and associated native plants in the conservation area, including the number of plants, their size, and their condition. d. An evaluation of the adequacy of the fencing, signs, and weed control	

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		efforts in the conservation area. e. A general assessment of the habitat, including any real or potential threats to the beetle and its host plants, such as erosion, fire, excessive grazing, off-road vehicle use, vandalism, excessive weed growth, etc. 2. A written monitoring report shall be prepared by a qualified biologist and submitted to the USFWS at the end of each monitoring year (i.e., by December 31). The report shall address the status and progress of the transplanted and newly planted elderberry plants and associated native plants, as well as any failings of the conservation plan and the steps taken to correct them. Observations of beetles or fresh exit holes shall be noted. Photographs of the conservation area shall be included as appendices to the report. Survival rate, condition (using an appropriate ranking system), and size of the conservation plantings shall be analyzed and summarized in the report. Real and likely future threats shall be addressed, along with suggested remedies and preventive measures (e.g., limiting public access, more frequent removal of invasive non-native vegetation). A copy of each monitoring report, along with photographs, correspondence, and all	

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		other pertinent material, shall be deposited at the California Academy of Sciences by December 31 of the monitoring year. A copy of the receipt issued from the Academy library acknowledging receipt of the material or library catalog number shall be submitted to the USFWS. 3. Biologists and law enforcement personnel from the USFWS shall be given complete access to the project site and conservation area to monitor transplanting activities and to monitor the VELB and its habitat in perpetuity. 4. A minimum survival rate of at least 60% of the elderberry plants and associated native plants shall be maintained throughout the 10-year monitoring period. If survival drops below the 60% threshold, the project applicant shall replace failed plantings within 1 year of discovery. Timing/Implementation: Prior to issuance of building permits, during, and after construction activities Enforcement/Monitoring: Lake County Planning Department and the Lake County Department of Public Works	
Impact 4.4.5 Implementation of the proposed project could result in releases of sediment and contaminants that could reach habitat occupied by aquatic and aquatic dependent species in the Putah Creek	PS	**MM 4.4.5** The following measures shall be employed in order to reduce impacts to downstream aquatic and aquatic-dependent species, including the foothill-yellow legged frog.	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
drainage basin.		• The control of off-site storm water flows shall provide for enhanced water quality through on-site retention and filtration systems so that sediment and other contaminants are removed from percolating water through settlement and filtration. • All development shall comply with conditions and requirements as established by the National Pollutant Discharge Elimination System (NPDES) General Construction Permit from Central Valley Regional Water Quality Control Board (CVRWQCB), including all conditions and requirements intended to preserve water quality. • The applicant shall adhere to the County's Storm Water Management Ordinance that describes the best management practices (BMPs) that shall be employed to prevent loosened soils, petrochemicals, pesticides, herbicides, and other contaminants carried by stormwater runoff from entering local streams and other water bodies. Timing/Implementation: Prior to issuance of grading or building permits Enforcement/Monitoring: Lake County Community Development Department; Lake County Department of Public Works	

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
Impact 4.4.6	Implementation of the proposed project could result in disturbance and direct loss of habitat for the northwestern pond turtle, a California Species of Concern.	PS	MM 4.4.6	No more than two weeks prior to the onset of construction or grading activities within 100 feet of aquatic habitat, a qualified biologist will survey the aquatic habitat and the 100 foot buffer surrounding the habitat within the impact area of the project for northwestern pond turtles and their nests. Preconstruction surveys in the 100 foot buffer habitat should be surveyed each morning prior to construction activities. In the event that a turtle is found during construction activities, construction activities shall stop until a qualified biologist, under consultation with CDFG, moves the turtle to a safe location outside of the construction zone. A qualified biologist shall brief all public works personnel, contractors, on-site construction workers, and others involved in the actual construction of the proposed project with educational and identification information regarding the protection and avoidance of the northwestern pond turtle. All observations of northwestern pond turtles and turtle nesting sites within the project area shall be reported to the Lake County Community Development Department and to CDFG. Timing/Implementation: Prior to and during construction Enforcement/Monitoring: Lake County Community Development Department; Lake	LTS

