EL DORADO COUNTY TGPA/ZOU
PARTIAL RECIRCULATED DRAFT PROGRAM EIR

SCH #2012052074

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Contents

[1] Only Section 4.5 of the Alternatives Chapter is being recirculated. The other sections are listed in the Table of Contents for contextual reference only.

Tables

Acronyms and Abbreviations

µg/m^3	micrograms per cubic meter
2014 TCR/CSMP	Transportation Concept Report and Corridor System Management Plan, United States Route 50
A	Agricultural Land
-A	Agricultural District
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
AB 1807	Assembly Bill 1807-Toxic Air Contaminant Identification and Control Act
AB 2588	Assembly Bill 2588-Air Toxics Hot Spots Information and Assessment Act of 1987
AB 32	Assembly Bill 32, the California Global Warming Solutions Act of 2006
ADT	average daily trips
AE	Exclusive Agriculture
AFY	acre-feet per year
AG	agricultural grazing
AL	Agricultural Lands
AP	Agricultural Preserve
AQMD	Air Quality Management District
ARB	California Air Resources Board
BCC	birds of conservation concern
BGEPA	Bald and Golden Eagle Protection Act
BLM	Bureau of Land Management
BMP	best management practice
BTU	British thermal unit
C	Commercial
C_2H_3Cl	chloride
CAA	Clean Air Act
CAAA	Clean Air Act amendments
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CC	Commercial Community
CCA	Community Choice Aggregation
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission

CED	Center for Economic Development
CEQA	California Environmental Quality Act
CG	Commercial General
CH_4	methane
CHSC	California Health and Safety Code
CIP	Capital Improvement Program
CL	Commercial Limited
CLG	Certified Local Government
CM	Commercial Mainstreet
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPPA	California Native Plant Protection Act of 1977
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	El Dorado County
CPO	Commercial Planned Office
CPUC	California Public Utilities Commission
CR	Commercial Regional
CRHR	California Register of Historical Resources
CRU	Create a Rural Commercial
CSMP	corridor system management plan
CUP	conditional use permit
CUWCC	California Urban Water Conservation Council
CWA	Clean Water Act
dB	decibel
dBA	A-Weighted Decibel
dbh	diameter at breast height
-DC	Design Review - Community
DEIR	Draft Environmental Impact Report
-DH	Design Historic
DISM	Design and Improvement Standards Manual
DOC	California Department of Conservation
DOF	California Department of Finance
DPM	diesel particulate matter
DWR	California Department of Water Resources
Eagle Guidance	Eagle Conservation Plan Guidance
EDAC	Economic Development Advisory Committee
EDCAQMD	El Dorado Air Quality Management District
EDCTA	El Dorado County Transit Authority
EDCTC	El Dorado County Transportation Commission
EDCWA	El Dorado County Water Agency

EDWPA	El Dorado Water and Power Authority
EID	El Dorado Irrigation District
EIR	environmental impact report
EO	Executive Order
-EP	Ecological Preserve
EP Act	Energy Policy Act of 2005
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESP	energy service provider
FAR	floor-to-area building ratio
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FERC	Federal Energy Regulatory Commission
FMMP	Farmland Mapping and Monitoring Program
FR	Forest Resources
FY	fiscal year
g/m^3	micrograms per cubic meter
GDPUD	Georgetown Divide Public Utility District
GFSCD	Grizzly Flats Community Services District
GHG	greenhouse gas
GWP	global warming potential
GWR	Gross Weight Rating
H_2S	hydrogen sulfide
HABS	Historic American Building Survey
HAPs	Hazardous Air Pollutants
HCD	Housing and Community Development
HCM	Highway Capacity Manual
HDCDs	Historic Design Control Districts
HDR	High-Density Residential
HFCs	hydrofluorocarbons
HH	Households
HOV	high-occupancy vehicle
HRA	Health Risk Assessment
Hz	Hertz
I	Industrial
I-	Interstate
-IBC	Important Biological Corridor
ICM	Integrated Corridor Management
IL	Industrial, Low
INRMP	Integrated Natural Resources Management Plan
I-	Interstate
IOU	investor-owned utility

IPCC	Intergovernmental Panel on Climate Change
IRWM	Integrated Regional Water Management
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation Systems
IWRMP	integrated water resources master plan
LA	Limited Agricultural
LAFCO	Local Agency Formation Commission
L_{dn}	day-night sound level
LDM	Land Development Manual
LDR	Low-Density Residential
L_{eq}	equivalent sound level
L_{max}	maximum sound levels
L_{min}	Minimum Sound Level
LOS	level of service
LSAA	Lake and Streambed Alteration Agreement
LTAB	Lake Tahoe Air Basin
L_{xx}	percentile-exceeded sound levels
map	land use diagram
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
MDR	Medium-Density Residential
MFR	Multifamily Residential
mg/m^3	milligrams per cubic meter
MGD	million gallons per day
MLDs	most likely descendants
MOU	Memorandum of Understanding
-MP	Mobile/Manufactured Home Parks
MPO	Metropolitan Planning Organization
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
MTP/SCS 2035	Metropolitan Transportation Plan/Sustainable Communities Strategy 2035
MUP	minor use permit
MWELO	Model Water Efficient Landscape Ordinance
N_2O	nitrogen dioxide
NAAQS	National Ambient Air Quality Standards
NCCP	natural community conservation plan
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide

NOA	naturally occurring asbestos
NOP	Notice of Preparation
NO_X	oxides of nitrogen
NR	Natural Resources
NRHP	National Register of Historic Places
O_3	ozone
ODS	ozone-depleting substances
OS	Open Space
PA	Planned Agricultural
Partial Recirculated DEIR	partial recirculated draft program environmental impact report
Pb	lead
-PD	Planned Development
Peak Velocity	Peak Particle Velocity
PF	Public Facilities
PFCs	perfluorocarbons
PG&E	Pacific Gas & Electric
-PL	Platted Lands
PM10	Respirable particulate matter
PM2.5	PM 2.5 microns in diameter or less
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppb	parts per billion
pphm	parts per hundred million
ppm	parts per million
ppt	parts per trillion
PPV	Peak Particle Velocity
R-1	One-Family Residential
RA	Residential-Agricultural
R&D	Research and Development
Regional Water Boards	Regional Water Quality Control Boards
Reporting Rule	Greenhouse Gas Reporting Rule
RFH	Recreational Facilities, High-intensity
RFL	Recreational Facilities, Low-intensity
RHNP	Regional Housing Needs Plan
RL	Rural Lands
ROG	reactive organic compounds
RPS	Renewables Portfolio Standard
RR	Rural Residential
RTP	regional transportation plan
SA-10	Select Agricultural
SACOG	Sacramento Area Council of Governments
SB	Senate Bill
-SC	Scenic Corridor

SCS	Sustainable Communities Strategy
SEZ	Stream Environment Zones
SF_6	sulfur hexafluoride
SIP	state implementation plan
SLOAPCD	San Luis Obispo Air Pollution Control District
SO_2	sulfur dioxide
SO_4	sulfates
South Tahoe PUD	South Tahoe Public Utility District
SPTC-JPA	Sacramento-Placerville Transportation Corridor Joint Powers Authority
SR	State Route
SSC	species of special concern
TAC	toxic air contaminant
Tahoe City PUD	Tahoe City Public Utility District
TCR	Transportation Concept Report
TCMs	traffic control measures
TDM	Travel Demand Model
TDR	Transfer of Development Rights
TGPA	targeted General Plan amendment
TIM	traffic impact mitigation
TPZ	Timberland Preserve Zone
TR	Tourist Recreation
TUP	temporary use permit
U.S.	United States
U.S. DOE	U.S. Department of Energy
USACE	U.S. Army Corps of Engineers
USBR	United States Bureau of Reclamation
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
UWMP	urban water master plan
VHT	Vehicle Hours Traveled
VMT	vehicle miles traveled
VOC	atile organic compounds
VPSI	Vanpool Service, Inc.
VT	vehicle trips
WDRs	waste discharge requirements
Williamson Act	California Land Conservation Act of 1965
WSA	water supply assessment
WTP	water treatment plants
WWFMP	wastewater facilities master plan
WWTP	wastewater treatment plant
ZCU	zoning code update
ZOU	Zoning Ordinance update

Chapter 1
Introduction

1.1 Purpose of this Document

Section 15088.5 of the California Environmental Quality Act (CEQA) Guidelines provides that all or a portion of a draft environmental impact report (DEIR) can be recirculated for public review and comment when, as a result of public comment, there is a new or more severe significant impact not analyzed in the DEIR. "Recirculation" simply means that the public is provided an opportunity to comment on the new or revised sections of the DEIR.

Recirculation is not required unless significant new information is being added to the DEIR. Recirculation is not required where the new information merely clarifies or amplifies or makes insignificant modifications to the DEIR.

The targeted General Plan amendment/Zoning Ordinance update (TGPA/ZOU) Draft Program EIR has been partially revised to cover additions to the proposed project consisting of proposed adoption of Community Design Standards and limited additions to the ZOU, to present additional environmental analysis performed in response to comments received on the DEIR, and to present additional information made available after the publication of the DEIR and additional environmental analysis required to address the new information.

1.1.1 Project Changes

The County of El Dorado (County) is developing a new and/or updated Design and Improvement Standards Manual (DISM)/Land Development Manual (LDM), or successor document that will set out development standards to augment those found in the Zoning and Subdivision Ordinances. While the DISM/LDM, or successor document, is still under development, the County is adopting specific standards on the following subjects. These standards are proposed to be adopted by resolution and would carry the weight of County regulations, as opposed to "guidelines" or suggestions.

- Landscaping and Irrigation Standards
- Mobile Home Park Design Standards
- Outdoor Lighting Standards
- Parking and Loading Standards
- Research and Development Design Standards

In addition, changes to the ZOU are proposed to incorporate parking and loading standards.

The changes to the DEIR contained in the partial recirculated draft program environmental impact report provide analysis of the impacts of the County's actions in adopting these standards and changes to the ZOU.

1.1.2 Additional Environmental Analysis

Traffic

In response to comments from the California Department of Transportation (Caltrans), the County made revisions to the Travel Demand Model (TDM) and ran the revised model based on the TGPA/ZOU. Chapter 3.9, *Transportation and Traffic*~~,~~ and Chapter 5, *Other CEQA Considerations*, have been revised to reflect the results of the new model run. In addition, a discussion of Caltrans' June 2014 *Transportation Concept Report and Corridor System Management Plan* (2014 TCR/CSMP) for U.S. Highway 50 has been added to the regulatory setting. The 2014 TCR/CSMP is also referenced in the impact analysis where pertinent.

Water

In response to comments received during circulation of the DEIR, the County has performed additional analysis of groundwater issues. Chapter 3.10, *Water Supply*, now has a qualitative analysis of the impacts of the TGPA/ZOU on groundwater. This includes discussions of the county's fractured groundwater aquifers, impact mechanisms such as ranch marketing activities, and the significant impact that future development will have on groundwater resources in the county.

Since release of the DEIR, the El Dorado County Water Agency (EDCWA) has issued its *Water Resources Development and Management Plan, 2014 West Slope Update* examining the long-term demand and supply of surface water within the service areas of the west county's three public water districts. Chapter 3.10 has been revised to incorporate a discussion of the *2014 West Slope Update* and its ramifications for long term water supply forecasts. The discussion of cumulative water supply impacts in Chapter 5, *Other CEQA Considerations*, has also been updated to reflect the *2014 West Slope Update*.

1.2 Organization of the Document

This document is the partial recirculated draft program environmental impact report (Partial Recirculated DEIR) for the TGPA/ZOU project. As authorized under Section 15088.5(c), the revisions to the DEIR are limited to portions of the DEIR and therefore, only those portions are included in the Partial Recirculated DEIR. For that reason, the following list of chapters includes only those in which changes are being made. In addition, none of the figures in the DEIR have been changed; therefore, figures are not included in the Partial Recirculated DEIR.

The Partial Recirculated DEIR includes the following sections:

Chapter 1. *Introduction*. This discusses the purpose of this partial recirculated draft program EIR document, summarizes the revisions being made to the DEIR, the public review process, and use of this document.

Revised Chapter 2, *Project Description*. This contains the Project Description from the DEIR with proposed revisions. Proposed additions to the Project Description are shown in <u>underline</u>; any deletions are shown in ~~strikeout~~.

Revised Chapter 3.9, *Transportation*. This contains the Transportation chapter from the DEIR with proposed revisions. Proposed additions are shown in underline; any deletions are shown in ~~strikeout~~.

Revised Chapter 3.10, *Water Supply and Groundwater Use and Supply*. This contains the Water Supply chapter from the DEIR with proposed revisions addressing groundwater use and supply in more detail. Proposed additions are shown in underline; any deletions are shown in ~~strikeout~~.

New Chapter 3.11, *Energy Conservation*. This chapter looks at energy use and whether future development under the TGPA/ZOU would result in the inefficient, wasteful, and unnecessary consumption of energy. Because this is a new chapter, and therefore all of its text is new, the text in this chapter is not underlined.

New Chapter 3.12, *Community Design Standards and ZOU Additions*. This new chapter examines the potential impacts of the Community Design Standards proposed to be adopted at the same time as the ZOU, and that will be included in the new and/or updated Design and Improvement Standards Manual (DISM)/Land Development Manual (LDM), or successor document, and changes to the parking and loading standards of the ZOU. The Community Design standards consist of additional development standards to augment those already in the proposed ZOU and the Subdivision Ordinance. The County now proposes to adopt these standards at the same time as the Zoning Ordinance. Because this is a new chapter, and therefore all of its text is new, the text in this chapter is not underlined.