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
				County Public Works Department	
Impact 4.4.7	Implementation of the proposed project could adversely affect special-status bird species, nesting raptors, and migratory birds through disturbance during the breeding and nesting season. These species are provided varying levels of protection under federal and state wildlife laws.	PS	MM 4.4.7	The applicant shall retain a qualified biologist to conduct a focused survey for active nests of raptors and migratory birds. The surveyor shall inspect all trees and snags in the project footprint and within a 150-foot radius for raptors and other bird nests. Surveys shall be conducted no more than 14 days prior to ground disturbance or tree removal during the early part of the breeding season (March 1 through May 31) and no more than 30 days prior to ground disturbance or tree removal activities during the late part of the breeding season (June 1 through September 15). If an active nest is located during surveys, the U.S. Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Game (CDFG) shall be notified regarding the status of the nest(s). Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest(s) until it is abandoned or a qualified biologist deems disturbance potential to be minimal (in consultation with USFWS and/or CDFG). Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 150 feet around the nest) or alteration of the construction schedule. Buffers shall be indicated on maps provided to the applicant's project manager and shall be marked in the field using stakes and flagging at all access points to the buffer.	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Buffers shall remain in effect until the nest is no longer active, as determined by a biologist with demonstrated raptor experience. Buffer distances may be reduced only in consultation with CDFG (and USFWS for buffers protecting eagle nests). To the extent that is feasible, the project applicant shall avoid removing trees during the nesting season all together (March 1 through September 1). Timing/Implementation: Prior to any construction activities Enforcement/Monitoring: Lake County Community Development Department	
Impact 4.4.8 Implementation of the proposed project could adversely affect special-status bat species, including the removal of habitat potentially used for roosting. Removal of an important day or maternity roost used by a special-status bat species would have a substantial adverse effect on local populations of the species.	PS	**MM 4.4.8** To ensure that there will be no adverse impacts to roosting special-status bat species, a survey shall be conducted by a qualified biologist 30 days prior to the removal of any trees and/or buildings. If no bat roosts are detected, then no further action is required if the trees and/or buildings are removed prior to the next breeding season (generally May through September). If tree and/or removal is delayed until the next breeding season, then an additional pre-construction survey shall be conducted 30 days prior to removal of any trees and/or buildings to ensure that a new colony has not established itself. If bats are found roosting within the project site, then the following mitigation will be implemented to reduce the potential disturbance: While unlikely, if a female or maternity colony of bats is found within the project area, and the	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		project can be constructed without the elimination or disturbance of the roosting colony (e.g., if the colony roosts in a large tree not planned for removal), a qualified biologist shall determine what physical and time-limited buffer zones shall be employed to ensure the continued success of the colony. Such buffer zones may include a construction-free barrier of 200 feet from the roost and/or the timing of the construction activities outside of the maternity roost season (after July 31 and before March 1). If an active nursery roost is known to occur within the project site and the project cannot be conducted outside of the maternity roosting season, consultation shall be initiated with CDFG to determine appropriate exclusionary or removal methods. The bats shall be excluded from the roosting site after July 31 and before March 1 to prevent the formation of maternity colonies. Non-breeding shall be safely evicted, under the direction of a qualified biologist. Timing/Implementation: Prior to issuance of building permits and during and immediately after construction activities Enforcement/Monitoring: Lake County Community Development Department	
Impact 4.4.9 Implementation of the proposed project could result in direct and indirect impacts to federally protected wetlands.	PS	**MM 4.4.9** The following measures shall be employed in order to reduce impacts to federally protected wetlands preceding and following development of the Valley Oaks project: • A detailed creek and wetland restoration plan shall be prepared by a person or	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		firm experienced in wetland restoration, submitted for review and approval by state and federal agencies, and implemented as part of the U.S. Army Corps of Engineers, Central Valley Regional Water Quality Control Board, and California Department of Fish and Game permit processes. The restoration plan shall include details on programs to create or rehabilitate wetlands, a monitoring program, criteria to determine success of wetland creation and/or rehabilitation, and alternative plans should the wetlands fail to meet the success criteria. Implementation of all mitigation shall result in a net increase in seasonal and riparian wetland acreage within the project site, and compensate for in-kind loss of wetland functions and values. • Riparian trees shall be retained on-site wherever possible. • Wetlands and other waters shall be protected from disturbance during project construction by 50-foot buffer zones. Each zone shall begin from the outer bank edge of the seasonal drainages. Wetlands shall be marked with orange construction barrier fencing or stakes and flags. Fencing or other barriers shall remain in place until all construction and restoration work that involves heavy equipment is complete.	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		• Buffer zones shall be demarcated in the field by a qualified environmental monitor determined by the County, and all construction activities that must occur within the buffer zone shall be supervised by the environmental monitor. The monitor shall also verify that barrier fencing and flagging are properly located and installed. The monitor shall have the authority to halt all construction activities in the vicinity of wetlands if these guidelines are violated. • All activities that damage or degrade wetland hydrology or vegetation such as moving or placement of vehicles, equipment, appliances, or refuse shall be avoided. • Use of pesticides shall not be permitted within 100 feet of wetland areas. Fertilizers in locations upslope from wetlands, the floodplain, and Coyote Creek shall not be permitted within 100 feet of those areas. • Chemicals, including household cleaning agents, detergents, motor oil, and other vehicle fluids shall not be placed in wetlands or into storm drains which ultimately feed into wetlands, the floodplain, and Coyote and Putah Creek. • Public access to the wetlands, riparian areas, floodplain, and Coyote, Gallagher, and Putah Creeks shall be allowed only	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU =Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
			for passive recreational activities, save for the VELB conservation area which would be restricted to monitoring personnel only. • All linear parks and open space areas shall be set up so that animal feces collection stations are appropriately maintained for perpetuity. Implementation/Timing: Prior to issuance of building permits, during construction activities and project operation Enforcement/Monitoring: Lake County Community Development Department		
Impact 4.4.10	No wildlife movement corridors have been identified within the proposed project area. However, stream corridors are thought to be used by wildlife as movement corridors, and Coyote Creek may serve this function to some degree.	LTS	None required.		LTS
Impact 4.4.11	Implementation of the proposed project, in combination with existing, recently approved, proposed, and reasonably foreseeable development, would contribute to cumulative impacts to wildlife habitat, riparian habitat, and special-status species.	LTCC	None required.		LTCC
4.5 Cultural and Paleontological Resources					
Impact 4.5.1	Implementation of the proposed project could potentially destroy or damage undiscovered prehistoric and historical cultural resources in the project site.	PS	**MM 4.5.1**	An inadvertent-discovery plan shall be prepared before construction begins and shall establish a set of protocols to identify, evaluate, and protect cultural resources accidentally discovered during any project-	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		related activities. This plan shall include the requirements that construction activities be halted within 100 feet of the find and that the County be notified regarding the discovery. A qualified archaeologist approved by the County shall be contracted to determine whether the resource is significant and to determine appropriate mitigation. Any artifacts uncovered shall be recorded and removed to a location to be determined by the archaeologist. If human remains are discovered, all work must stop in the immediate vicinity of the find and the County Coroner must be notified, according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed. The requirements of the inadvertent-discovery plan shall be noted on all construction plans. Timing/Implementation: As a condition of project approval, and implemented during project construction. Monitoring/Enforcement: Lake County Planning Department.	
Impact 4.5.2 Implementation of the proposed project could potentially destroy or damage undiscovered paleontological resources.	PS	**MM 4.5.2** Should any potentially unique paleontological resources (fossils) be encountered during development activities, work shall be halted immediately within 100 feet of the discovery, the Lake County Planning Department shall	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
			be immediately notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. Lake County and the project applicant shall consider the mitigation recommendations of the qualified paleontologist for any unanticipated discoveries. Lake County and the project applicant shall consult and agree upon implementation of a measure or measures that Lake County and the project applicant deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project proponent shall be required to implement any mitigation necessary for the protection of paleontological resources. Timing/Implementation: As a condition of project approval, and implemented prior to project construction. Monitoring/Enforcement: Lake County Planning Department	
Impact 4.5.3	Implementation of the proposed project, along with existing, recently approved and proposed projects, as well as any foreseeable development in the project vicinity, could result in cumulative impacts on cultural resources in the region.	LTCC	None required.	LTCC
Impact 4.5.4	Implementation of the proposed project, along with existing, recently approved and proposed projects, as well as any foreseeable development in the project vicinity, could potentially destroy or damage undiscovered paleontological	LTCC	None required.	LTCC

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
resources in the project site.					
4.6 Geology and Soils					
Impact 4.6.1	Implementation of the proposed project may expose people or structures to ground shaking and seismic hazards as a result of fault activity.	LTS	None required.		LTS
Impact 4.6.2	Implementation of the proposed project may place structures and future residents within areas of geologic instability.	PS	**MM 4.6.2a**	All areas with existing structures shall be stripped of surface vegetation, old fills, debris, and underground utilities. All existing underground utilities shall be removed or rerouted where they exist outside an imaginary plane sloped two horizontal to one vertical (2H:1V) from the outside bottom edge of the nearest foundation element. Voids left from the removal of utilities and other obstructions shall be replaced with compacted engineered fill under the observation of the project geotechnical engineer.	LTS
			Timing/Implementation:	Prior to approval of grading and improvement plans..	
			Enforcement/Monitoring:	Lake County Public Works Department.	
			MM 4.6.2b	All structures shall be set back a minimum of 20 feet from the top of the realigned creek bank.	
			Timing/Implementation:	Prior to the issuance of building permits.	
			Enforcement/Monitoring:	Lake County Public Works Department.	
			MM 4.6.2c	The top 18 to 36 inches of surface soils and	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		and any existing artificial fill shall be removed to their full depth within the proposed building pads, if spread footing and interior concrete slab-on-grade floors are to be used. A layer of visqueen at least 10 ml thick shall be used under all concrete slab-on-grade. The actual depth of the subexcavation shall be determined by a geotechnical engineer in the field during construction. Timing/Implementation: Prior to the issuance of building permits. Enforcement/Monitoring: Lake County Public Works Department. **MM 4.6.2d** All subgrades scheduled to receive fill shall be scarified to minimum depth of eight inches, moisture conditioned to a moisture content within 2% of optimum moisture content, and recompacted to at least 90% of relative maximum dry density as determined by ASTM D-1557 laboratory test procedures. Timing/Implementation: Prior to the issuance of building permits. Enforcement/Monitoring: Lake County Public Works Department. **MM 4.6.2e** All cut and fill slopes shall be graded to inclinations no steeper than two horizontal to one vertical (2H:1V). Any steeper slopes shall be retained and covered with erosion matting or seeded for erosion control. Timing/Implementation: Prior to the issuance of building permits. Enforcement/Monitoring: Lake County Public Works	

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Department. **MM 4.6.2f** All grading, earthwork, foundations, slabs-on-grade, asphaltic concrete pavements, utility trenches, and drainage improvements shall be implemented in accordance with the requirements set forth in the Geotechnical Investigation prepared for the project by PJC & Associates, Inc. (2004). Standard construction pumps shall be used to pump groundwater from temporary utility trenches used during grading. Timing/Implementation: Prior to the issuance of building permits. Enforcement/Monitoring: Lake County Public Works Department. **MM 4.6.2g** If expansive soils are encountered in the interior slab areas proposed for residential development, the soil shall be removed within 30 inches of the pad sub-grade elevation and no expansive soils shall be used as structural engineered fill. Over excavation to remove the weak soils and any fill shall extend 5 feet beyond the perimeter wall foundations. Timing/Implementation: Prior to the issuance of building permits. Enforcement/Monitoring: Lake County Public Works Department.	
Impact 4.6.3 Implementation of the proposed project would result in construction, excavation, and grading activities that could result in soil erosion and the	LTS	None required.	LTS

	Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
	loss of topsoil.			
Impact 4.6.4	Implementation of the proposed project in combination with existing, recently approved, proposed, and reasonably foreseeable development in the region, would not contribute to cumulative geologic and soil impacts, as the impacts would be site-specific and not additive in character.	LTCC	None required.	LTCC
4.7 Hazards and Human Health				
Impact 4.7.1	Implementation of the proposed project would require the transportation of limited amounts of hazardous materials, including construction solvents, paints, adhesives, and other construction-related materials.	LTS	None required.	LTS
Impact 4.7.2	Implementation of the proposed project would include the use, disposal, and potential accidental release of limited amounts of hazardous materials during the construction and operational phases, which may result in adverse human health and safety impacts.	LTS	None required.	LTS
Impact 4.7.3	Implementation of the proposed project may expose people to hazardous containing materials and/or soil contamination.	PS	**MM 4.7.3a** All debris identified in the Phase I (i.e., abandoned automobiles, tires, empty containers, paint and roofing materials) shall be removed and disposed of in accordance with Department of Environmental Health rules and regulations. Timing/Implementation: Prior to issuance of building permits. Enforcement/Monitoring: Lake County Department of Environmental Health. **MM 4.7.3b** If any underground storage tanks (UST) are	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
				Additionally, the surrounding area should be checked for any smells of propane, varying propane levels for any possible leaks, or notice any dead vegetation killed by leaking gas. Furthermore, NFPA 58 and OSHA 29 CFR 1910.110, DOT 49 CFR 172.700 require that all persons handling liquid propane gases be specially trained in proper handling and operating procedures. Therefore, only qualified propane supplier employees should transport, operate, service, and/or install propane systems and containers. Timing/Implementation: Incorporated into the CC&Rs for the proposed project and implemented through maintenance reports every time the large tanks are serviced or filled. Enforcement/Monitoring: Valley Oaks Homeowners Association (HOA) and propane supplier	
Impact 4.7.6	Implementation of the proposed project, in addition to existing, recently approved, proposed, and other reasonably foreseeable development in the project vicinity, may result in cumulative hazardous materials and human health risk impacts.	LTCC	None required.		LTCC
4.8 Hydrology and Water Quality					
Impact 4.8.1	Implementation of the proposed project would increase storm water runoff rates and volumes with the introduction of impervious surfaces to the project site.	PS	**MM 4.8.1**	Development of the project shall incorporate landscaped linear park channels that provide linear storage and attenuation to effectively mitigate against downstream impacts of	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		increased runoff rates produced within the site development. Timing/Implementation: Requirements to be established prior to approval of site grading and drainage plans. Enforcement/Monitoring: Lake County Community Development and Public Works Departments.	
Impact 4.8.2 Implementation of the proposed project would alter existing surface water drainage patterns by rerouting the main Coyote Creek channel through the project site and discharging primary Coyote Creek flows to Putah Creek at a new location.	PS	**MM 4.8.2a** The Upper Coyote Creek Bypass linear park channel shall be required to have capacity to contain the regulatory (100-year) floodplain and floodway for Coyote Creek, plus a minimum of 6 inches of freeboard in conformance with County Hydrology Design Standards for the minimum freeboard in effect per County Hydrology Design Standards at the time of development). New drainage structures proposed at street crossings of the Upper Coyote Creek Bypass (Pin Oak Drive, Valley Oak Road, Arabian Lane, and Hartmann Road) shall be required to pass a 100-year event discharge. The satisfaction of these requirements shall be supported by detailed hydrologic and hydraulic analyses prepared by a professional engineer registered in the State of California. Timing/Implementation: Prior to approval of tentative map (drainage report) and prior to approval of site grading and drainage plans (refined report that incorporates applicable components of detailed design).	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		Enforcement/Monitoring: Lake County Community Development Department; Lake County Public Works Department **MM 4.8.2b** The project applicant shall secure a Conditional Letter of Map Revision (CLOMR) from FEMA indicating their willingness to revise official FIRM panels to reflect confinement of the regulatory floodplain and floodway for Coyote Creek to the Upper Coyote Creek Bypass linear park through the project area. Timing/Implementation: Prior to issuance of a grading permit and prior to approval of the Final Subdivision Map. Enforcement/Monitoring: Lake County Community Development Department; Lake County Public Works Department **MM 4.8.2c** The project applicant shall secure a Letter of Map Revision (LOMR) from FEMA indicating that FEMA has revised the official FIRM panels to reflect confinement of the regulatory floodplain and floodway for Coyote Creek to the Upper Coyote Creek Bypass linear park through the project area based on completion of site improvements, in conformance with the drainage plan. Timing/Implementation: Prior to issuance of occupancy permits. Enforcement/Monitoring: Lake County Community Development Department; Lake County Public Works Department **MM 4.8.2d** The project applicant shall secure permission	

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		(including the acquisition of a drainage easement, encroachment permit, or other legal provision, as required) from the State of California to discharge the proposed Upper Coyote Creek Bypass linear park channel to their lands at Putah Creek at a new location. Timing/Implementation: Prior to issuance of a grading permit. Enforcement/Monitoring: Lake County Community Development Department; Lake County Public Works Department **MM 4.8.2e** As part of completing the drainage plan for the project, the applicant's engineer shall complete a detailed hydraulic study and determine if work would be required within the right-of-way for SR 29 to facilitate the effective interception of the entire 100-year discharge entering the northwest corner of the project site from Coyote Creek for delivery into the proposed Upper Coyote Creek Bypass linear park channel. If drainage improvements are determined to be required within state highway right-of-way, the project applicant would be required to obtain an encroachment permit from the California Department of Transportation (Caltrans). Timing/Implementation: Prior to issuance of a grading permit. Enforcement/Monitoring: Lake County Community Development Department; Lake County Public Works Department; Caltrans **MM 4.8.2f** The final map for the subdivision shall depict the limits of the current regulatory floodplain	

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		and floodway represented on effective FEMA FIRM panels, as well as the limits of the regulatory floodplain and floodway that would exist after completion of site grading and drainage improvements. Timing/Implementation: Prior to approval of the Final Subdivision Map. Enforcement/Monitoring: Lake County Community Development Department; Lake County Public Works Department	
Impact 4.8.3 Implementation of the proposed project would involve construction-related vegetation removal, excavation, grading, and other construction activities involving slope and soil disturbance that may impact water quality by increasing the potential for erosion and sedimentation. Slope and soil disturbance associated with construction activities may cause accelerated soil erosion and sedimentation and/or the release of pollutants to downstream properties and facilities.	PS	**MM 4.8.3** For construction activities that disturb an acre or more of land, the project applicant shall prepare a site and construction-phase specific Storm Water Pollution Prevention Plan (SWPPP) in conformance with the California Stormwater Quality Association Construction Handbook (Construction Handbook) and in compliance with the requirements of the State General Construction Activity Storm Water Permit (CGP). The Construction Handbook provides general guidance for selecting and implementing best management practices (BMPs) that eliminate or reduce the discharge of pollutants from construction sites to waters of the state and for developing and implementing stormwater pollution prevention plans that document the selection and implementation of BMPs for a particular construction project. The site-specific SWPPP must describe the site, including a description of the erosion and sediment controls proposed (BMPs for water quality), the means of waste disposal, implementation of	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		approved local plans, control measures of post-construction sediment and erosion, maintenance responsibilities, and non-stormwater management controls. The applicant shall submit the SWPPP to the County and file a Notice of Intent with the Central Valley Regional Water Quality Control Board (CVRWQCB). The applicant(s) shall require all construction contractors to retain a copy of the approved SWPPP on the construction site. BMPs identified in the SWPPP shall be utilized in all project site development activities. Implementation of appropriate, effective water quality controls would ensure that stormwater discharges that would result with implementation of the project are in compliance with all current requirements of the RWQCB. The project construction activities would also be required to comply with the County's standards for erosion control during construction. Timing/Implementation: Prior to and during all phases of project construction. Enforcement/Monitoring: Lake County Community Development Department; Lake County Public Works Department	
Impact 4.8.4 Implementation of the proposed project would introduce sediments and constituent pollutants typically associated with urban development into stormwater runoff. These pollutants would have the potential of degrading downstream	PS	**MM 4.8.4** Development of the project shall incorporate linear park channels that would provide for linear storage, velocity reduction, and water quality treatment prior to site runoff discharging to downstream creeks. As a part	LTS