Revised Chapter 4.5, *Range of Alternatives for Analysis*. This contains the Alternatives chapter from the DEIR with new discussions of traffic, groundwater supply, and energy for each of the alternatives. No new alternatives are included. Proposed additions are shown in underline; any deletions are shown in ~~strikeout~~.

Revised Chapter 5, *Other CEQA Considerations*. This contains the Other CEQA Considerations chapter from the DEIR with revised discussions of cumulative traffic and water supply impacts. Proposed additions are shown in underline; any deletions are shown in ~~strikeout~~.

References. This includes any new references cited in the Partial Recirculated DEIR that are not included in Chapter 7, *References*, of the DEIR.

1.3 Public Review Process

The Partial Recirculated DEIR will be available for a 45-day public review period, from January 30, 2015 through March 16, 2015. The Partial Recirculated DEIR was circulated to state agencies for review through the State Clearinghouse of the Governor's Office of Planning and Research. Copies of the Partial Recirculated DEIR are available for public review during normal business hours at the Planning Department office in Placerville, as well as at the County Libraries. Copies of the Partial Recirculated DEIR were also available for review on the County's TGPA/ZOU website.

1.3.1 Limitation on Comments

CEQA Guidelines Section 15088.5(f)(2) states that:

> When the EIR is revised only in part and the lead agency is recirculating only the revised chapters or portions of the EIR, the lead agency may request that reviewers limit their comments to the revised chapters or portions of the recirculated EIR. The lead agency need only respond to (i) comments received during the initial circulation period that relate to chapters or portions of the document that were not revised and recirculated, and (ii) comments received during the recirculation period that relate to the chapters or portions of the earlier EIR that were revised and recirculated. The lead agency's request that reviewers limit the scope of their comments shall be included either within the text of the revised EIR or by an attachment to the revised EIR.

In keeping with this provision**, El Dorado County requests that commenters limit their comments to the revisions and new material presented in the Partial Recirculated DEIR**. The Final EIR will include written responses to the comments submitted on the previously circulated DEIR, as well as the comments received on the Partial Recirculated DEIR.

1.4 Summary of Revisions

***Revised* Chapter 2, *Project Description*.** The Project Description has been expanded to include summaries of the proposed Landscaping and Irrigation Standards, Mobile Home Park Design Standards, Outdoor Lighting Standards, Parking and Loading Standards, and Research and Development Design Standards.

***Revised* Chapter 3.9, *Transportation and Traffic*.** This chapter has been revised to include new information from Caltrans regarding Highway 50 that was received after issuance of the DEIR, the results of new traffic model runs based on the revised TDM, and a qualitative analysis of the potential impacts of the Parking and Loading Standards on traffic.

The following major changes were made to the El Dorado County TDM based on comments from Caltrans:

- Land use growth in and around the City of Placerville had been double-counted in the DEIR analysis. Land use totals were reduced to the correct levels for the revised analysis.
- School land use was reallocated based on corrected school locations.
- Increased the speeds on US 50 from East Bidwell Street to Greenstone Road to match Caltrans preferred speed of 58 mph for the general purpose and high-occupancy vehicle lanes (no changes to the auxiliary lanes). Changed speed on White Rock Road to match the Sacramento Area Council of Governments' Sacramento Activity-Based Travel Simulation Model speeds.

Traffic forecasts have been updated for Scenarios 2–6 using the revised TDM. The results are summarized below.

- Scenario 1 – This scenario is based on 2010 traffic counts, not the TDM model forecasts, so Scenario 1 traffic counts and LOS results were not revised.
- Scenario 2 – The following three roadway segments changed from level of service (LOS) D (or better) to LOS E when compared to the DEIR:

  - US 50 Westbound west of Bass Lake Road – this segment would degrade to LOS E during the AM peak hour. **(Significant Impact)**
  - US 50 Westbound west of Ponderosa Road – this segment would degrade to LOS E during the AM peak hour. LOS E is considered acceptable on this segment by El Dorado County and Caltrans standards. **(Less than Significant)**
  - Cameron Park Drive north of Robin Lane – this segment is expected to operate at LOS E in the PM peak hour. LOS E is acceptable on this segment. **(Less than Significant)**

- Scenarios 3 and 4 – No new impacts. The revised analysis results show three of the four roadway segments improve from LOS E (or worse) to LOS D during the PM peak hour.
- Scenario 5 – No new impacts. No changes in LOS for roadway segments that were projected to operate at LOS E or worse.
- Scenario 6 – the following four roadway segments changed from LOS D (or better) to LOS E (or worse) when compared to the DEIR:
  - US 50 Eastbound west of Bass Lake Road – this segment would degrade to LOS E during the PM peak hour. **(Significant Impact)**
  - US 50 Eastbound west of Ponderosa Road – this segment would degrade to LOS E during the PM peak hour. LOS E is considered acceptable on this segment by El Dorado County and Caltrans standards. **(Less than Significant)**
  - US 50 Westbound west of Ponderosa Road – this segment would degrade to LOS E during the AM peak hour. LOS E is considered acceptable on this segment by El Dorado County and Caltrans standards. **(Less than Significant)**
  - Cameron Park Drive north of Robin Lane – this segment is expected to operate at LOS F in the PM peak hour. LOS F is allowed on this roadway segment, as specified by General Plan Policy TC-Xd and Table TC-2 in the El Dorado County General Plan. The volume-to-capacity ratio is 1.05 under Scenario 6, which is below the maximum volume-to-capacity ratio of 1.11 for this segment. **(Less than Significant)**

Revised* Chapter 3.10, *Water Supply and Groundwater Use and Supply. The Water Supply chapter from the DEIR has been expanded to include a discussion of groundwater supply. This examines the potential for water demand generated by future development in areas reliant on groundwater to exceed the supply of groundwater. Because there is no comprehensive data on the amount of groundwater available, this is a qualitative examination. The conclusion is that future demand on groundwater resources will exceed supplies, resulting in a significant effect.

In addition, the discussion of El Dorado Irrigation District's (EID) long-term water supply has been revised in recognition of the conclusion of the EDCWA's *Water Resources Development and Management Plan, 2014 West Slope Update* that there will be a supply deficit after 2035 unless additional water is obtained. The *2014 West Slope Update* and the water management plans prepared by EID serve different purposes, one being a long-term plan for water and the others being shorter-term plans for acquisition, delivery, and facilities, respectively. The EIR has been revised to recognize the significance of the long-range supply deficit identified by EDCWA.

***New* Chapter 3.11, *Energy Conservation*.** This new chapter provides a discrete discussion of the extent to which the Project would result in the inefficient, wasteful, and unnecessary consumption of energy. This reviews California's comprehensive statutory and regulatory scheme for energy conservation in residential and commercial development. It also examines the potential for motor vehicle fuel use to be inefficient, wasteful, and unnecessary. The analysis concludes that new development that conforms to the statutory and regulatory requirements in place within California will not result in the inefficient, wasteful, and unnecessary consumption of energy.

***New* Chapter 3.12, *Community Design Standards and ZOU Additions*.** This new chapter examines the potential environmental impacts of the Landscaping and Irrigation Standards, Mobile Home Park Design Standards, Outdoor Lighting Standards, and Research and Development Design Standards. These standards direct the manner in which future land uses will be developed. They do not on their own represent the type of land use that may be approved within a given zone under the Zoning Ordinance. This chapter explains why this is so and examines the limited number of impacts that would result from the design standards. The Parking and Loading Standards are also reviewed in revised Chapter 3.9, *Transportation and Traffic*.

Revised* Chapter 4.5, *Range of Alternatives for Analysis. Brief new or revised discussions of traffic, groundwater supply, and energy have been added for each of the alternatives identified in the DEIR, based on the changes made to the other sections of the EIR. No new alternatives are included.

Revised* Chapter 5, *Other CEQA Considerations. Changes to the Other CEQA Considerations chapter from the DEIR include additional discussion of the contributions to cumulative impacts resulting from the proposed development standards, including impacts related to aesthetics (Outdoor Lighting Standards in particular), biological resources (Outdoor Lighting Standards in particular), energy use, transportation and traffic, surface and groundwater supplies, and growth-inducing impacts. The traffic discussion is updated with information from the new TDM run. With the exception of surface and groundwater supplies, where there is information that future demand under the General Plan and the TGPA/ZOU will exceed future supplies, the Community Design Standards and ZOU additions will not result in a considerable new contribution to cumulative impacts. Proposed additions are shown in underline; any deletions are shown in ~~strikeout~~.

1.5 Use of this Document

The Partial Recirculated DEIR will be combined with previously circulated DEIR as part of the Final EIR. The Final EIR will also include the comments received on the DEIR and the Partial Recirculated DEIR, along with written responses to those questions.

The Board of Supervisors will certify the Final EIR prior to completing its deliberations on the Project. If it approves the Project, then the Board will adopt the findings, statement of overriding considerations, and mitigation monitoring and reporting program that are required by CEQA.

The Partial Recirculated DEIR focuses on changes to the project that were not analyzed in the DEIR, as well as new information on water supply and traffic. **The Partial Recirculated DEIR is not the Final EIR.** The Final EIR will include other revisions and clarifications in response to the comments

received on the DEIR and the Partial Recirculated DEIR, or as needed to otherwise clarify the Final EIR.

Chapter 2
Project Description

2.1 Project Overview

The project consists of targeted amendments to the El Dorado County General Plan (TGPA), a comprehensive zoning ordinance update (ZOU), and design standards and guidelines, including those for mixed use development. El Dorado County is illustrated in Figure 2-1.[1] The project applies to those areas that are under County jurisdiction (Figure 2-2).

The County General Plan was adopted in 2004. Following completion of the first 5-year review of that plan, the Economic Development Advisory Committee (EDAC), Regulatory Reform Subcommittee, and County staff, after an extensive public outreach and participation process, developed a set of targeted amendments (the TGPA) to the policies adopted in the 2004 plan and implementation actions for the General Plan policies. The primary implementing actions for the General Plan are the ZOU and the development of design standards and guidelines for mixed use development. As part of this project, the County will also consider amending the Camino/Pollock Pines Community Region Boundary (Figure 2-3) and Agricultural District Boundaries (Figure 2-4) in the General Plan.

The project does not involve the adoption of a new County General Plan. Except for the targeted amendments described in this chapter, the current General Plan would remain unchanged. A comprehensive update to the Zoning Ordinance is proposed as a part of the project, but many of the same uses are retained. Major new uses being proposed in the ZOU are examined at a general level in the pertinent impact analyses. All changes proposed in the ZOU are consistent with the existing General Plan land use designations and existing policies or with the proposed amended policies and minor land use diagram (map) corrections.

2.2 Project Location

El Dorado County encompasses 1,805 square miles in east-central California. The county's westernmost portion contains part of Folsom Lake and the county's eastern boundary is the California-Nevada state line. The county is topographically divided into two zones. The northeast corner of the county is in the Lake Tahoe Basin, while the remainder of the county is in the area referred to regionally as the *western slope*—the area west of Echo Summit (Figure 2-1). Eldorado and Tahoe National Forests comprise a major portion of the eastern portion of the county.

This project is limited to the unincorporated portions of the county. The areas within the county boundaries that are not under County jurisdiction and therefore not subject to regulation by the County through the General Plan and Zoning Ordinance include federal lands such as National Forest lands (Eldorado National Forest, Tahoe National Forest, Lake Tahoe Basin Management Unit),

[1] Figures from the DEIR have not been updated; therefore, no figures are included in the Partial Recirculated Draft EIR.

Bureau of Land Management lands, Bureau of Reclamation lands (Folsom Lake), state lands at the Marshall Gold Discovery State Historic Park and state parks along the Lake Tahoe shore; tribal lands such as the Shingle Springs Rancheria; and land within the incorporated cities of Placerville and South Lake Tahoe (Figure 2-2).

Nearly half the land area of the county falls under the jurisdiction of such entities (El Dorado County 2003). The population of the unincorporated area of the county was estimated to be 149,167 in 2011 (U.S. Census Bureau 2012). The County seat is in the incorporated city of Placerville, 45 miles northeast of Sacramento. The city of Placerville's population was estimated by the U.S. Census to be 10,383 in 2011. The city of South Lake Tahoe, with a 2011 population estimate of 21,388, is the largest city in the county.

The project would take effect county-wide in those areas that are under County jurisdiction (Figure 2-2), including communities such as El Dorado Hills, Cameron Park, Shingle Springs, El Dorado, Diamond Springs, greater Placerville, Camino, Pollock Pines, and north and south county rural communities. A number of the unincorporated communities within the county are covered by the adopted specific plans listed below, in addition to the County General Plan. None of these plans are proposed for amendment as part of the project.

- Meyers Area ~~Community~~ Plan
- Carson Creek Specific Plan
- Promontory Specific Plan
- Valley View Specific Plan
- El Dorado Hills Specific Plan
- Bass Lake Hills Specific Plan
- North West El Dorado Hills Specific Plan

2.3 Project Objectives

The County's purpose in proposing the TGPA and the ZOU is to update the General Plan and Zoning Ordinance to better provide a framework for future development in the County that takes into account population growth, economic factors, demographics, and community needs and wants. The key objectives for the project are listed in Sections 2.3.1 and 2.3.2.

2.3.1 TGPA Objectives

- Encourage and support the development of housing affordable to the moderate income earner.
- Promote and support the creation of jobs.
- Increase capture of sales tax revenues.
- Promote and protect agriculture in the county.
- Revise existing General Plan policies and land use designations to provide clarity while keeping land use map changes to a minimum.

2.3.2 Zoning Ordinance Update Objectives

- Update the zoning map to conform to the General Plan land use designations.
- Eliminate conflicting provisions within the existing ordinance.
- Add provisions to facilitate General Plan Implementation Measures.
- Reorganize the ordinance for ease of use.
- Update the text of the ordinance to bring it into conformance with the General Plan and to incorporate modern implementation tools.
- Create new zones to reflect current zoning needs.
- Delete obsolete zones.
- Create overlay zones to more effectively implement General Plan policies.
- Expand allowed uses in the agricultural and rural land zones to provide opportunities for agricultural support, recreation, and rural commerce.
- Provide a range of intensities for home occupations, based on size and zoning of parcels, addressing the issues of accessory structures, customers, and employees. Modify zoning for Williamson Act contracted and rolled out land to reflect the underlying General Plan land use designations. “Rolled out” means land on with the Williamson Act contract has been non-renewed and will expire at the end of its term.
- Provide a range of commercial zones that specify the type, design, and location of commercial uses, consistent with the General Plan.

2.4 Description of the Project

The County is proposing targeted amendments to certain General Plan policies and land use designations and a comprehensive update to the Zoning Ordinance. The preliminary draft TGPA and draft comprehensive ZOU were circulated for public review and comment. Comments received during the review process were taken into consideration in preparing the TGPA and ZOU.

The proposed General Plan amendments and changes to the Zoning Ordinance are summarized below. The full texts of the proposed TGPA and ZOU, with the changes from the existing General Plan marked, are available for review at the County Community Development Agency, Long Range Planning Public Counter at 2850 Fairlane Court, Placerville and at all of the El Dorado County Public Libraries. Electronic copies are also available on the County website at http://www.edcgov.us/LongRangePlanning/. The *El Dorado County Mixed-use Design Guidelines* are found in Appendix C of this EIR.

2.4.1 Targeted General Plan Amendments

Amendments are proposed for the General Plan elements listed below.

- Land Use
- Transportation and Circulation

- Public Services and Utilities
- Public Health
- Safety and Noise
- Conservation and Open Space
- Agriculture and Forestry

No changes are proposed to the Housing Element, which was adopted October 29, 2013. Some of the changes to the Land Use Element are prompted by changes to the State Planning and Zoning Law that now requires general plans to provide high-density residential designations to accommodate the potential for lower income housing (Chapter 664, Statutes of 2008. Effective January 1, 2009).

The majority of the project's proposed General Plan amendments consist of policy changes within the existing General Plan designations (i.e., they are changes to the General Plan text). The project also includes a limited number of proposed changes to the land use map and General Plan Land Use Designations. These map changes are proposed in order to correct mapping errors in the adopted General Plan land use map, many of which were identified during the Zoning Map update process and affect approximately 0.10% of existing parcels within the county.

While the TGPA includes a number of specific amendments to General Plan policies, most of the current General Plan's policies would remain unchanged. Maps and a list showing the proposed changes are available at http://www.edcgov.us/landuseupdate/.

Land Use Map Changes

The General Plan designates planned land uses in the county, such as Commercial, Industrial, Residential (with densities ranging from Multi-Family to Rural Residential), Agricultural, Natural Resources, and Open Space on the land use map. The TGPA does not change the General Plan land use designations for individual properties, except where necessary to correct a small number of land use map errors (approximately one tenth of one percent of the existing parcels) discovered subsequent to the adoption of the General Plan in 2004. These corrections are identified on the Draft General Plan Amendment map (Figures 2-5a–5l).

The proposed land use map changes are described below and are shown in Figures 2-3, 2-4, and 2-5a–2-5l.

1. **Camino/Pollock Pines Community Region**. The General Plan identifies a number of existing communities as "Community Regions" in order to "provide opportunities that allow for continued population growth and economic expansion while preserving the character and extent of existing rural centers and urban communities, emphasizing both the natural setting and built design elements which contribute to the quality of life and economic health of the County." These communities are "those areas which are appropriate for the highest intensity of self-sustaining compact urban-type development or suburban type development within the County" (General Plan Objective 2.1.1 and Policy 2.1.1.2).

   The General Plan also identifies "Rural Centers" within the County "as centers within the Rural Regions which provide a focus of activity and provide goods and services to the surrounding areas." As explained in the General Plan, "Rural Center boundaries establish areas of higher intensity development throughout the rural areas of the County based on the availability of

infrastructure, public services, existing uses, parcelization, impact on natural resources, etc." (General Plan Objective 2.1.2 and Policy 2.1.2.2).

The TGPA proposes to divide the existing Camino/Pollock Pines Community Region to create three Rural Centers centered on Camino, Cedar Grove, and Pollock Pines (see Figure 2-3). This would allow each of the communities to develop in a manner that reflects its separate and distinct character. The proposed Rural Center designations would not extend beyond the existing boundary of the Community Region. In addition, the project would not include changes to the current land use designations for the properties within the existing boundary or proposed Rural Centers.

2. **Agricultural District Boundaries**. The General Plan Agricultural and Forestry Element's Implementation Measure AF-J requires the County to inventory the agricultural lands in active production and/or lands determined by the Agricultural Commission to be suitable for agricultural production. Once the inventory is complete, the County is to perform a suitability review consistent with Agricultural and Forestry Element Policies 8.1.1.1, 8.1.1.2, 8.1.1.3, and 8.1.1.4 and amend the Agricultural District boundaries as appropriate (General Plan Policy 8.1.1.7).

Policy 8.1.1.1 describes the purpose and designation of Agricultural Districts.

"'Agricultural Districts' shall be created and maintained for the purposes of conserving, protecting, and encouraging the agricultural use of important agricultural lands and associated activities throughout the County; maintaining viable agricultural-based communities; and encouraging the expansion of agricultural activities and production. These districts shall be delineated on the General Plan land use map as an overlay land use designation."

Policy 8.1.1.2 describes the criteria for including land within the Agricultural District boundary.

"A. Lands currently under Williamson Act contract (i.e., 'agricultural preserves');

"B. Soils identified as El Dorado County 'choice' agricultural soil, which consist of Federally designated prime, State designated unique or important, or County designated locally important soils;

"C. Lands under cultivation for commercial crop production;

"D. Lands that possess topographical and other features that make them suitable for agricultural production;

"E. Low development densities; and

"F. A determination by the Board of Supervisors that the affected lands should be preserved for agricultural production rather than other uses."

The Agricultural District overlay applies in combination with another land use designation to identify rural areas that are important to the county's agricultural economy. This includes lands designated in the General Plan as Agricultural Lands (AL), Natural Resources (NR), and Rural Residential (RR), for example. Including a parcel in or excluding a parcel from the Agricultural District overlay does not change the underlying General Plan land use designation. The project does not include any changes to the current land use designations.

The TGPA proposes to expand the Agricultural District Boundaries for Garden Valley-Georgetown, Coloma, Camino–Fruitridge, Gold Hill, Oak Hill, Pleasant Valley, and Fair Play–Somerset to implement General Plan Implementation Measure AF-J. In addition, a number of

parcels now within Agricultural Districts will be removed from those districts, based on the Policy 8.1.1.2 criteria (see Figure 2-4).

The total current acreage of the Agricultural Districts is 49,141. The total acreage proposed to be added with the project is 17,241, and 137 acres are proposed to be removed. The County Agricultural Commission has identified the parcels to be added and the parcels to be removed through a public process that included notifying the affected landowners and offering them the opportunity to contest the Commission's preliminary determination. All contested parcels were addressed during the May 2010 Agricultural Commission meeting. Table 2-1 summarizes the proposed changes to the Agricultural Districts.

3. **Land Use Map Corrections.** State planning and zoning law requires the County's Zoning Ordinance, including the zoning map, to be consistent with the General Plan land use map (Government Code Section 65860). In the process of bringing the zoning map into conformance with the General Plan, errors in the General Plan land use map were discovered. The project would include both changes to the zoning map through the ZOU and limited land use map clean-up through the TGPA (Figures 2-5a–5l).

Table 2-1. El Dorado County Agricultural District Changes

	Parcels Identified for Addition				Parcels Identified for Removal			
Ag District	# of Proposed Additions	Acres	# of Contested Parcels[a]	Acres	# of Proposed Removals	Acres	# of Contested Parcels[a]	Acres
Camino–Fruitridge	25	990	4	294	0	0	0	0
Gold Hill	7	316	0	0	24	92	3	16
Oak Hill	6	299	0	0	0	0	0	0
Pleasant Valley	27	650	0	0	1	20	0	0
Coloma	8	1,163	0	0	0	0	0	0
Garden Valley – Georgetown East	65	3,291	0	0	0	0	0	0
Fair Play– Somerset (1st Half)	82	4,628	0	0	71	25	0	0
Fair Play– Somerset (2nd Half)	259	5,904	4	148	0	0	0	0
Total	479	17,241	8	442	96	137	3	16

Source: El Dorado County Department of Agriculture and Weights and Measures 2010.

[a] A contested parcels is one for which the landowner contested the Planning Commission's preliminary determination to add or remove the parcel from Agricultural Districts.

General Plan Policy Amendments

The proposed General Plan policy amendments are listed below.

Policy 2.1.1.3: Commercial/Mixed Use (in Community Regions). This policy would increase the maximum density for the residential portion of mixed-use projects in Community Regions from 16 dwelling units per acre to 20 dwelling units per acre to be consistent with 2009 amendments to State planning law (Government Code Section 65583.2(c)(B)(3)). The maximum residential

density of 20 dwelling units per acre may only be achieved where adequate infrastructure, such as water, sewer and roadway are available or can be provided concurrent with development.

Policy 2.1.2.5: Commercial/Mixed Use (in Rural Centers). This policy would increase the maximum density for the residential portion of mixed use projects in Rural Centers from 4 dwelling units per acre to 10 dwelling units per acre.

Policy 2.2.1.1 and Table 2-1: Commercial and Industrial. The General Plan states that commercial designations are "considered appropriate only within Community Regions and Rural Centers." Industrial designations are allowed in Community Regions and Rural Centers, but in Rural Regions only when "constrained to uses which support on-site agriculture, timber resource production, mineral extraction, or other resource utilization."

The TGPA proposes to change current policy restrictions that prohibit commercial and industrial land use designations in the Rural Regions.

Policy 2.2.1.2: Commercial/Residential Mixed Use. The following sentence would be deleted: "The residential component of the project shall only be implemented following or concurrent with the commercial component." This would allow residential use to precede commercial development in mixed use projects.

Policy 2.2.1.2: Industrial. The requirement that industrial lands be restricted to areas within, or in close proximity to Community Regions and Rural Centers would be deleted. The requirement that industrial lands in rural regions have more limited industrial uses—for support of agriculture and natural resource uses—would be deleted

Policy 2.2.1.2: Multifamily Residential (MFR). The minimum allowable density for the MFR designation in the current General Plan is 5 dwelling units per acre, with a maximum density of up to 24 dwelling units. The project would increase the designation's minimum density to eight units per acre with an optional review but retain the current maximum density of 24 units per acre[2]. The project would amend the MFR designation to encourage a full range of housing types including small lot, single-family detached design without a requirement for a planned development. The project would specify that mixed-use development within Community Regions and Rural Centers that combine commercial and residential uses shall be permitted under the MFR designation.

Policy 2.2.1.2: High Density Residential. The requirement for a planned development application on projects of three or more dwelling units per acre to allow for additional moderate income housing options would be deleted.

Policy 2.2.1.2: Open Space. The policy to refer to General Plan Objective 7.6.1 and to allow for additional moderate income housing options would be amended.

Policies 2.2.3.1, 2.2.3.2, and 2.2.5.4: Open Space. Amend the 30% open space requirement for Planned Development in Community Regions and Rural Centers to allow less than 30% of "improved open space" on site.

[2] The prior proposal to increase the MFR density to 30 units per acre described in the NOP for the DEIR was based on the belief that this was necessary in order for the housing element to accommodate the county's fair share of the regional housing need. After adoption of the Housing Element in late October 2013 and its ratification by the California Department of Housing and Community Development later that year, it is clear that the density is not needed in order to meet state law. Therefore, that part of the project is no longer being pursued.

Table 2-4: General Plan Land Use Designation and Zoning District Consistency Matrix: This table would be amended as necessary to reflect Zoning Ordinance Update revisions.

Policy 2.2.4.1: Density Bonus. The density bonus criteria would be amended for clarity and consistency with General Plan policies 2.2.3.1 and 2.2.3.2, which establish additional criteria required to qualify for a residential density bonus.

Policy 2.2.5.4: Planned Development. This policy, requiring a Planned Development application on projects requesting the creation of 50 parcels or more to allow for additional moderate-income housing, would be deleted.

Policy 2.2.5.8: Neighborhood Services zoning district. The policy creating the Neighborhood Services zoning district and allowing for neighborhood service uses to be met in related commercial and residential zones would be deleted.

Policy 2.2.5.10: Agricultural Support Services. The policy that requires a special use permit for agriculture support services would be amended; standards and permit requirements for such uses would be incorporated into the Zoning Ordinance.

Policy 2.4.1.3: Design Historic (-DH) combining zone district for Clarksburg. The policy would be amended to recognize the historical town sites of El Dorado and Diamond Springs.

Policy 2.5.2.1: Mixed-use development would be allowed in neighborhood commercial centers. Currently, this policy allows residential use on the second story, but does not mention mixed use by name.

Policies 2.9.1.2, 2.9.1.3, and 2.9.1.4: Five-year Amendment Intervals. Criteria for establishing Community Region and Rural Center boundaries would be amended by deleting the restriction that boundaries can be amended every 5 years; this revision would allow revisions to the boundaries to be initiated by Board of Supervisors whenever necessary.

New Policy 2.4.1.5. This policy would set criteria for and identify infill sites and opportunity areas and provide, through an implementation measure, incentives for development of these vacant/underutilized areas. Implementation may support the use of mixed-use and "form-based" codes. These policy changes would not include amending the land use designations or increasing the densities currently provided for in the General Plan.