	Impact	Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
	stormwater quality.			of the design of linear park channels, the applicant shall demonstrate that effective settlement of sediments and water quality treatment would be provided during low flow and high flow events. A plan shall also be provided to facilitate the monitoring and possible removal of accumulated sediments in the event that any toxic accumulations of pollutant constituents are determined to be present in the drainage facilities. Timing/Implementation: Prior to approval of site grading and drainage plans. Enforcement/Monitoring: Lake County Community Development Department; Lake County Public Works Department	
Impact 4.8.5	Implementation of the proposed project would result in greater demand for groundwater extractions from the Coyote Valley Groundwater Basin. The basin is not in overdraft condition and would have sufficient supplies to serve the proposed project and other anticipated development within the District.	LTS	None required.		LTS
Impact 4.8.6	Implementation of the proposed project could result in activities that would infiltrate the groundwater and impact the quality of the groundwater.	PS	MM 4.8.6	Prior to the design of linear park channels that would serve the project site, soil borings shall be taken at representative locations within or adjacent to the channel template(s) to analyze the subsurface soils that are present and the elevation of the subsurface water table. If these soil borings identify shallow groundwater within 3 feet of the proposed bottom elevation of the linear park channel at any location, a liner (natural or manufactured)	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		shall be incorporated into the design of applicable segments of the linear park channel(s), subject to County review and approval. The design of the liner, if applicable, shall be incorporated onto the site improvement plans and prepared by a professional engineer registered in the State of California. If applicable, the requirement for a liner may be waived by the County if a geotechnical study prepared by a professional engineer registered in the State of California indicates that a lesser separation than 5 feet is acceptable. Timing/Implementation: Prior to approval of site grading and drainage plans. Enforcement/Monitoring: Lake County Community Development Department; Lake County Public Works Department	
Impact 4.8.7 Implementation of the proposed project could expose people, structures, or other facilities to injury or damage from flood hazards.	PS	MM 4.8.7 The project development shall incorporate appropriate measures to capture and convey storm runoff entering the project from the local watershed serving the Hidden Valley Lake Subdivision to the north through the development for discharge into the proposed Lower Coyote Creek Bypass linear park channel. The method and capacity of conveyance of this flow to the Lower Coyote Creek Bypass linear park channel shall meet applicable County standards. The Lower Coyote Creek Bypass Channel shall have a minimum capacity to convey the 10-year discharge. Excess flow shall also be conveyed in adjacent areas and streets. Finished floor	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		elevations for proposed residences shall be elevated above the 100-year water surface elevations in conformance with County standards. The effectiveness of these measures shall be demonstrated by detailed hydrologic and hydraulic evaluations performed by a professional engineer registered in the State of California. Timing/Implementation: Prior to approval of tentative map (drainage report) and prior to approval of site grading and drainage plans (refined report that incorporates applicable components of detailed design). Enforcement/Monitoring: Lake County Community Development Department; Lake County Public Works Department	
Impact 4.8.8 The project site is located just south and downstream of Hidden Valley Lake and Coyote Creek Dam and is entirely located within the published dam failure inundation area for this facility.	PS	MM 4.8.8 Since this project is located within the dam failure inundation area for Coyote Creek Dam, and even though the potential for a dam failure at this location is considered to be beyond the realm of reasonable foreseeability, the Director of the County Office of Emergency Services shall review the project development as it relates to evacuation plans on file for the area as required per County standards. If the Director of the County Office of Emergency Services imposes any special requirements as a result of this review, these special requirements shall be followed, as a condition of site development. Timing/Implementation: Prior to approval of site grading and	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
			drainage plans. Enforcement/Monitoring: Lake County Office of Emergency Services.	
Impact 4.8.9	Implementation of the proposed project, in conjunction with existing, recently approved, proposed, and reasonably foreseeable development in the area, would contribute to cumulative effects of stormwater runoff, the alteration of existing drainage patterns, surface water and groundwater quality impacts, and flood hazards.	CC	None required.	LTCC
Impact 4.8.10	The proposed project, in addition to existing, approved, proposed, and other reasonably foreseeable development projects in the area, would result in greater demand for groundwater extractions from the CVGB. The basin is not in overdraft condition and would have sufficient supplies to serve planned future development within the cumulative setting.	LTCC	None required.	LTCC
4.9 Land Use				
Impact 4.9.1	Implementation of the proposed project could result in land use compatibility issues with the surrounding area.	LTS	None required.	LTS
Impact 4.9.2	Implementation of the proposed project could result in inconsistencies with the Lake County General Plan, Lake County Zoning Ordinance, or the Middletown Area Plan.	LTS	None required.	LTS
Impact 4.9.3	The proposed project, in combination with existing, recently approved, proposed, and reasonably foreseeable development in the area,	LTCC	None required.	LTCC

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

	Impact	Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
	could contribute to the conversion of rural and open space lands to urban uses within the county.				
4.10 Noise					
Impact 4.10.1	Implementation of the proposed project could result in increases in ambient noise levels resulting from construction activities.	PS	**MM 4.10.1**	The following measures shall be implemented to reduce construction-generated noise levels at nearby land uses: • Construction activities (excluding activities that would result in a safety concern to the public or construction workers) shall be limited to the hours between 7 A.M. and 7 P.M. every day, according to the County's General Performance Standards. • Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation. Timing/Implementation: During all construction activities. Enforcement/Monitoring: County of Lake Community Development Department	LTS
Impact 4.10.2	Implementation of the proposed project would result in increases to existing traffic noise levels on existing roadways, which would affect sensitive land uses.	PS	**MM 4.10.2a**	The County shall require that an acoustical assessment be performed prior to construction of the medium density residential site, the senior housing site, the congregate care facility, and any office building sites. Where the acoustical analyses determine that noise levels would exceed applicable County noise	LTS

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		standards of 45 dBA L_{dn} for interior noise, the County shall require the implementation of noise attenuation measures sufficient to achieve compliance with County noise standards at nearby noise-sensitive land uses. Such measures may include, but are not limited to, the incorporation of setbacks, sound barriers, berms, and/or equipment enclosures. Timing/Implementation: Prior to issuance of building permits, and included as a condition of approval of the Specific Plan of Development Enforcement/Monitoring: Lake County Planning Department **MM 4.10.2b** To achieve the desired acoustical performance for the single-family lots located near SR 29, sound barriers shall be constructed according to the specifications provided in the acoustical analysis performed by SSACS (2007) (see **Appendix H**). Timing/Implementation: Prior to issuance of building permits, and included as a condition of approval of the Specific Plan of Development Enforcement/Monitoring: Lake County Planning Department	
Impact 4.10.3 Implementation of the proposed project could result in additional noise impacts generating from stationary sources such as residences and commercial buildings.	PS	**MM 4.10.3a** The following mitigation shall be implemented to reduce potential noise impacts associated with the proposed open space/park areas: • Use of open space/park areas shall be prohibited during the nighttime hours of 10 P.M. to 7 A.M. Signage designating	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
		hours of use shall be posted at primary entrances to open space/park areas. • Landscape maintenance activities for the proposed open space/park areas shall be permitted only between the hours of 7 A.M. and 8 P.M. Timing/Implementation: During project operation Enforcement/Monitoring: Lake County Planning Department **MM 4.10.3b** The County shall require that an acoustical assessment be performed prior to construction of the commercial sites. Where the acoustical analyses determine that stationary source noise levels would exceed applicable County noise standards of 45 dBA L_{eq} for interior noise, the County shall require the implementation of noise attenuation measures sufficient to achieve compliance with County noise standards at nearby noise-sensitive land uses. These measures include, but are not limited to, construction of sound barriers around delivery areas, limiting the scheduled hours for deliveries, and/or construction of sound barriers around HVAC equipment. Timing/Implementation: Prior to issuance of building permits, and included as a condition of approval of the Specific Plan of Development Enforcement/Monitoring: Lake County Planning Department	
Impact 4.10.4 Implementation of the proposed project could result in increased noise impacts from groundborne vibration.	LTS	None required.	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

	Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 4.10.5	Implementation of the proposed project, along with existing, recently approved, proposed, and reasonably foreseeable development in the area, would result in increases to cumulative traffic noise impacts.	CC	None available.	CC and SU
4.11 Population/Housing/Employment/Economics				
Impact 4.11.1	Implementation of the proposed project would induce population growth in the Hidden Valley Lake community through the building of new homes and businesses.	LTS	None required.	LTS
Impact 4.11.2	Implementation of the proposed project, in conjunction with existing, recently approved, proposed, and reasonably foreseeable development in the area, would induce population growth in the area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure).	LTCC	None required.	LTCC
Impact 4.11.3	Implementation of the proposed project may result in urban decay in the surrounding communities of Hidden Valley Lake, Middletown and Cobb.	LTS	None required.	LTS
Impact 4.11.4	Implementation of the proposed project, along with existing, recently approved, proposed, and reasonably foreseeable development in the county, could result in cumulative urban decay impacts.	LTCC	None required.	LTCC