Policies TC-1a, TC-1b, and Table TC-1: County Roadway Standards. These policies and table in the Transportation and Circulation Element would be revised to allow for narrower streets and road ways and to support the development of housing affordable to all income levels and to further support the objectives found in policies TC-1p, TC-1r, TC-1t, TC-1u, TC-1w, TC-4f, TC-4i, HO-1.3, HO-1.5, HO-1.8, HO-1.18, HO-5.1, and HO-5.2. This will involve adding an exception to Table TC-1 to allow deviations from the standards when needed to accommodate "complete streets" pursuant to state law or for mixed-use developments.

Policies TC-1m, TC-1n(B), TC-1w: Road Improvements. These policies would be amended to make minor modifications to clarify language: TC-1m—delete "of effort"; TC-1n(B)—replace "accidents" with "crashes" to be consistent with transportation industry standard language; and TC-1w—delete "maximum."

Table TC-2, Policy TC-Xb, and Policy TC-Xd: Level of Service Standards. This revision entails moving Table TC-2 to another document; if it is moved, all references to TC-2, including the references in TC-Xb and TC –Xd, would be amended.

Policy TC-Xb (C): Roadway Capacity. This would be a minor amendment to refer to "Figure TC-1" when referencing the circulation diagram.

Policy TC-Xg: Right of Way Dedications. This amendment would clarify the requirement that development may be required to dedicate right-of-way, fund design and construction, and or fund all improvements necessary to mitigate the effects of traffic from the project.

Policy TC-Xi: Planning for U.S. Highway 50 Widening. This policy would be amended to allow for coordination of regional projects to be delivered on a schedule agreed to by related regional agencies, thereby excluding regional projects from the scheduling requirements of the policies of the General Plan.

Policies TC-4a, TC-4d, and TC-4f: Bicycle Routes. Language in these policies would be amended to ensure consistency with subsequently adopted documents and plans.

Policies TC 4i, TC-5a, TC-5b, and TC-5c: Paths and Sidewalks. These policies would be amended to provide more flexibility as to when sidewalks are required. Requirements and enforcement would be included in subsequently adopted design standards and guidelines.

Policy TC-1y: Employment Cap. The El Dorado Hills Business Park employment cap limits would be analyzed and either amended or deleted.

Policies TC-Xd, TC-Xe and TC-Xf: Level of Service Standards. These policies would be amended to clarify the definition of "worsen"; to clarify what is required if a project "worsens" traffic; to identify the methodology for traffic studies (e.g., analysis period, analysis scenarios, methods); and to identify the timing of improvements.

New Goal and associated policies. A goal and policies would be added to provide for CEQA streamlining opportunities for qualified projects that are consistent with the Metropolitan Transportation Plan.

New Policy. A new policy would be added to support the development of new or substantially improved roadways to accommodate all users, including bicyclists, pedestrians, transit riders, children, older people, and disabled people, as well as motorists, to comply with the requirements of Assembly Bill 1358, the Complete Streets Act of 2008 (Chapter 657, Statutes of 2008 – Government Code Section 65302(b)(2)). An implementation measure would be added to update the applicable manuals and standard plans to incorporate elements in support of all users.

Objectives 5.1.1, 5.1.2, and Table 5-1: Planned Adequate Infrastructure. The Public Services and Utilities policies and table would be amended as needed to clarify that the Board has final authority when determining minimum level of service requirements consistent with General Plan objectives, standards, and related policies.

Policy 6.4.1.4 and 6.4.1.5: New Parcels in Flood Hazard Areas. Reference to the flood insurance rate maps would be removed from these policies to address recommendations by the Office of Emergency Services and Homeland Security regarding dam failure inundation.

Policy 6.5.1.11: Noise Standards. Tables 6-3 through 6-5 establish noise standards. This amendment would exempt construction activities occurring from 7 a.m. to 7 p.m. during the week or from 8 a.m. to 5 p.m. on weekends and holidays from those standards. In addition, the amendment would fully exempt public projects to alleviate traffic congestion and safety hazards from those noise standards. No changes to the tables are proposed.

Objective 6.7.1 and 6.7.5: Air Quality. These objectives would be amended to reflect updated air quality plan opportunities and add new policies and implementation measure that support the adoption of an Air Quality–Energy Conservation Plan.

Policy 7.1.2.1: Restriction on Developing Slopes of 30%. The policy that prohibits development on slopes of 30% or steeper would be amended to correspond with policy 2.3.2.1 discouraging development on 30% slopes or steeper and to set standards in the Zoning Ordinance and Grading Ordinance.

Policy 7.2.1.2 and 7.1.2.3: Mineral Resources. These policies would be amended to clarify which mineral resource zones are required to be mapped.

Objective 7.6.1.3(B): Specific references to Agricultural (A), Exclusive Agricultural (AE), Agricultural Preserve (AP), Residential-Agricultural (RA), and Select Agricultural (SA-10) zone districts would be deleted to conform to the new agricultural zones proposed in the ZOU.

Policy 8.1.3.2: Buffer for Incompatible Uses. This policy would be amended to provide a limited agricultural buffer for lands within a community region by adding language from Policy 8.4.1.2.

Policy 8.2.4.2: Special Use Permit. This policy would be amended to eliminate the requirement for a special use permit for all visitor serving uses, and instead would establish standards, permitted uses, and requirements for permits, in the various zone districts in the Zoning Ordinance.

Policy 8.1.1.6: Williamson Act Parcels. The policy requiring parcels encumbered by a Williamson Act Contract to be zoned Exclusive Agriculture (AE), pursuant to the California Land Conservation Act, would be deleted. The ZOU establishes new agricultural zones that can accommodate lands encumbered by Williamson Act contracts.

Policy 8.2.4.4: This policy provides that Ranch Marketing, Winery, and visitor-serving uses (agricultural promotional uses) are permitted on agricultural parcels, subject to a compatibility review to ensure that the establishment of the use is secondary and subordinate to the agricultural use and will have no significant adverse effect on agricultural production on surrounding properties. The proposal considers amending the policy to allow for ranch marketing activities on grazing lands.

2.4.2 Zoning Ordinance Update

The ZOU is a comprehensive update of the County's Zoning Ordinance. The update is needed so that the Zoning Ordinance will be consistent with the provisions of the General Plan's goals, objectives, policies, and Implementation Measures. Consistency between the general plan and zoning is mandated by state law (Government Code 65860). The current Zoning Ordinance is not consistent with the General Plan.

The proposed comprehensive ZOU has two major components:

1. Revising the zoning maps to bring existing zoning designations into conformance with the General Plan, as required by state law.
2. Comprehensively updating the text of the Zoning Ordinance to bring it into conformance with the General Plan to eliminate inconsistencies and to incorporate modern implementation tools.

Table 2-2 illustrates the consistency between the General Plan's land use designations and the proposed zoning classifications.

Note that the Board of Supervisors has recodified the County Ordinance Code such that the Zoning Ordinance, which was previously Title 17 of the Code, is now Title 130. For simplicity's sake, since all discussions to this point have described the Zoning Ordinance and the ZOU as being part of Title 17 (and the online copy of the ZOU is numbered accordingly) the Partial Recirculated DEIR will continue to refer to the Zoning Ordinance as being Title 17. However, in keeping with the recodification, when adopted, the ZOU will incorporated into the Code as Title 130, not Title 17.

Table 2-2. General Plan Land Use Designation and Zone Consistency Matrix

	Land Use Designations											
Zones	MFR	HDR	MDR	LDR	RR	AL	NR	C	R&D	I	OS	TR
RM	●							●[1]				
R1		●	Δ									
R20K		●										
R1A		●	●									
R2A			●									
R3A			●									
RE (5-10)			●	●	●[2]							
CPO								●				
CL								●				
CM								●				
CC								●				
CR								●				
CG								●				
I										●		
R&D									●			
LA (10-160)				●[4]	●	●	●				●[3]	
PA (10-160)				●[4, ★]	●	●	●				●[3]	
RL (10-160)				●[4]	●	●	●				●[3]	
AG (40-160)				★	●	●	●				●[3]	★
FR					●	●	●					
TPZ				●	●	●	●					
RFL	●	●	●	●	●		●				●	●
RFH	●	●						●			●[5]	●
TC	●	●	●	●	●	●	●	●	●	●	●	●
OS	●	●	●	●	●	●	●				●	●

NOTES:

Land Use Designations

C = Commercial
R&D = Research & Development
HDR = High-Density Residential
I = Industrial
LDR = Low-Density Residential
MDR = Medium-Density Residential
MFR = Multifamily Residential
NR = Natural Resource
OS = Open Space
RR = Rural Residential
AL = Agricultural Lands
TR = Tourist Recreational

Zones	Land Use Designations											
	MFR	HDR	MDR	LDR	RR	AL	NR	C	R&D	I	OS	TR

Zones

AG (40-160)	=	Agricultural Grazing
CC	=	Commercial, Community
CG	=	Commercial, General
CL	=	Commercial, Limited
CM	=	Commercial, Main Street
CPO	=	Commercial Professional Office
CR	=	Commercial, Regional
FR	=	Forest Resource
I	=	Industrial
LA (10-160)	=	Limited Agricultural
OS	=	Open Space
PA (10-160)	=	Planned Agricultural
R&D	=	Research & Development
R1	=	Single-unit Residential
R1A	=	One-acre Residential
R20K	=	Single-Unit Residential
R2A	=	Two-acre Residential
R3A	=	Three-acre Residential
RE (5-10)	=	Residential Estate
RFH	=	Recreation Facility-High
RFL	=	Recreation Facility-Low
RL (10-160)	=	Rural Lands
RM	=	Multi-Unit Residential
TC	=	Transportation Corridor
TPZ	=	Timber Production Zone

● = Consistent with General Plan Policy.
Δ = Consistent when combined with the Platted Lands (-PL) Overlay Only.
★ = Consistent when in a Williamson Act Contract.

[1] As part of a mixed use project.
[2] RE-10, only.
[3] With a conservation easement.
[4] LA-10, PA-10 and RL-10 only.
[5] When inside a Community Region.

The main changes to the Zoning Ordinance being proposed are summarized below. The full text of the ZOU is available at the locations described in Section 2.4 above.

- Change zone designations as necessary so the zoning map for all parcels in the county conforms to the General Plan land use designations for those parcels. This consists of re-zoning individual parcels that currently have zoning inconsistent with the General Plan to make them consistent with the General Plan. As shown in Table 2-2, a given General Plan land use designation may have more than one consistent zoning classification. The changes generally adopt the least intensive consistent zone.
- Eliminate inconsistent provisions in the Zoning Ordinance.

- Add provisions to carry out the General Plan Implementation Measures.
- Zones were added and deleted as needed to ensure that the Zoning Ordinance is consistent with applicable state and federal laws, as well as the General Plan policies. The following new zones were added: Rural Lands (RL), Forest Resources (FR), Agricultural Grazing (AG), Limited Agriculture (LA), Commercial Regional (CR), Commercial Community (CC), Commercial Limited (CL), Commercial Main Street (CM), Industrial Light (IL), Industrial Heavy (IH), Recreation Facility—Low (RFL), and Recreation Facility—High (RFH). The following zones were deleted: Unclassified (U), Agriculture (A), Residential-Agricultural (RA), Exclusive Agriculture (AE), Select Agricultural (SA), Agricultural Preserve (AP), General Commercial (CG), Planned Commercial (CP), Limited Multifamily (R2), Tourist Residential (RT), and Residential Agricultural (RA). Combining zone districts (e.g., Historical, Community Design) would be created to identify land that needs additional protection of resources or protection of public health and safety, and a review process would be established to more effectively implement General Plan policies and related ordinances.
- Create combining zone districts (e.g., Historical, Community Design, etc.) to identify land that needs additional protection of resources or protection of public health and safety, and establish a review process to more effectively implement General Plan policies and related ordinances.
- Establish new commercial zones reflecting a range of development intensities that specify the types, designs, and locations of commercial uses consistent with the General Plan. Proposed zones are: Commercial Regional (CR), Commercial General (CG), Commercial Community (CC), Commercial Professional Office (CPO), Commercial Limited (CL), and Commercial Mainstreet (CM). Also create a Rural Commercial (CRU) zone that would be permitted within the Rural Region of the General Plan.
- Reorganize the Zoning Ordinance for ease of use. The existing Zoning Ordinance includes extensive lists of land uses that are allowed by right or by special use permit for each zoning classification. The ZOU makes extensive use of tables to identify the types of development that are allowed by right, and those allowed upon approval of a conditional use permit (CUP), development plan permit, administrative permit, temporary use permit, and minor use permit. Development standards, such as parking and allowable noise levels, are similarly presented in tabular form for ease of reference.
- Expand allowed uses in the agricultural and rural lands zones to provide opportunities for agricultural support, recreation, and rural commercial activities, including Ranch Marketing on agricultural grazing land. Ranch Marketing would be allowed by right or upon approval of a CUP, administrative permit, temporary use permit, and minor use permit, depending on the particular use.
- Increase allowed uses in the rural regions to provide additional agricultural support, recreation, home occupation, and other rural residential, tourist serving, and commercial uses.
- Provide a range of intensities for home occupations, based on size and zoning of parcels, and establish standards for the use of accessory structures, ingress and egress of customers, and number of employees. This includes provisions for “cottage food operations” (small, home-based producers of food for commercial sale) as now allowed under state law.
- Establish a procedure to request reasonable accommodation for persons with disabilities seeking equal access to housing under the Federal Fair Housing Amendments Act of 1988 and the California Fair Employment and Housing Act in the application of zoning laws and other land

use regulations, policies, and procedures when consistent with the General Plan and Zoning Ordinance.