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
4.12 Public Services			
Impact 4.12.1.1 Implementation of the proposed project would increase demand for fire and emergency services and may result in unacceptable levels of service for structure fires, wildfires, and medical emergencies.	PS	**MM 4.12.1.1** The project applicant shall require that adequate fire flows and sprinklers are installed in the commercial units, residential care facility, senior living units, and medium density residential units to the satisfaction of the SLCFPD. Timing/Implementation: Prior to issuance of certificates of occupancy. Enforcement/Monitoring: South Lake County Fire Protection District.	LTS
Impact 4.12.1.2 Implementation of the proposed project could result in inadequate emergency vehicle access.	PS	**MM 4.12.1.2** Prior to the approval of the final map or improvement plans, whichever comes first, the applicant shall work with SLCFPD on the design of the project's emergency access circulation system to comply with established standards and ensure acceptable response times. The applicant shall submit the final plans to SLCFPD for review and approval. Timing/Implementation: Prior to approval of improvement plans or final map, whichever occurs first. Enforcement/Monitoring: South Lake County Fire Protection District.	LTS
Impact 4.12.1.3 Implementation of the proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development, would increase the population within the SLCFPD service area, requiring additional fire and emergency medical services and related	LTCC	None required.	LTCC

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
facilities.			
Impact 4.12.2.1 Implementation of the proposed project would increase demand for law enforcement services and reduce the level of service currently being provided.	PS	**MM 4.12.2.1** The Public Facilities Financing Plan for the proposed Valley Oaks project shall demonstrate that there are sufficient sources of funding to provide adequate law enforcement personnel, equipment, and facilities required to maintain existing levels of service. Timing/Implementation: Prior to approval of the Valley Oaks Public Facilities Financing Plan Enforcement/Monitoring: Lake County Sheriff's Department; Lake County Community Development Department	LTS
Impact 4.12.2.2 The proposed project, in addition to existing, approved, proposed, and reasonably foreseeable development, would increase the population within the Lake County Sheriff's Department jurisdiction and surrounding areas and would require additional law enforcement services under cumulative conditions.	LTCC	None required.	LTCC
Impact 4.12.3.1 Implementation of the proposed project would increase student enrollment at MUSD schools.	LTS	None required.	LTS
Impact 4.12.3.2 The proposed project, in combination with existing, approved, proposed, and reasonably foreseeable development proposed within MUSD boundaries, would result in a cumulative increase in student enrollment at the MUSD's schools.	LTCC	None required.	LTCC
Impact 4.12.4.1 Implementation of the proposed project would increase the demand for additional recreational	LTS	None required.	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure		Resulting Level of Significance
	facilities.				
Impact 4.12.4.2	Implementation of the proposed project, along with existing, recently approved, proposed, and reasonably foreseeable development in the County would require additional park and recreation facilities under cumulative conditions.	LTCC	None required.		LTCC
4.13 Transportation and Circulation					
Impact 4.13.1	Implementation of the proposed project could result in unacceptable levels of service at study area intersections.	PS	**MM 4.13.1**	The project applicant shall pay their fair share of improvements, through the County's Transportation Impact Fee Program, to the SR 29/Spruce Road Extension–Arabian Lane intersection in order to reduce LOS levels to acceptable standards. The fair share will be determined by the County. The following recommended improvements should be made at this intersection. • Single left-turn lanes should be constructed on northbound and southbound SR 29 and westbound Arabian Lane approaches providing 75 feet of stacking northbound, 450 of stacking southbound, and 125 feet of stacking westbound. • The eastbound approach should include a right-turn lane with 50 feet of stacking space. • The northbound approach should include separate left-turn, through and right-turn lanes. • Protected left-turn phasing should be provided on the northbound and	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact		Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
			southbound SR 29 approaches and split phasing on the eastbound and westbound approaches. • Right-turn overlap phasing should be provided on the northbound, eastbound and westbound approaches. Timing/Implementation: During project construction Enforcement/Monitoring: Lake County Public Works Department	
Impact 4.13.2	Implementation of the proposed project could result in impacts to emergency access.	LTS	None required.	LTS
Impact 4.13.3	Implementation of the proposed project could result in conflicts with alternative transportation sources.	LTS	None required.	LTS
Impact 4.13.4	Implementation of the proposed project could result in hazards due to design features or incompatible uses.	LTS	None required.	LTS
Impact 4.13.5	Implementation of the proposed project includes construction of residential homes, underground utilities, roadway improvements and other construction related activities that may impede normal traffic flow.	LTS	None required.	LTS
Impact 4.13.6	Implementation of the proposed project, along with existing, recently approved, proposed and reasonably foreseeable development in the region, could result in cumulative level of service impacts.	LTCC	None required.	LTCC

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact

PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
4.14 Utilities and Service Systems			
Impact 4.14.1.1 Implementation of the proposed project would not require expansion of existing District water supply infrastructure but would result in the need for additional water distribution and storage facilities.	LTS	None Required.	LTS
Impact 4.14.1.2 The proposed project, in addition to other reasonably foreseeable development in the area, would result in increased demand for water supply from the District as well as new or expanded water distribution, storage, and treatment infrastructure.	LTCC	None Required.	LTCC
Impact 4.14.2.1 Implementation of the proposed project would increase demand for wastewater treatment.	LTS	None Required.	LTS
Impact 4.14.2.2 Implementation of the proposed project would increase wastewater flows and require the construction of wastewater conveyance infrastructure.	LTS	None Required.	LTS
Impact 4.14.2.3 Implementation of the proposed project, in combination with existing, recently approved, proposed, and reasonably foreseeable development in the area, could require additional wastewater treatment, conveyance, and disposal capacity to accommodate future growth within HVLCSD service area boundaries.	CC	None Available.	CC and SU
Impact 4.14.3.1 Implementation of the proposed project would generate additional solid waste to be disposed of by South Lake Refuse.	LTS	None Required.	LTS

LTS = Less Than Significant Impact
S = Significant Impact
CC = Cumulatively Considerable Impact
PS = Potentially Significant Impact
SU = Significant and Unavoidable Impact
LTCC = Less Than Cumulatively Considerable Impact

Impact	Level of Significance Without Mitigation	Mitigation Measure	Resulting Level of Significance
Impact 4.14.3.2 The proposed project, in addition to existing, recently approved, proposed, and reasonably foreseeable projects in the region, would generate solid waste that would require expanded collection and disposal services.	LTCC	None Required.	LTCC
Impact 4.14.4.1 Implementation of the proposed project would increase demand for electrical services.	LTS	None Required.	LTS
Impact 4.14.4.2 Implementation of the proposed project would require the extension of telephone and cable infrastructure to serve the proposed project.	LTS	None Required.	LTS
Impact 4.14.4.3 Implementation of the proposed project as well as existing, approved, proposed, and reasonably foreseeable development in the surrounding area would result in cumulative utility service impacts.	LTCC	None Required.	LTCC

3.0 PROJECT DESCRIPTION

The Valley Oaks Planned Development project is a mixed-use development that would involve the construction of residential, commercial, and open space/park uses on approximately 150 acres of land. This section has been prepared in compliance with CEQA Guidelines Section 15124, which details the requirements and contents of an EIR project description.

3.1 REGIONAL LOCATION

Lake County is located in the eastern portion of California, north of the central valley, and is bordered by Mendocino and Sonoma counties to the west, Napa County to the south, and Glenn and Colusa counties to the east (see **Figure 3.0-1**). The main regional access to the project site is provided via State Route 29 (SR 29), which travels in a north-south direction from SR 20 in Upper Lake County to Interstate 80 in Vallejo.

3.2 PROJECT LOCATION

The project site is located along SR 29 within the unincorporated community of Hidden Valley Lake, approximately 4 miles northeast of Middletown and the junction of SR 29 and SR 175, and approximately 12 miles southeast of Clear Lake (see **Figure 3.0-2**). Clear Lake is the largest natural freshwater lake completely within California, located at an elevation of 1,326 feet with more than 43,000 surface acres.