- Modify zoning for Williamson Act contracted and rolled out land to reflect the General Plan land use designation.
- Create standards (master plans) for proposed mixed use and traditional neighborhood design development on commercial and multi-family zoned parcels to provide a streamlined approval process.
- Create standards for single family detached development proposed in multi-family zones.
- Create a standard to allow a limited percentage of commercial use in proposed mixed use development in multi-family zones.
- Provide multiple industrial zones with varying intensities to specify the type, design, and location of industrial uses.
- Provide alternative options for open space requirements that are part of a planned development to provide more flexibility and incentives for infill development and use that focus on recreation in Community Regions and Rural Centers.
- Amend the zoning map to include a historical overlay zone district to the historical townsites of El Dorado and Diamond Springs, consistent with adopted General Plan and Zoning Ordinance policies.
- Establish standards, including setbacks from lakes, rivers, and streams to avoid and minimize impacts on wetlands and sensitive riparian habitats.
- Establish standards for hillside development, including limitations on the development of slopes that are 30% (i.e., 30 feet of rise for every 100 feet of horizontal distance) or greater. These include the method for calculating average slope.
- Provide opportunities for recreational uses on Timber Production Zone land that is compatible with timber management and harvesting.

2.4.3 Community Design Standards[3]

The County is developing a new and/or updated Design and Improvement Standards Manual (DISM)/Land Development Manual (LDM), or successor document that will set out development standards to augment those already in the Zoning and Subdivision Ordinances. While the DISM/LDM, or successor document, is still under development, the County is adopting specific standards on the following subjects. These standards would be adopted by resolution at the same time as adoption of the new Zoning Ordinance. A full copy of the proposed language is available on the County's website <http://www.edcgov.us/Government/LongRangePlanning/LandUse/TGPA-ZOU_Main.aspx> (in the Zoning Ordinance Update tab), and at the County offices whose address is on the front of the Recirculated DEIR.

[3] The Mixed Use Development Design Manual proposed as part of the DISM/LDM, or successor document, has been analyzed in the DEIR that was circulated for review in March 2014. Therefore, review of that design manual is not included in the Recirculated Draft EIR.

Landscaping and Irrigation Standards

The County currently does not have comprehensive requirements for landscaping. The proposed standards are intended to comply with Government Code Section 65591, et seq., which requires the County to adopt water efficient landscaping standards.

The Landscaping and Irrigation Standards would apply to all ministerial and discretionary development for multi-unit residential, industrial, research and development, commercial, civic, and utility uses, with the following exception. Commercial uses on agricultural or resource zoned land would only be required to install landscaping as a buffer for a permanent parking lot adjoining a public road and as shade within a permanent paved parking lot. A landscape plan would be required to be submitted prior to issuance of any building permit. The landscaping would be required to be installed prior to issuance of a certificate of occupancy.

The Landscaping and Irrigation Standards include:

- Specific requirements for landscape buffers along road frontages and property lines, including where industrial, research and development, commercial, civic, and utility uses adjoin residentially zoned lots.
- General landscaping standards such as minimum tree and shrub density, a requirement that 50 percent of the plants used must be drought-tolerant species, a limit on lawn of 10 percent of the landscaped area, minimum size of plant materials used in a new landscape, and mulching standards.
- Landscaping in paved parking lots with five spaces or more to ensure that mature trees will provide at least 50 percent shade coverage.
- Irrigation standards, landscape maintenance and protection requirements, and requirements for upgrading non-conforming landscaping when there is a change in use or whenever additional parking is required due to an intensification of use or expansion of a structure.

A key element of the Landscaping and Irrigation Standards is water efficient landscaping. The Standards describe the minimum contents of a water efficient landscape plan. This would include project information; the landscape design specifying plant selection, grouping, and detailed irrigation plans; documentation of the water efficiency of the landscape design; and establishment of a water budget and maximum applied water allowance for the site. Specific standards would be established for the irrigation plan and its design.

A water efficient landscape plan would be required for the following uses:

- New construction and rehabilitated landscapes requiring a permit with a landscape area equal to or greater than 2,500 square feet for industrial, research and development, commercial, civic, or utility uses, and developer-installed landscaping in single- and multi-unit residential development.
- New construction landscapes that are homeowner-provided and/or homeowner-hired in single- and multi-unit residential projects, with a total landscape area equal to or greater than 5,000 square feet and only when a building or grading permit is required for said landscaping installation.

- New and rehabilitated cemeteries - limited to a Water Efficient Landscape Worksheet, landscape and irrigation maintenance schedule, irrigation audits or surveys, and irrigation water use analysis by the local water district.
- Existing cemeteries and landscapes limited to irrigation audits or surveys and irrigation water use analysis by the local water district addressing water waste prevention.

The following would be exempt from the requirement for a water efficient landscape plan:

- Registered local, state, or federal historical sites.
- Ecological restoration projects where the site is intentionally altered to establish a defined, indigenous, historic ecosystem and that do not require a permanent irrigation system.
- Mining reclamation projects that do not require a permanent irrigation system.
- Plant collections, as part of public arboretums and botanical gardens.
- Commercial agricultural operations.

The Landscaping and Irrigation Standards also contain provisions for the auditing of water use for existing landscapes. An audit would be required at least every five years for existing landscaped areas, one acre or more in size, to which a local water district provides water, including golf courses, green belts, common areas, multi-unit residential development, schools, businesses, parks, cemeteries, and publicly owned landscapes. An audit would not be required when the local water district determines, based on an irrigation water use analysis of meter readings and billing data, that the existing landscape area does not exceed the maximum applied water allowance for the project site.

Mobile Home Park Design Standards

The existing Zoning Ordinance establishes the Mobile Home Park (MP) zone district, including design standards for mobile home parks. The standards include setback, lot area, yard area, building and mobile home height limits, internal street, boat and trailer storage, landscaping, fence, utilities, and parking requirements.

The ZOU includes a Mobile/Manufactured Home Parks (-MP) overlay district. As proposed, the –MP district does not contain design standards and stated that such standards would be found in the DISM/LDM, or successor document. Mobile Home Park Design Standards are now proposed to be adopted at this time.

The proposed Mobile Home Park Design Standards are identical to the provisions of the existing Zoning Ordinance.

Outdoor Lighting Standards

The existing Zoning Ordinance does not have comprehensive standards for outdoor lighting. These standards fill that need by establishing limits on the intensity of outside lighting and standards for outdoor lights at businesses, residences and outdoor sports and performance facilities.

Any applicant of a commercial, industrial, multi-unit residential, civic, or utility project that proposes to install outdoor lighting shall submit plans for such lighting, to be reviewed and approved by the Planning Director as a part of an Administrative Permit. If the project requires a

Design Review, Conditional/Minor Use Permit, or Development Plan Permit, the lighting plan would be included as a part of that application, and subject to approval by the review authority. The lighting plan would be required to include, at a minimum, lighting specifications, a site plan, photometric plan, and a "lighting inventory" (a list of the exterior lamps to be used on site, their intensities, and calculated lumens of illumination per acre). The lighting inventory would be required to be completed and certified by the design professional prior to the issuance of a building permit issuance and by the licensed contractor prior to final occupancy.

The Outdoor Lighting Standards would establish outdoor lighting limits based on zoning designations and their locations within designated Community Regions, Rural Centers, or Rural Region. In mixed-use projects, the limits would be based on the sum of each percentage of the site dedicated for commercial and residential uses.

The proposed outdoor lighting limits are illustrated in the following table.

Table 2-3. Outdoor Lighting Limits

	Lumens per Acre		
Zones	**Community Regions**	**Rural Centers**	**Rural Region**
C, CPO, CG, I, R&D, RFH	100,000	50,000	25,000
RM, NS, RFL, OS, TC	50,000	25,000	

The Outdoor Lighting Standards for all development in commercial, industrial, research and development, and multi-unit residential zones, as well as civic and utility lighting in any zone, include the following:

- Pole mounted fixtures would be limited to a maximum height of 20 feet above grade.
- Top-mounted luminaires to illuminate parapet signs would be limited to a maximum height of 25 feet, as measured at the highest point of the fixture to the finished grade.
- Roof-mounted luminaires would be prohibited.
- Security lighting would be required to be activated by motion sensors and remain in the "on" mode for a maximum of 10 minutes.
- Light fixtures mounted under gas station or convenience store pump area canopies would be required to be shielded from illuminating the sky.
- Lots within the Historic District (-DH) Combining Zone may be allowed some leeway from shielding requirements in order to maintain a certain visual character in keeping with the historic period.
- Search lights, laser source, or similar high intensity lighting shall not be permitted except in emergencies by police, fire, or other emergency personnel.
- Mercury vapor lamps would be prohibited.
- Outdoor display lighting, such as vehicle sales and rental lots, and building material sales display areas would be required to be turned down to 25 percent or less of the existing illumination level or switched to security lighting within 30 minutes of closing or in Community Regions by 11:00 pm, in Rural Centers by 10:00 pm, and in the Rural Region by 9:00 pm.

Residential lighting, including single- and multi-family development, would be required to meet the following additional standards:

- Lighting installation would be limited to those areas adjacent to buildings, walkways, driveways, or activity areas (swimming pools, spas, outdoor dining areas, barns, and other similar uses) in close proximity to the residence or activity area.
- An outdoor luminaire would be required to be fully shielded if rated greater than 1,000 initial lumens (equivalent to one 60 watt incandescent lamp).

The Outdoor Lighting Standards include the following provisions for outdoor sports and performance facilities:

- A lighting plan, prepared by a design professional, would be submitted with the proposed lighting installation. The lighting plan would be required to be based on a dual system separating the performance area, such as the playing field, track, stage, or arena from the remainder area of the site. Floodlights in the performance area would be limited to aiming no higher than 62 degrees below the vertical plane, and should include internal louvers and external shields to focus light on the performance area in order to eliminate light trespass.
- The main lighting of the performance area would be required to be turned off no later than 30 minutes after the end of the event.
- The remainder of the site would be subject to the lighting curfews listed above.

Parking and Loading Standards

The existing Zoning Ordinance contains extensive parking and loading area requirements in Chapter 17.18. These include parking lot design standards, off-street parking requirements, provisions for modifying parking requirements, specific off-street parking space requirements by type of land use, loading area standards, parking space size requirements, and parking lot landscaping.

The ZOU includes standards for off-street parking spaces in proposed Chapter 17.35, but does not include many of the features of the existing Ordinance in favor of including them in the future DISM/LDM, or successor document. The County is now proposing to divide the Parking and Loading Standards in the existing Zoning Ordinance between the ZOU and the DISM/LDM, or successor document. The General Parking and Loading Standards now in Chapter 17.35 of the Zoning Ordinance, including Content [Section 17.35.010], Definitions [17.35.020] and Off-Street Parking and Loading Requirements [17.35.030], would remain in that section in the ZOU, while the detailed standards and construction and maintenance requirements would be moved into the DISM/LDM, or successor document. This would make the ZOU's parking requirements similar to the existing Zoning Ordinance. The main differences are described below.

The Parking and Loading Standards would require submittal of a parking plan showing all off-street parking spaces, aisles, and access points along with a building permit application for construction of any building or structure that requires parking, for an expansion of an existing use, when a more intensive land use is being established, and at the time of submittal of any discretionary application. The parking improvements would be required to be built prior to occupancy. However, the Standards does not specify the minimum size for standard and compact auto parking spaces and defers to the Building Code for the number and size of required handicap spaces. The Standards would reduce the number of compact car spaces in lots where 10 or more spaces are provided from not more than 35% of the total spaces to not more than 10%. Similarly, the Standards would reduce

the compact spaces at multi-unit residential developments of 10 or more units from not more than 50% of the total spaces to not more than 20%.

The Standards would add new specifications for motorcycle and bicycle parking, drive-through facilities, and voluntary carpool/vanpool parking. It would provide additional specific requirements for shared parking facilities. It would expand the criteria for consideration of an increase or decrease in the number of parking spaces to include payment of in-lieu fees to support mass transit facilities and implementation of a transportation demand management plan. A new provision would allow the required off-street parking to be reduced on a one-to-one basis where on-street parking is available. Off-street parking for commercial and civic uses in a Community Region or Rural Center could be reduced by 10% when the parking area is located behind the structure so it is not visible to the passing public and there is a transit stop (i.e., bus stop) within 300 feet of the site.

The Standards would revise the requirements for loading bays and for passenger loading/unloading areas, but not substantially from the existing Zoning Ordinance. The Standards would also revise the existing requirements for parking lot design. The primary changes are the elimination of: specified parking space sizes; standards for angle and parallel parking; access driveway location and width; and detailed specifications for parking lot construction (e.g., pavement thickness, type of pavement).

Research and Development Design Standards

The existing Zoning Ordinance establishes the Research and Development (R&D) zone district, including design standards for landscaped buffers, parking lot landscaping, architectural design, and trash collection and storage areas.

The ZOU carries over the R&D zone to provide areas for the location of high technology, non-polluting manufacturing plants, research and development facilities, corporate and industrial offices, and support service facilities in a rural or campus-like setting, such as a business park environment. However, the R&D district proposed in the ZOU does not contain design standards and states that such standards will be found in the DISM/LDM, or successor document. The County now proposes to adopt Research and Development Design Standards at the same time as the ZOU.

Overall, the proposed design standards are similar to those found in the R&D zone that is currently in effect. However, the proposed standards do not include the existing requirement that parking and loading spaces must be located an average of thirty feet and not less than twenty feet from the street right-of-way, and if visible from the street shall be screened from view by landscaped berms a minimum of three to five feet in height. There is no equivalent requirement in the proposed Research and Development Design Standards, Parking and Loading Standards or Landscaping and Irrigation Standards.

The proposed Landscaping and Irrigation Standards, as they apply to the proposed R&D district, include provisions for landscaped buffers along road frontages and adjoining residential properties that are similar to those now found in the existing R&D zone. The key changes from existing standards are that the proposed Landscaping and Irrigation Standards are more detailed regarding planting requirements, do not allow the use of a landscaped chainlink fence as a buffer, and require a higher density of plantings than does the existing R&D zone.