3.3 PROJECT SITE AND VICINITY

PROJECT SITE CHARACTERISTICS

The project site is approximately 150 acres in size and has historically been used as pasture land and commercial horse stables. The project site is mostly flat but is gently sloping from the northwest corner to the southern portion. The project site's elevation ranges between 975 feet and 1,000 feet above mean sea level. There are several existing structures, including one residence, stables, and supporting accessory buildings located at the southeastern portion of the site. The site's vegetation consists of native and non-native perennial grasses, several valley oaks of various sizes, and other native and non-native tree species. The project site also includes portions of Coyote Creek, which traverses the site from the northwestern corner to the eastern boundary, just north of Coyote Creek Elementary School, which is adjacent to the project site to the east.

SURROUNDING LAND USES

The existing Hidden Valley Lake Subdivision and other residential development is adjacent to the site to the north, pasture land and residences are to the east, Hartmann Road bounds the majority of the site to the south, and SR 29 makes up the site's western boundary. Creekside Oak Estates (formerly Hartmann Road Estates) is an approved, but currently vacant, residential community located adjacent to the project site, approximately 0.25 miles northeast of the intersection of SR 29 and Hartmann Road. Across SR 29 from the project site is a mix of uses: a few residences, barns, a church, and some mixed retail uses.

3.4 PROJECT OBJECTIVES

The following project objectives have been identified for the proposed project.

- To provide for:
  - A well-planned development consisting of ±380 detached single-family lots, a minimum of 6,000 square feet in size (inclusive of sidewalk easement and P.U.E.).
  - A community commercial "village" which provides a full range of goods and services to meet the needs of the residents of Middletown and the greater community of Lake County. A portion of the "village commercial" may include mixed use, i.e., residential over office/retail.
  - A medium density residential area having a density of up to ±15 units per acre (small lot and/or attached).
  - A multi-family residential parcel to be designed and developed for senior housing.
  - A residential care and/or assisted living facility.
  - Project and public open space.
- To permit design flexibility in the development of the site in order to be responsive to the unique physical characteristics of the site, achieve a mix of housing types and a range of commercial services, ensure compatibility with the character of the surrounding neighborhood, and provide public and private amenities within the boundaries of the project.
- To enhance the historic, natural feature of the site and create additional wildlife habitat.
- To address and reduce seasonal flooding including the off-site areas of Spy Glass and Fish Hook in Hidden Valley Lake.
- To establish assessments for both the residential and commercial components of the project in order to provide maintenance of the project roadways, maintenance of the proposed River Park along Hartmann Road and Putah Creek, and financial assistance to the local fire district.
- To provide employment and retail business, service, and professional office location opportunities.
- To provide recreational opportunities and alternative means of transportation by creating a linear park along Coyote Creek; pedestrian and bicycle linkages to the adjoining school; pedestrian/bicycle linkages to the existing and proposed trail system; and pedestrian and bicycle linkages to the proposed River Park, commercial development along Hartmann Road and, if desired by the residents, the Hidden Valley Lake subdivision.

3.5 PROJECT CHARACTERISTICS

The Valley Oaks project (proposed project) would include residential, commercial, parks, and open space development on the approximately 150-acre parcel. The residential component would feature 380 single-family dwelling units, 53 senior living/multi-family residential units, a residential care facility with 49 beds, and approximately 55 medium density residential units with

each of these project components clustered on smaller parcels. **Figure 3.0-3** illustrates the proposed site plan.

The commercial component would include five separate villages ranging from approximately 2.37 acres to 11.07 acres in size to include retail, theatre, and office/commercial land uses. The project would also include a linear park along Coyote Creek, a neighborhood park and other common areas and open space for active and passive recreation, and pedestrian and bicycle opportunities (J. Kapolchok + Associates, 2008).

The proposed project would result in the realignment of the existing Coyote Creek corridor via an upper and lower bypass channel. The purpose of the realignment is to avoid removal of mature oak trees and to avoid replacing the arch pipe under Hartmann Road near the confluence of Coyote Creek and Gallagher Creek. The realigned corridor would serve as a drainage channel to convey flows from the proposed project and the Hidden Valley Lake development immediately north of the site and would also serve as a linear on-site water feature. The creek would be realigned from the northwestern portion of the project site and would run diagonally, generally parallel with SR 29. The realigned channel would require a new crossing at Hartmann Road and ultimately discharge into Putah Creek, which is located south of the project site and Hartmann Road. The proposed channel would be a naturally lined channel with native bedrock and cobble lining underlain with geotextiles to minimize erosion and to provide a park-like, naturally vegetated corridor. The Coyote Creek Linear Park would be located on both sides of the realigned channel and provide a system of trails and recreational opportunities for the project's residents.

The project's land use characteristics, associated acreages, and dwelling units (if applicable) are listed below in **Table 3.0-1.**

TABLE 3.0-1
VALLEY OAKS PROPOSED LAND USES

Land Use	Acreage	Dwelling Units (if applicable)	Density (Dwelling Units per Acre)
Residential			
Single-Family Residential	50.46	380	7.5
Medium Density Residential	3.54	55	13.8
Senior Housing	2.53	53	19.4
Subtotal	**56.53**	**488**	***8.6**
Commercial			
Village I "Retail"	11.07	-	-
Village II "Theater"	3.25	-	-
Village III "Retail"	8.38	-	-
Village IV "Retail"	2.37	-	-
Village V "Office/Retail"	3.27	-	-
Residential Care Facility	2.02	-	
Subtotal	**30.36**	-	-

Land Use	Acreage	Dwelling Units (if applicable)	Density (Dwelling Units per Acre)
Parks and Open Space			
Parks, Open Space, and Landscaping	28.89	-	-
Subtotal	**28.89**	-	-
Infrastructure			
Roadways, Utility Easements, Rights of Way	34.09	-	-
Subtotal	**34.09**	-	-
Total	**150.1**	**488**	***8.6**

PROJECT PHASING

The Valley Oaks project is proposed as a phased development. The commercial or "PDC" component consists of six bulk parcels, five "Commercial Village" parcels, and one residential care facility parcel. The residential or "PDR" component consists of a medium density residential bulk parcel, a senior housing parcel, and 380 detached single-family lots. The PDR portion of the project is proposed to be developed in six separate phases. Phase I would include the development of lots 1-73. Lots 47-117, 138-140, and 303-320 would be developed during Phase II. Phase III would develop lots 118-137, 141-170, and 321-324. Phase IV would include the development of lots 201-250. Phase V would include the development of lots 171-200, 251-271, and 335-352, and Phase VI would include the development of lots 272-302 and lots 353-380. No start or finish date has been determined for any of the phases in the project, as construction would be dependent on market demand and absorption rate. The commercial parcels would also be developed dependent on market demand and absorption rate.

INFRASTRUCTURE

Circulation

The proposed project would include the construction of both on-site and off-site paved roadways, driveways, and supporting parking areas. Primary access to the site would be provided via SR 29, which makes up the project's western boundary. The main entrance to the project would be at a newly signalized intersection of the proposed Arabian Lane and SR 29, approximately ¼ mile north of Hartmann Road. Arabian Lane would serve as the major west-to-east roadway through the site and include a roundabout at its intersection with the realigned Hartmann Road. A secondary access would be provided via the realigned Hartmann Road segment, which would be realigned through the project site starting approximately 600 feet north of the existing intersection of SR 29 and Hartmann Road. Hartmann Road would serve as the major south-to-north roadway through the project area. The realigned Hartmann Road would be improved to County standards, include landscaped medians, and continue through the intersection of the proposed Arabian Lane. The realigned Hartmann Road would provide access to the single-family and medium density residential lots and the private park located near the northwestern portion of the site.

The project would also provide multiple access points to the Coyote Creek Elementary School via a pedestrian walkway, a school drop-off point, and from the future Coyote Valley Road extension, which is proposed for construction just north of the proposed Creekside Oak Estates

subdivision. Internal circulation would be provided by loop and grid roadway networks with an integrated system of pedestrian and bike trails.