2.5 Public Involvement

2.5.1 Community Outreach

The first phase of public outreach for the project consisted of a series of community meetings in March 2012. Evening meetings were held in the communities of El Dorado Hills, South Lake Tahoe, Somerset, Cameron Park, Cool, and El Dorado. The meetings provided an opportunity for residents to learn about the various project components, the decision-making process, and opportunities for further involvement. These meetings were advertised through the County's project-dedicated website, the County homepage, through press releases distributed to local media, and through direct email by staff to key individuals and organizations. Attendance ranged from a single person at the Tahoe meeting to more than 60 people at the El Dorado Hills meeting. A concluding press release was provided to local media.

The second phase of public outreach for the project centered on the initial scoping meetings held in May and June of 2012. In addition to the daytime County Planning Commission meeting and evening County Agricultural Commission meetings in Placerville, evening scoping meetings were held in the following seven communities: El Dorado, El Dorado Hills, Greenwood, Somerset, Camino, South Lake Tahoe, and Cameron Park. The scoping meetings were advertised through a press release distributed to local media, posted on the project and County websites, distributed through direct email by staff, and through the posting of approximately 50 flyers in key community gathering places throughout the county. Many local organizations, such as chambers of commerce, also helped spread news and information about project-related meetings and information. All project-related information was posted to the dedicated project website, including press releases, meeting schedules, County Board of Supervisors items, and key documents. By the time of the scoping meetings, there were over 1,400 email subscriptions to the project or associated websites. All subscribers were notified of any updates to the project website.

2.5.2 Notice of Preparation

CEQA requires that prior to preparing an EIR the lead agency must provide public notice of its intention to do so and solicit views on environmental issues for a period of at least 30 days. This is called the Notice of Preparation.

The first Notice of Preparation (NOP) was released on May 25, 2012 for a 45-day public comment period. The NOP and related documents were posted on the County's project-dedicated website, and all subscribers to the website were notified. The County Board of Supervisors then held a week-long workshop to review the ZOU, take public comments, and provide County staff with direction on how to revise the draft ordinance. Staff revised the draft and returned to the Board during three additional agenized items to review revisions and authorization to finalize the draft ZOU.

A second NOP reflecting the revised ZOU was released on October 1, 2012 for a 30-day public comment period. As before, project-related information was posted on the dedicated project website, and all subscribers to the website were notified.

The Community and Economic Development Advisory Committee also directly notified hundreds of individuals and organizations about project-related notifications, meetings, and documents through its Constant Contact email announcements.

Numerous articles have appeared in local media publications as a result of the outreach and meeting opportunities provided during the project process.

2.6 Project Alternatives

This DEIR examines a number of feasible alternatives to the project that meet most of the objectives listed above while reducing one or more of the project's significant environmental impacts. The alternatives are described and analyzed in Chapter 4, *Alternatives*.

2.7 Required Approvals

The project requires the following approvals in order to be implemented:

- Adoption of the TGPA by resolution of the County Board of Supervisors.
- Adoption of the ZOU by the County Board of Supervisors.
- Adoption of proposed new design guidelines for mixed use and multi-family development by the County Board of Supervisors.

2.8 Related Projects

The County is initiating a number of other projects related to implementing its General Plan. Although related to the General Plan, these County projects are being undertaken separately from the TGPA, ZOU, and design guidelines being considered here. The 2013 Housing Element Update was adopted October 29, 2013. The other projects will also be considered for approval separately.

- Biological Resources General Plan Policies Amendments and EIR. The County is reinitiating the process of considering changes to the biological resources policies. At such time as draft policies are developed, an EIR will be prepared to analyze their potential impacts before the County takes action to approve, modify, or reject the proposed changes.
- Updated Sign Ordinance
- Privately-initiated General Plan amendment applications that propose to change land use designations are not included in or facilitated by the project. Unlike the TGPA and ZOU, such private projects are not proposed by the County Board of Supervisors. As do all counties in California, El Dorado County allows land owners to request changes to the adopted General Plan and Zoning Ordinance. Separate CEQA analyses are underway for private General Plan amendment proposals unrelated to the project, but the County is not obligated to approve any of those proposals. However, the County must include major proposed projects in its discussion of future contributors to significant cumulative impacts according to CEQA Guidelines Section 15130 and related case law, (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099; *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98). Relevant private projects are considered in the cumulative impact analyses of this DEIR.
- Design and Improvement Standards Manual (DISM)/Land Development Manual (LDM), or successor document. The County is updating this document that will consolidate the basic

standards for land development in a single document. This work effort is on-going and has no specific date of completion. The Community Design Standards described above are the only portions of the DISM/LDM or successor document to be considered at this time.

3.9 Transportation and Traffic

This analysis of the potential impacts of the project on the transportation system is based on the technical traffic modeling analysis prepared by Kimley-Horn and Associates (2014) provided in Appendix D.

3.9.1 Existing Conditions

Regulatory Setting

State

The California Department of Transportation (Caltrans) prepares transportation ~~corridor~~ concept reports (T~~C~~CRs) for State Highway Routes as long-range planning documents. These long range planning documents "identify existing route conditions and future needs, including existing and forecasted travel data, a concept [i.e., desired] level of service (LOS) standard, and the facility needed to maintain the concept LOS and address mobility needs over the next 20 years" (California Department of Transportation 2010).

In the T~~C~~CRs, facility information (e.g., roadway widths, number of lanes) is presented by segment along the highway corridor. The T~~C~~CR represents a preliminary approach to identifying potential system improvements and estimating the costs of those improvements. T~~C~~CRs are revised as conditions change and new information becomes available.

T~~C~~CRs are not regulatory documents. Their purpose is to help guide future investment in the transportation corridor and identify the types of improvements to be installed. Improvements are also programmed through the regional transportation planning process described below. The nature and the size of the improvements identified in the T~~C~~CR may change as the improvement project is planned and designed in more detail.

Caltrans also prepares corridor system management plans (CSMPs) for State Highway corridors. A CSMP is a comprehensive, integrated management plan for increasing transportation options, decreasing congestion, and improving travel times in a transportation corridor. ~~Unlike a TCCR that focuses solely on a particular State Highway Route, a~~A CSMP includes all travel modes in a defined corridor: highways and freeways, parallel and connecting roadways under local jurisdiction, public transit (bus, bus rapid transit, light rail, intercity rail) systems and bikeways. CSMPs also incorporate intelligent transportation technologies, which include ramp metering, coordinated traffic signals, changeable message signs for traveler information, incident management, bus/carpool lanes and car/vanpool programs, and transit strategies. Each CSMP identifies current management strategies, existing travel conditions and mobility challenges, corridor performance management, planning management strategies, and capital improvements (California Department of Transportation 2014a).

LOS is a general measure of traffic operating conditions that assigns a letter grade from A (the best) to F (the worst). These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. The LOS grades are generally defined as follows.

- **LOS A**—free flowing conditions.

- **LOS B**—speeds at or near free-flow speed, but presence of other users begins to be noticeable.
- **LOS C**—speeds at or near free-flow speed, but freedom to maneuver is noticeably restricted.
- **LOS D**—speeds begin to decline slightly with increasing flow; freedom to maneuver is more restricted.
- **LOS E**—operating conditions at or near roadway capacity; even minor disruptions to the traffic stream can cause delay.
- **LOS F**—breakdown in vehicle flow; queues form quickly behind point in the roadway where the arrival flow rate temporarily exceeds the departure rate.

U.S. Highway 50

~~The *U.S. Highway 50 Transportation Corridor Concept Report* (TCCR) (California Department of Transportation 2010) presents travel data for U.S. Highway 50 from its origin at Interstate (I-) 80 near Sacramento to the Nevada state line. The TCCR only provides segment summaries for the portion of the highway from the Cedar Grove exit in El Dorado County to the Nevada state line. The *U.S. 50 Corridor System Management Plan* (California Department of Transportation 2009) now serves as the TCCR for U.S. Highway 50 from its origin at I-80 in West Sacramento to the Cedar Grove exit (U.S. Highway 50 is the only highway in El Dorado County with a CSMP). Together, these reports establish the concept LOS for specific corridor segments. The long-range improvements are identified to bring the existing facility up to the design concept expected to adequately serve 20-year traffic forecasts. In addition, the ultimate design concept for the facility is also identified for conditions beyond the immediate 20-year design period. Table 3.9-1 shows the existing and concept LOS and facility improvements.~~

Caltrans has prepared a combined TCR/CSMP for U.S. Highway 50. The *Transportation Concept Report and Corridor System Management Plan, United States Route 50* (2014 TCR/CSMP) adopted in June 2014 covers U.S. Highway 50 from its origin at Interstate (I-) 80 near Sacramento to the Nevada state line. The 2014 TCR/CSMP is a long-term document, with a base year of 2012, a horizon year of 2035 (20-year build), and an "ultimate facility concept" (ultimate concept) after 2035. The 20-year build is based on planned and programmed programs and strategies. The ultimate concept includes programs and strategies for the corridor reaching beyond the 20-year build that are neither funded nor programmed, including future construction of high-occupancy vehicle (HOV) and auxiliary lanes. (California Department of Transportation 2014b)

The ultimate concept LOS performance standards established under the 2014 TCR/CSMP are LOS D in rural areas and LOS E in urban areas. The 2014 TCR/CSMP recognizes that a number of segments within the US Highway 50 corridor cannot be improved to perform at the ultimate concept urban area standard due to financial, environmental, right of way, or political constraints. The 2014 TCR/CSMP anticipates that for those segments, targeted operational improvements, Intelligent Transportation Systems (ITS), and Integrated Corridor Management (ICM) will be needed in order to achieve LOS D.

The 2014 TCR/CSMP summarizes its proposed projects and strategies as follows:

> The proposed projects and strategies on US 50 are limited by the Right of Way (ROW) constraints on the facility, as well as by financial, environmental, and political factors. In the urban section of US 50, existing development limits land purchases for highway expansion, and in the rural section land purchases are limited by National Forest land and environmental

constraints. The largest projects on the facility consists of a bus/carpool (HOV) lane expansion from the SR 99/51 junction to Watt Avenue (Ave.) interchange and from the Cameron Park Road interchange to the Missouri Flat Road interchange. There are also a significant number of operational and Intelligent Transportation Systems (ITS) improvements that will be constructed on the facility. These improvements, to be constructed throughout the facility, include the installation of various ITS technologies, auxiliary lanes, transition lanes, passing lanes, ramp metering, intersection improvements, interchange improvements, ramp widening, bus/carpool lanes and connectors and other improvements appropriate to the context of the interchanges to be improved.

Integrated Corridor Management (ICM) is a part of the ultimate facility concept for the US 50 corridor. As an operational management strategy, it is particularly in locations where the ultimate concept LOS performance is unattainable on the 20-year buildout facility, and where further buildout cannot occur due to constraints and limitations such as those described above. ICM is a multimodal approach to managing transportation assets, allowing partner agencies to manage the transportation corridor as an integrated asset in order to improve travel time reliability and predictability, help manage congestion and provide travelers with better information and more choices.

Table 3.9-1 summarizes the existing, 20-year build, and ultimate concept LOS and facility improvements for all 21 segments of the U.S. Highway 50 corridor. Note that Caltrans considers segments 1-14 to be urban, while segments 15-21 are considered rural. Some rural segments have urban characteristics and Caltrans has assigned those an urban LOS E.

The 2014 TCR/CSMP describes its approach to the LOS D and E performance standards as follows (emphasis in original):

… A local agency may set a higher LOS threshold standard consistent with community wishes and other local concerns. Caltrans as the owner and operator of the facility establishes the Concept Level of Service as the **minimum acceptable level of service**. Any threshold standard LOS established by a local agency for the State Highway System (SHS) should not be lower than the Caltrans Concept LOS…

Caltrans regularly reviews proposed local development projects during the CEQA process for potential impacts on the state highway system (SHS) under their Intergovernmental Review program. The 2014 TCR/CSMP states:

LOS is one performance measure utilized by Caltrans in the review of proposed projects during the Intergovernmental Review/CEQA development review process to determine if proposed projects might cause significant impacts to the operation of the SHS. In segments of the SHS main line where the existing LOS is at or below the Concept LOS, any land use development should not directly or cumulatively lower the existing LOS. Any impacts exceeding this threshold will be viewed by Caltrans as significant and warrant appropriate mitigation. Any CEQA lead agency should coordinate with Caltrans as early in the development review process as feasible to jointly determine the most appropriate threshold standards of significance.

Although Caltrans will use the LOS standards from its 2014 TCR/CSMP to inform its comments when reviewing development projects as a responsible agency under CEQA, it cannot dictate to the lead agency what will be that agency's significance thresholds. CEQA allows a lead agency, such as El Dorado County, to establish the thresholds of significance that will apply to its own CEQA analysis

(CEQA Guidelines Section 15064; *Save Cuyama Valley v. Santa Barbara County* (2013) 213 Cal.App.4th 1059; *Mount Shasta Bioregional Ecology Center v. County of Siskiyou* (2012) 210 Cal.App.4th 184). Conversely, while such thresholds apply to the lead agency's determination, they are not binding on responsible agencies such as Caltrans.

In any case, County roads are required to meet the standards set out in the General Plan under the consistency requirements established in Government Code Section 65402 and General Plan Policy 2.2.5.2. General Plan Policy TC-Xa and the accompanying Table TC-2 state that certain County roads and certain segments of U.S. Highway 50 are allowed to operate at LOS F. Policy TC-Xa was adopted by initiative (Measure Y of 2008 and Measure Y of 1998), requires a 4/5ths vote of the Board of Supervisors for amendment and is unlikely to be amended by Board action. The TGPA/ZOU EIR must rely on Policy TC-Xa to retain consistency between the CEQA analysis and the clear policies for traffic impact set out in the General Plan.

Table 3.9-1. U.S. Highway 50 ~~Transportation Corridor Concept~~2014 TCR/CSMP Report Data

Seg-ment	Description	County	Current LOS	20-Year Build Year LOS[a]	~~20-Year~~ Ultimate Concept LOS[b]	Existing Facility[~~b~~c]	20-year Build Facility[~~c~~d]	Ultimate Facility[~~d~~e]
1	I-80 to Yolo/ Sacramento County Line	Yolo	~~F~~ E	F	~~F~~ E	8F (6F btw Jefferson Blvd ramps)	8F+~~2HOV+ Aux Lanes~~ITS	8F+2HOV+ Aux Lanes + ITS + ICM
2	Yolo/Sacramento County Line to State Routes (SR) 99 and 51	Sacramento	F	F	~~F~~ E	8F	8F+2HOV+ Aux Lanes+ITS	8F+2HOV+ Aux Lanes + ITS + ICM
3	SR 99 and SR 51 to Watt Avenue	Sacramento	F	F	~~F~~ E	8F	8F+2HOV+ Aux Lanes+ITS	8F+2HOV+ Aux Lanes + Transition + ITS + ICM
4	Watt Avenue to Zinfandel Drive	Sacramento	F	F	~~F~~ E	8F + 2HOV	8F+2HOV+ Aux Lanes+ITS	8F+2HOV+ Aux Lanes + ITS + ICM
5	Zinfandel Drive to Sunrise Blvd	Sacramento	E	F	~~F~~ E	8F + 2HOV	8F+2HOV+ Aux Lanes+ITS	8F+2HOV+ Aux Lanes + Transition + ITS + ICM
6	Sunrise Blvd to Folsom Blvd	Sacramento	~~E~~ F		~~F~~ E	6F+2HOV to Hazel Ave, 4F+2HOV to Folsom Blvd	~~6F+2HOV+Aux Lanes to Hazel Ave~~ 8F+2HOV+ITS +Aux Lanes to Hazel Ave, 4F+2HOV+ITS +Aux Lanes to Folsom Blvd	8F+2HOV+ ITS + ICM + Aux Lanes to Hazel Ave.; 4F + 2HOV + ITS + ICM + Aux Lanes to Folsom
7	Folsom Blvd to Sacramento/ El Dorado County Line	Sacramento	~~D~~ F	F	~~F~~ E	4F+2HOV	4F+2HOV+ Aux Lanes+ITS	~~6F+2HOV+ Aux Lanes~~ 4F+2HOV+Aux Lanes +ITS + ICM
8	Sacramento/El Dorado County Line to ~~Cameron Park Drive~~Latrobe Road	El Dorado	~~E~~ F	F	~~F~~ E	4F + 2HOV	4F+2HOV+ Aux Lanes+ITS	~~6F+2HOV+ Aux Lanes~~ 4F+2HOV+Aux Lanes +ITS + ICM
9	Latrobe Road to Bass Lake Road	El Dorado	E	F	E	4F + 2HOV	4F+2HOV+ Aux Lanes+ITS	4F+2HOV+Aux Lanes +ITS + ICM
10	Bass Lake Road to Cameron Park Drive	El Dorado	D	D	E	4F + 2HOV	4F+2HOV+ Aux Lanes+ITS	4F+2HOV+Aux Lanes +ITS
~~9~~ 11	Cameron Park Drive to ~~Missouri Flat road~~ Ponderosa Road	El Dorado	~~E~~ D	D	E	4F	4F+2HOV+Aux Lanes +ITS ~~to Greenstone Rd, 4F+ Aux Lanes to Missouri Flat Rd~~	~~6F+2HOV+Aux Lanes to Green-stone, 4F+2HOV +Aux Lanes to Missouri Flat Rd~~ 4F+2HOV+Aux Lanes +ITS

Seg-ment	Description	County	Current LOS	20-Year Build Year LOS[a]	~~20-Year~~ Ultimate Concept LOS[b]	Existing Facility[~~b~~c]	20-year Build Facility[~~c~~d]	Ultimate Facility[~~d~~e]
12	Ponderosa Road to Missouri Flat Road	El Dorado	C	C	E	4F	4F+2HOV+Aux Lanes + ITS to Greenstone Rd, 4F+ Aux Lanes + ITS to Missouri Flat Rd	4F + 2 HOV + Aux Lanes + ITS to Greenstone; 4F + Aux Lanes + ITS to Missouri Flat
~~10~~ 13	Missouri Flat Road to End of Freeway in Placerville	El Dorado	D	E	~~F~~ E	4F	4F~~+Aux Lanes~~	4F+Aux Lanes + ITS
~~11~~ 14	End of Freeway in Placerville to Bedford Avenue	El Dorado	~~D~~ C	C	~~E~~ D	4E + Merge Lanes (Eastbound)	4E + Merge Lanes + ITS	4E +Merge Lanes + ITS + ICM
~~12~~ 15	Bedford Ave to Cedar Grove Exit	El Dorado	~~D~~ C	C	~~F~~ E/D	4F to Smith Flat Rd, 4E to Camino~~, 4F to Cedar Grove~~	4F~~+Aux Lanes~~ to Smith Flat, 4E to Camino~~, 4F to Cedar Grove~~	4F+Aux Lanes + ITS to Smith Flat; 4E + ITS to Camino
~~13~~ 16	Cedar Grove Exit to 0.67 mile east of Sly Park Rd	El Dorado	~~D~~ B	C	~~F~~ E	4F	4F	4F + ITS

Seg-ment	Description	County	Current LOS	20-Year Build Year LOS[a]	~~20-Year~~ Ultimate Concept LOS[b]	Existing Facility[~~b~~c]	20-year Build Facility[~~c~~d]	Ultimate Facility[~~d~~e]
~~14~~ 17	0.67 miles east of Sly Park Road to Ice House Road	El Dorado	~~C~~ B	C	~~C~~ D	3C, 2.0 miles 4E, 5.3 miles 3C, 0.3 mile	3C, 2.0 miles 4E, 5.3 miles 3C, 0.3 mile	~~4E~~ 3C + ITS, 2.0; 4E + ITS, 5.3; 3C + ITS, 0.3 miles
~~15~~ 18	Ice House Road to Echo Summit	El Dorado	E	F	~~F~~ D	2C; 0.35 mile of 2-wy left-turn lane	2C; 0.35 mile of 2-way left-turn lane	2C + ITS + ICM; 0.35 mile of 2-way left-turn lane
~~16~~ 19	Echo Summit to SR 89 South	El Dorado	~~D~~ E	E	~~F~~ D	2C	2C	2C+ ITS + ICM + Bike Lanes
~~17~~ 20	SR 89 South/Luther Pass Road to State Route 89 North/Lake Tahoe Blvd	El Dorado	E	F	~~F~~ D	~~2C, 4.23 miles~~ 3C, 0.86 miles; 2C, 3.64 miles; 5C, ~~0.60~~ 0.61 mile	~~2C, 4.23 miles~~ 3C, 0.86 miles; 2C, 3.64 miles; 5C, ~~0.60~~ 0.61 mile	~~4C, 4.10 miles~~ ~~5C, 0.73 mile~~ 3C + ITS + ICM, 0.86; 2C + ITS + ICM, 3.64; 5C + ITS + ICM, 0.61 miles
~~18~~ 21	SR 89 North/Lake Tahoe Blvd to State of Nevada	El Dorado	~~C~~ E	F	~~F~~ E	~~4C with 2-way left-turn lane~~ 5C	~~4C with 2-way left-turn lane~~ 5C	~~4C with 2-way left-turn lane~~ 5C + ITS + ICM + Bike Lanes

Source: California Department of Transportation ~~2010~~2014b.

[a] 20-Year Build Year = 2035

[b] Ultimate Concept LOS: The minimum acceptable LOS over the next 20 years.

[~~b~~c] Facility Type Codes: C = Conventional Highway; E = Expressway; F = Freeway; HOV = High Occupancy Vehicle lanes; Aux = Auxiliary lanes.

[~~c~~d] Concept Facility: The future roadway with improvements needed in the next 20 years. If LOS F, no further degradation of service from existing F is acceptable, as indicated by delay performance measurement.

[~~d~~e] Ultimate Facility: The future roadway with improvements needed beyond a 20-year timeframe.

State Route 49

The *Transportation Concept Report, State Route 49* (California Department of Transportation 2000) contains the 20-year improvement concept for State Route (SR) 49. The route concept recognizes the unique nature of SR 49 in terms of historical and topographic constraints, which preclude the possibility of significantly improving SR 49 on the existing alignment. As such, SR 49 would remain as a two-lane conventional highway through El Dorado County. Some improvements, such as widening to the Caltrans 40-foot pavement standard, were identified to achieve the full concept facility. LOS F is the concept LOS south of the community of El Dorado (mileposts 0.00–9.494) and through Placerville (mileposts 13.984–15.685). All other segments have an LOS E concept. Ultimately, some segments are recommended to be widened to four lanes or include spot improvements (i.e., passing lanes or improvements for bicycle and pedestrian travel). Table 3.9-2 shows the existing and concept LOS and facility improvements for the SR 49 segments in El Dorado County.

State Route 193

Within El Dorado County, the *State Route 193 Transportation Concept Report* (California Department of Transportation 2011a) accepts the concept service level for SR 193 as LOS E "due to significant topographic and environmental constraints that make capacity enhancement projects financially infeasible." SR 193 connects Cool to Georgetown and Georgetown to Placerville. The concept and ultimate facility remains at an existing two-lane conventional highway status. Although Caltrans does not forecast an increase in demand for this segment of SR 193, the concept report acknowledges the route's physical constraints such as narrow, steep, and winding sections and the high percentage of heavy vehicles on the route during timber and agricultural harvests.

State Route 153

The *Transportation Corridor Concept Report, State Route 153* (California Department of Transportation 2011b) contains the 20-year improvement concept for SR 153. State Route 153 is a two-lane conventional highway extending 0.5 mile west from SR 49 near Coloma to the James Marshall Gold Discovery Monument. The concept service level is LOS E, and no improvements other than routine maintenance are planned for this route.

Regional

Funding for transportation projects is programmed at the regional level through the regional transportation plan (RTP) process. An RTP is a planning document developed by regional transportation planning agencies such as the El Dorado County Transportation Commission (EDCTC) in cooperation with Caltrans and other stakeholders (e.g., El Dorado County and the City of Placerville). RTPs are required to be prepared per state (Government Code Section 65080 et seq.) and federal statute (23 United States Code [USC] 134–135 et seq.). RTPs are developed to identify transportation needs and provide a clear vision of the regional transportation goals, policies, objectives, and strategies to meet those needs. This vision must be realistic and within fiscal constraints. Transportation improvements that are expected to be funded from federal, state, or local sources—or any combination of all three sources—are included in the RTP's list of fiscally constrained projects. In the language of transportation planning, "fiscally constrained" means capable of being financed.

Table 3.9-2. State Route 49 Transportation Concept Report Data

Segments in El Dorado	Description	Current Facility[a]	Current LOS	Concept Facility[b]	Concept LOS[c]	Improvements Towards Concept Facility	Ultimate Facility[d]
1	Amador/El Dorado County line to Union Mine Rd.	2C	E	2C	F	Widen to 40' standard	2C
2	Union Mine Rd. south of El Dorado to Sacramento St. south of Placerville	2C	E	2C	E	Widen to 40' standard	2/4 E
3	Sacramento St. south of Placerville to junction of SR 193	2C	F	2C	F	Improve capacity and operations at SR 49/U.S. 50 junction	2/4 E
4	Junction of SR 193 to El Dorado/Placer County Line	2C	E	2C	E	Widen to 40' standard	2/4 E

Source: California Department of Transportation 2000.

[a] Facility Type Codes: C = Conventional Highway; E = Expressway; F = Freeway; HOV = High Occupancy Vehicle lanes; Aux = Auxiliary lanes.

[b] Concept Facility: The future roadway with improvements needed in the next 20 years. If LOS "F", no further degradation of service from existing "F" is acceptable, as indicated by delay performance measurement.

[c] 20-Year Concept LOS: The minimum acceptable LOS over the next 20 years.

[d] Ultimate Facility: The future roadway with improvements needed beyond a 20-year timeframe.

In this same vein, the Sacramento Area Council of Governments' (SACOG's) *Metropolitan Transportation Plan/Sustainable Communities Strategy for 2035* is a federally-mandated, long-range, fiscally-constrained transportation plan prepared for the six-county area that includes El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba Counties. Most of this area is designated a federal nonattainment area for ozone, indicating that the transportation system is required to meet stringent air quality emissions budgets to reduce pollutant levels that contribute to ozone formation. To receive federal funding, transportation projects nominated by cities, counties, and agencies must be consistent with the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). Consistency is measured based on whether the project was contained in the plan and its associated computer modeling of transportation and air quality impacts. In addition, any regionally significant transportation project planned for a city or county must be included in the MTP because of its potential effect on travel demand and air pollution. The MTP/SCS contains more than $1.85 billion in regionally significant transportation improvements for El Dorado County (Sacramento Area Council of Governments 2012: Appendix A). El Dorado County's Regional Transportation Plan is included as part of the MTP.

The *2013/16 Metropolitan Transportation Improvement Program* (MTIP) is a list of transportation projects and programs to be funded and implemented over the next 3 years. SACOG submits this document to Caltrans and amends the program on a quarterly cycle. The MTIP and its amendments are subject to air quality conformity analysis under federal regulations, which limit the use of federal funds for regionally significant, capacity-increasing roadway projects, to those that do not conflict with the region's air quality management plan.