Wastewater Facilities

The proposed project would tie into the existing Hidden Valley Lake Community Services District (HVLCSD) wastewater conveyance system and treatment facility. The existing system also provides reclaimed water to the Hidden Valley Lake Golf Course and may also provide reclaimed water for the project's landscaping and non-potable water demands. The project would tie into the existing 18-inch main that runs through a secured easement of the grounds of the Coyote Valley Elementary School. The project's wastewater flows would be conveyed by gravity flow to the pump station off of Hartmann Road and ultimately pumped in an easterly direction to the wastewater treatment plant located on Grange Road, approximately 1.5 miles from the project site (Aust, 2006).

Drainage

As indicated above, the proposed project would include the realignment of the on-site portion of Coyote Creek. The existing flow of the creek splits near the northwestern corner of the project site and is conveyed through a pipe arch culvert under SR 29 and across the project site in a west to east direction, ultimately draining into Putah Creek, which is located just west of Hartmann Road (CDC, Inc., 2007). The reader is referred to Section 4.8, Hydrology and Water Quality, for information regarding the proposed creek realignment and other storm and drainage facility details that are required as part of the project. The environmental effects of the proposed creek realignment were addressed programmatically in this DEIR. The creek realignment also includes a restoration plan, in which native plant species would be chosen to environmentally benefit both humans and animals.

Water Supply

The proposed project would obtain water service from the Hidden Valley Lake Community Services District, which provides drinking water meeting all state and federal standards. The project would tie into the existing water system that serves the Hidden Valley Lake subdivision. The project would be served through HVLCSD's Zone 4, which consists of 6-inch to 12-inch pipelines. The project would be served via the existing 12-inch main that passes through a secured easement on the grounds of the Coyote Valley Elementary School at the project's southeastern boundary. The project's commercial uses would be supplied via 12-inch pipelines and all residential uses would be supplied via 8-inch pipelines (Aust, 2006). The HVLCSD has indicated that it would be required to add a new storage tank with a capacity of 500,000 gallons in order to provide adequate water supply and pressure for municipal use and fire protection for the proposed project. The tank would be constructed on previously disturbed HVLCSD property.

PUBLIC SERVICES

Other public services required to serve the project include fire protection, law enforcement, propane, electricity, telephone, cable, and internet services. Fire protection and emergency medical services would be provided by the South Lake County Fire Protection District. Law enforcement services for the project would be provided by the Lake County Sheriff's Department. Pacific Gas and Electric Company would provide electrical service to the site. The proposed project would utilize a central propane system for its gas needs. Cable television,

telephone, and Internet services would be provided by a variety of companies, depending on the user preferences of the new residents and businesses.

3.6 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

In order to approve the proposed project and to allow for development of the site to move forward according to the project characteristics discussed above, it is anticipated that the following approvals and entitlements will be required to be granted by the County:

- General Plan Amendment from Agriculture and Rural Residential to Suburban Residential and Community Commercial;
- Rezone of the project site from A-SC-FF (Agriculture–Scenic Combining District–Floodway Fringe Combining District) and RR-SC-FF (Rural Residential–Scenic Combining District–Floodway Fringe Combining District) to PDR-SC-FF (Planned Development Residential–Scenic Combining District–Floodway Fringe Combining District) and PDC-SC-FF (Planned Development Commercial–Scenic Combining District–Floodway Fringe Combining District);
- LAFCo approval of a Sphere of Influence Amendment and Annexation to the Hidden Valley Lake Community Services District (HVLCSD);
- Approval of a Specific Plan of Development and a General Plan of Development;
- Approval of the Public Facilities Financing Plan (PFFP) for the project;
- Approval of tentative and final maps;
- Improvement plans;
- Grading plans;
- Building permits;
- Granting of a Development Agreement to the project applicant; and
- Adoption of a Mitigation Monitoring and Reporting Program, if the project is approved.

Other discretionary approvals that may be required by other governmental agencies may include, but are not limited to, the following:

- Water quality permitting (NPDES and water quality certifications) under the Clean Water Act by the Central Valley Regional Water Quality Control Board (CVRWQCB) and State Water Resources Control Board.
- Wetland fill and streambed alteration permits under Section 404/401 of the Clean Water Act by the U.S. Army Corps of Engineers.
- Approval of infrastructure details for water supply and wastewater facilities by the Hidden Valley Lake Community Services District.

- Approval of the linear park, Coyote Park, and the neighborhood and open space park sites and associated landscape corridor plans by Lake County Parks and Recreation Department.

REFERENCES

Aust, M. 2006. Personal Communication (Phone). Mel Aust, General Manager, Hidden Valley Lake Community Services District. August 30, 2006.

Civil Design Consultants, Inc. (CDC, Inc.). 2007. *Hydraulic Analysis – Coyote Creek*. Santa Rosa, CA.

J. Kapolchok + Associates. 2008. *Proposal Statement – "Valley Oaks" – A Planned Development*. Santa Rosa, CA.

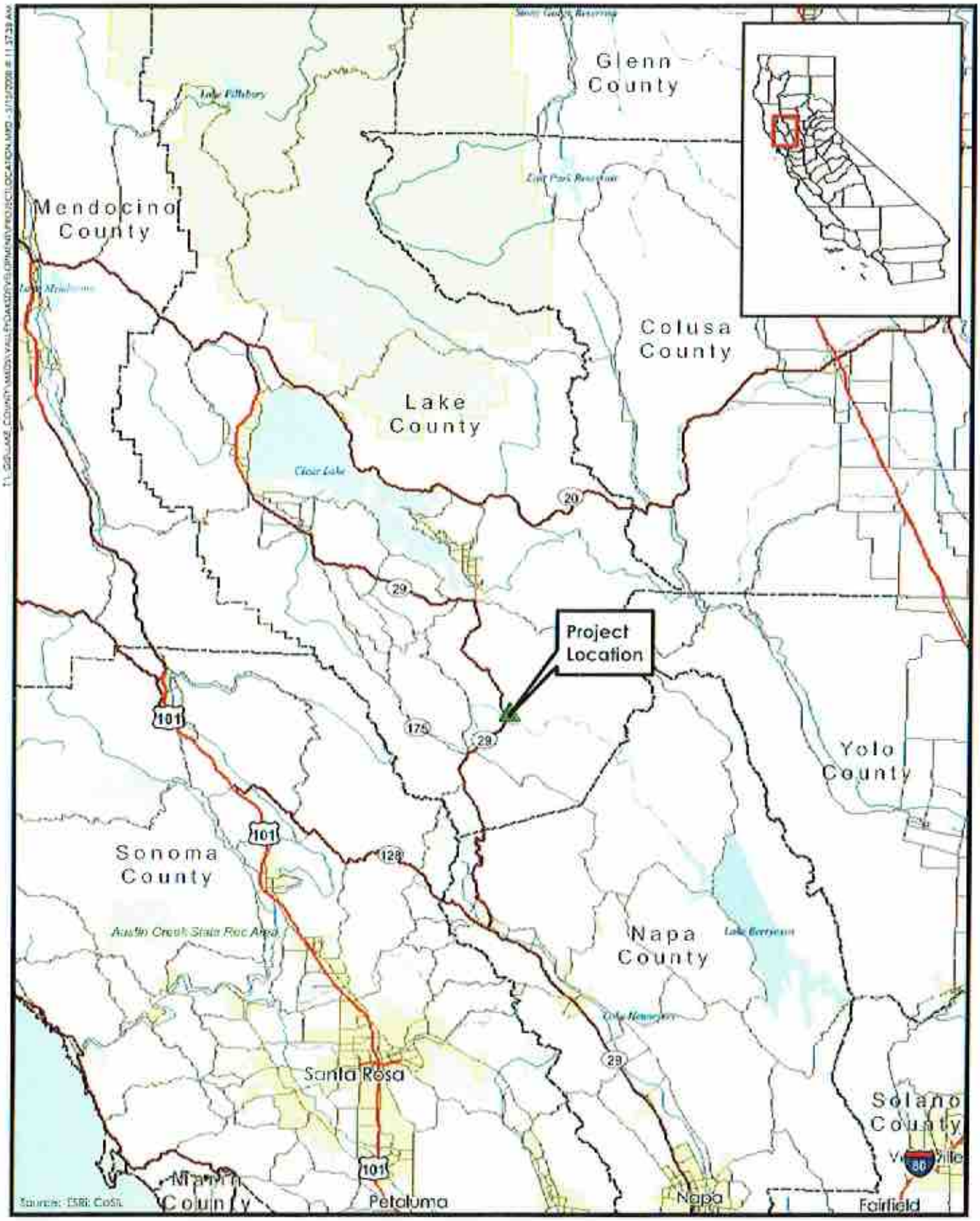
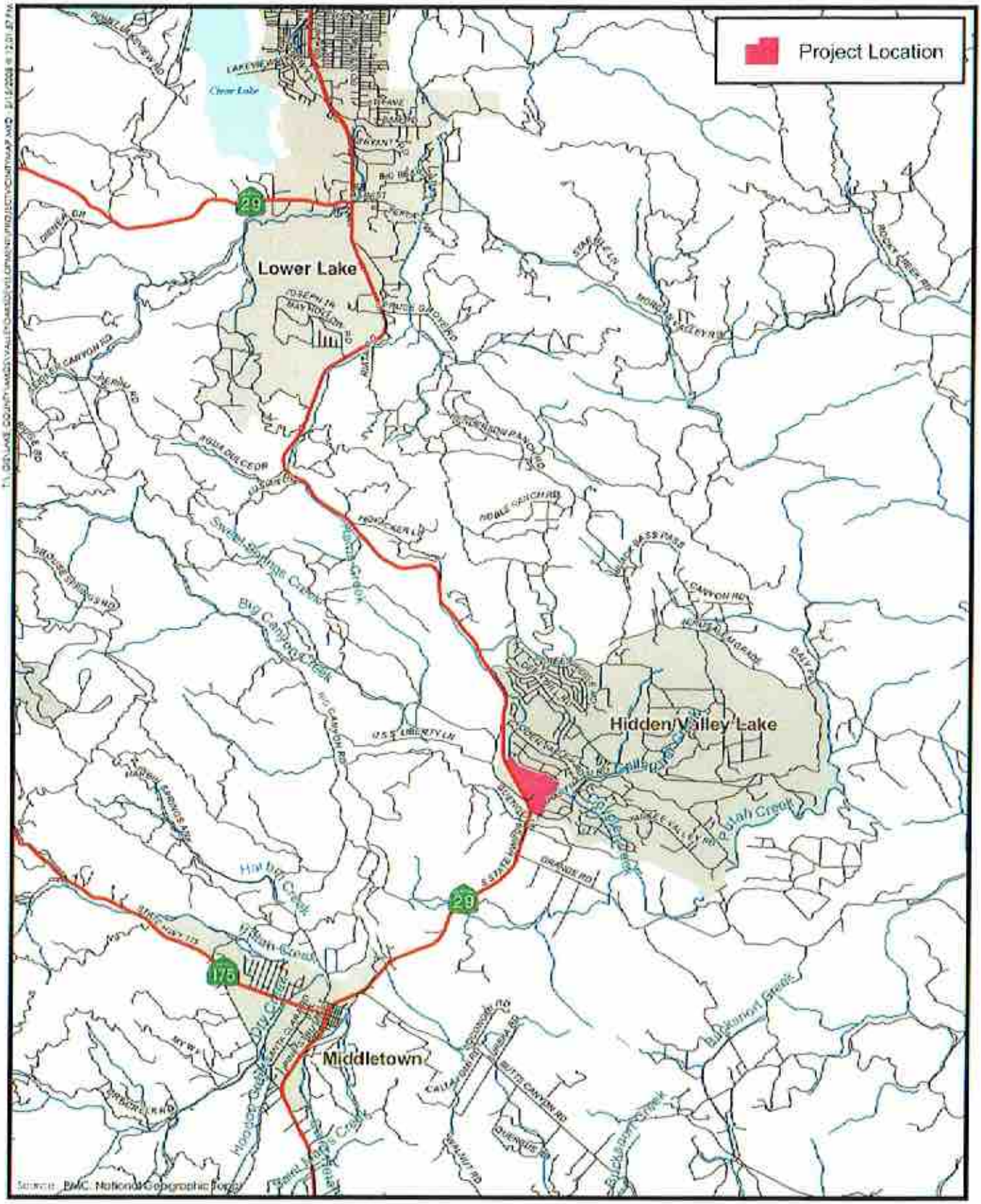


Figure 3.0-1
Regional Location

PMC



0.75 0 0.75
Miles

N

Figure 3.0-2
Project Vicinity
PMC

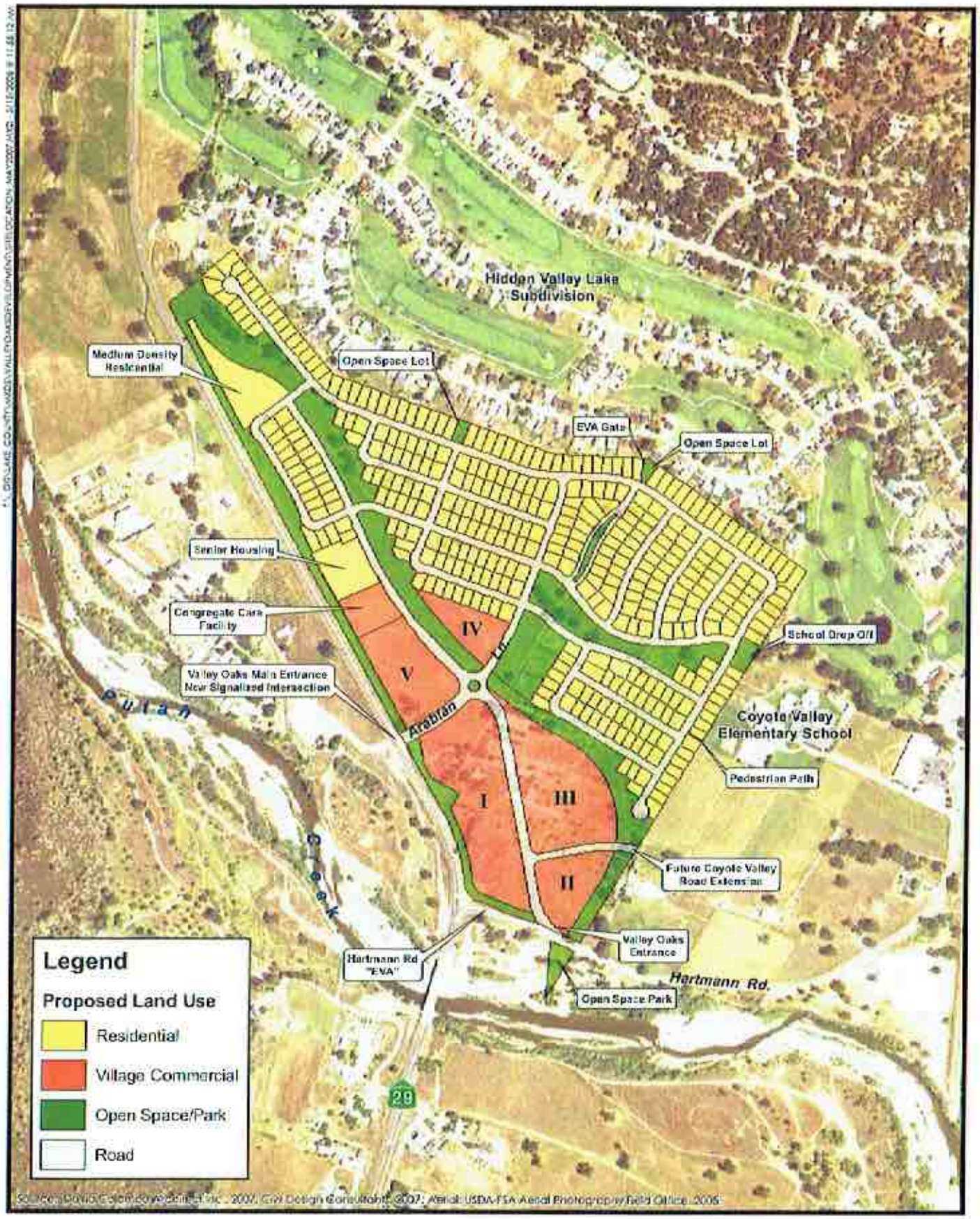


Figure 3.0-3
Site Plan
PMC