The El Dorado County Regional Transportation Plan (RTP) 2010–2030 is El Dorado County's portion of the SACOG's Metropolitan Transportation Plan/Sustainable Communities Strategy for 2035 described above and is prepared by the El Dorado County Transportation Commission (EDCTC). The RTP consists of a Policy Element, Action Element, Financial Element, Air Quality Conformity, and an environmental document. The Policy Element describes the process for implementing the short- and long-term transportation strategies. The Action Element identifies the multi-modal projects that implement the RTP in accordance with the goals, objectives, and policies set forth in the Policy Element. Projects are included for both the short-term (up to 10 years) and long-term (20 years and beyond) horizons. Each transportation mode is addressed in the Action Element. The Financial Element summarizes the cost of implementing the projects in the RTP within a financially constrained environment. All anticipated transportation funding revenues are compared with the anticipated costs of the transportation projects identified in the Action Element. If shortfalls are identified, strategies are developed to potentially fund the otherwise unfunded projects. As the region's Metropolitan Planning Organization (MPO), SACOG has the responsibility for making findings of conformity required under section 176(c) of the federal Clean Air Act within the designated Sacramento Ozone Non-Attainment Area. Finally, the environmental document, a program EIR, is prepared for the RTP in accordance with CEQA.

Local

El Dorado County Parks and Trails Master Plan

The *El Dorado County Parks and Trails Master Plan* (El Dorado County 2012) was the first comprehensive Parks and Trails Master Plan to be prepared for the west slope area of El Dorado County. As directed by the Parks and Recreation Element of the 2004 El Dorado County General Plan, this master plan has been developed to provide long-term vision and direction for the

planning, implementation, and management of west slope park and trail resources provided by El Dorado County for the benefit of residents and visitors. The vision for parks and trails in El Dorado County is to offer access to a diverse selection of recreation opportunities that provide multiple benefits, including the following.

- Health and wellness for residents of all ages and abilities.
- Centers for community gathering and events.
- Enhanced sense of place and local identity.
- Protection for El Dorado County's unique natural and cultural resources.
- Economic development associated with recreation-based tourism and quality of life.

El Dorado County Bicycle Transportation Plan

The *El Dorado County Bicycle Transportation Plan* (El Dorado County 2010) provides a blueprint for the development of a bicycle transportation system on the western slope of El Dorado County. The El Dorado County Bicycle Transportation Plan that was adopted in 2010 by the El Dorado County Board of Supervisors is in compliance with California Streets and Highways Code (Sections 890–894.2, Appendix b), enabling the county to be eligible for State Bicycle Transportation Account funds.

The Bicycle Transportation Plan represents the efforts of the ~~El Dorado County Transportation Commission~~EDCTC staff, the Bicycle Transportation Plan Advisory Committee, El Dorado County, El Dorado Hills Community Services District, and numerous dedicated citizens in the area. The plan was developed with the overall goal of providing a safe, efficient, and convenient network of bicycle facilities that establish alternative transportation as a viable option in El Dorado County and neighboring regions. The plan addresses the following specific issues and objectives pertaining to non-motorized transportation.

- Bicycle commuting—develop a bicycle transportation system that enhances the safety and convenience of bicycling to neighboring jurisdictions, employment centers, residential neighborhoods, campgrounds, parks, education, commercial and other activity centers in El Dorado County.
- Safety and education—maximize bicycle safety.
- Implementation and maintenance—identify detailed and prioritized improvements in the El Dorado County Bicycle Transportation Plan.
- Land use development—integrate bicycle and pedestrian planning with other regional and community planning, including land use and transportation.
- Multi-modal integration—maximize multi-modal connections to the bicycle transportation system.
- Funding—obtain all possible funding for plan implementation.
- Connectivity—develop a well-connected bikeway system.
- The El Dorado Trail—in usable segments, develop Class I Bike Paths on the El Dorado Trail.

The proposed bikeway system is slightly over 280 miles in length, and includes a strategy for development of Class I Bike Path along the entire Sacramento–Placerville Transportation Corridor, also known as The El Dorado Trail. The development of the proposed system will provide better

access to the County's transit network and activity centers as well as encourage increased use of the bicycle as a transportation mode. (Existing bike trails are described in *Environmental Setting* section.)

Sacramento-Placerville Transportation Corridor Draft Master Plan

The *Sacramento-Placerville Transportation Corridor Master Plan* (El Dorado County 2003) outlines a strategy for interim and long-term uses for the former Sacramento-Placerville railroad corridor. This corridor was purchased by the Sacramento-Placerville Transportation Corridor Joint Powers Authority (SPTC-JPA), which is composed of representatives of El Dorado County, Sacramento County, the Sacramento Regional Transit District, and the City of Folsom. The master plan identifies multiple uses including excursion trains, trails, and utility easements. The Master Plan is for the El Dorado County portion of the Sacramento-Placerville transportation corridor only. It is not intended as a study of the general feasibility or appropriateness of any mode of transportation in the County. It considers the feasibility of each interim use for the corridor as it was acquired.

El Dorado County Long Range and Short Range Transit Plans

The ~~*El Dorado County Long Range Transit Plan* (El Dorado County Transportation Commission 2003) *and*~~ *Western El Dorado County Short~~- and Long-~~ Range Transit Plan* (El Dorado County Transportation Commission 20~~08~~14) outline the long- and short-term planning steps necessary for public transit service in El Dorado County to respond to continued growth. The plans recommend a focus on commuters traveling within El Dorado County and to Sacramento County, as well as key markets such as elderly/disabled services and activity center shuttles.

Measure Y

The original Measure Y was approved by voters on November 3, 1998 and provided that it shall remain in effect for 10 years. It added the following five policies to the 1996 General Plan.

County tax revenues shall not be used in any way to pay for building road capacity improvements to offset traffic impacts from new development projects. Exceptions are allowed if County voters first give their approval. (Policy 3.2.2.5)

Developer-paid traffic impact fees shall fully pay for building all necessary road capacity improvements to fully offset and mitigate all direct and cumulative traffic impacts from new development upon any highways, arterial roads and their intersections during weekday, peak-hour periods in unincorporated areas of the county. (Policy 3.2.2.4)

Traffic from residential development projects of 5 or more units or parcels of land shall not result in, or worsen, Level of Service "F" (gridlock, stop-and-go) traffic congestion during weekday, peak-hour periods on any highway, road, interchange or intersection in the unincorporated areas of the county. (Policy 3.5.1.6.1.)

The County shall not add any additional segments of U.S. Highway 50, or any other roads, to the County's list of roads that are allowed to operate at Level of Service "F" (gridlock) without first getting the voter's approval. (Policy 3.5.1.6.2)

Before giving approval of any kind to a residential development project of 5 or more units or parcels of land, the County shall make a finding that the project complies with the policies added by this initiative. If this finding cannot be made, then the County shall not approve the project, or give final approval to a tentative subdivision map, until all these policy findings can be made, in order to

protect the public's health and safety as provided by state law to assure that safe and adequate roads are in place as such development occurs. (Policy 3.2.1.5).

After Measure Y passed, the County and the Control Traffic Congestion Initiative Committee (the proponents of Measure Y) spent considerable time interpreting the new policies.[1] Those efforts culminated in a December 7, 1999, Board of Supervisors meeting at which the Board reviewed a range of options and voted on its preferred interpretations of the Measure Y policies.[2] Of particular note, the Board interpreted the term "worsen" (as used in Policy 3.5.1.6.1) to mean a measurable amount of traffic that is deemed by traffic engineering standards to have a perceptible impact on traffic congestion. Additionally, with respect to the issue of when traffic improvements needed to address aggregate impacts must be implemented, the Board concluded that, "The development project may proceed if the mitigation measures and roadway improvements are shown in the roadway plan adopted pursuant to General Plan Policy 3.5.1.1., are included in a Capital Improvement Plan which calls for the completion of the improvements within an identified, reasonable period of time, and funding sources have been identified for the full funding of the improvements and are reasonably anticipated to be available."

The Measure Y policies were later incorporated into the adopted 2004 General Plan along with alternative policies that would take effect if the Measure Y policies were not readopted by the voters at its 10-year expiration in 2008 (Policies TC-Xa through TC-Xi). The 2004 General Plan also included a number of other policies designed to further the goals of the General Plan and the Measure Y policies. Further refining its prior interpretation of the term "worsen," the Board included new Policy TC-Xe in the 2004 General Plan, which defined "worsen" as follows: (a) a 2% increase in traffic during a.m. peak hour, p.m. peak hour, or daily; (b) the addition of 100 or more daily trips; or (c) the addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour. Clarifying the timing of necessary traffic improvements, the Board included new Policy TC-Xf:

Prior to occupancy for development that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the developer shall do one of the following: (1) construct all road improvements necessary to regional and local roads needed to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element; or (2) ensure adequate funding is identified and available for the necessary road improvements and those projects are programmed. The determination of compliance with this requirement shall be based on existing traffic plus traffic generated from the project and from other reasonably foreseeable projects.

Because Measure Y was to be in effect for only 10 years, in 2008, the Board put a successor measure (also identified as Measure Y) on the ballot. The successor measure proposed certain revisions to Policy TC-Xa, the most significant ones being that (1) the Board can, on a 4/5 vote, add roads to the list of roads allowed to operate at LOS F[3]; and (2) the County can use financial resources other than developer fees to pay for necessary road improvements. For reference purposes, the changes made to Policy TC-Xa in 2008 are shown as follows, in underline/strikeout format. The 2008 changes

[1] The 1996 General Plan was challenged in court and it was set aside by court order on February 5, 1999, but that order included the Measure Y policies among the policies to be applied in the interim period pending preparation of a new General Plan and EIR.

[2] Note that the Board's discretion in this regard was somewhat limited. It could not substitute its policy preferences for those of the voters, but could only interpret ambiguous provisions of the measure in accordance with the voters' intent.

[3] Any such actions would be subject to review under CEQA.

shown below are reflected in Policy TC-Xa as it now exists in the General Plan. No changes to Policy TC-Xa are proposed as part of the TGPA.

> Traffic from single family residential subdivision development projects of five or more ~~units or~~ parcels of land shall not result in, or worsen, Level of Service F (gridlock, stop-and-go) traffic congestion during weekday, peak-hour periods on any highway, road, interchange or intersection in the unincorporated areas of the county.
>
> The County shall not add any additional segments of U.S. Highway 50, or any other ~~highways and~~ roads, to the County's list of roads ~~(shown in Table TC-2)~~ that are allowed to operate at Level of Service F without first getting the voters' approval or by a 4/5ths vote of the Board of Supervisors.
>
> Developer-paid traffic impact fees combined with any other available funds shall fully pay for building all necessary road capacity improvements to fully offset and mitigate all direct and cumulative traffic impacts from new development upon any highways, arterial roads and their intersections during weekday, peak-hour periods in unincorporated areas of the county.
>
> ~~County tax revenues shall not be used in any way to pay for building road capacity improvements to offset traffic impacts from new development projects. Exceptions are allowed if county voters first give their approval.~~
>
> ~~Before giving approval of any kind to a residential development project of five or more units or parcels of land, the County shall make a finding that the project complies with the policies above. If this finding cannot be made, then the County shall not approve the project in order to protect the public's health and safety as provided by state law to assure that safe and adequate roads and highways are in place as such development occurs.~~

The successor measure was placed on the November 8, 2008 ballot. It passed with 71.47% "yes" votes.

In addition to authorizing the successor measure, the Board also adopted a resolution (No. 194-2008) revising the associated traffic policies. The additional revisions became effective upon the voters' approval of the successor measure. The primary effect of those revisions was to clarify the timing of the Capital Improvement Program and the traffic improvement concurrency requirements. Specifically, Policy TC-Xf was revised in 2008 as follows:

> At the time of approval of a tentative map for a single family residential subdivision of five or more parcels ~~Prior to occupancy for development~~ that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the ~~developer~~ County shall do one of the following: (1) condition the project to construct all road improvements necessary to ~~regional and local roads needed to~~ maintain or attain Level of Service standards detailed in this Transportation and Circulation Element based on existing traffic plus traffic generated from the development plus forecasted traffic growth at 10-years from project submittal; or (2) ensure ~~adequate funding is identified and available~~ the commencement of construction of ~~for~~ the necessary road improvements are included in the county's 10 year CIP ~~and those projects are programmed. The determination of compliance with this requirement shall be based on existing traffic plus traffic generated from the project and from other reasonably foreseeable projects~~.

By clarifying the concurrency requirements, current Policy TC-Xf provides two ways for a single-family residential project that worsens traffic to mitigate its impacts. First, the County can condition the project to construct all road improvements necessary to maintain or attain the specified level of service standards. Second, the County can ensure that commencement of construction of the necessary road improvements is in the 10-year Capital Improvement Program (CIP).[4] In adopting

[4] In contrast, the Board's prior interpretation of this policy required that the construction be completed in a reasonable period of time.

the resolution authorizing those clarifications, the County recognized that allowing a project to rely on the 10-year CIP created the potential for short-term increases in traffic (since, theoretically, the residential project could be completed in Year 1, but the road improvements might not be constructed until Year 10). It was determined, however, that any such impacts would be offset by the ability to use additional financial resources to pay for necessary projects and by policies requiring more frequent CIP review, which would allow the County to better prioritize improvements to minimize any short-term level of service deficiencies.

The basic process is illustrated in Figure 3.9-1.

Traffic Impact Mitigation Fee Programs

The County had four adopted traffic impact mitigation (TIM) fee programs used to fund capital improvements to the road system to mitigate traffic impacts resulting from development.

- **West Slope Area of Benefit Traffic Impact Mitigation Fee Program**. This program was originally adopted in 1991. The Board adopted major revisions to the program in August 1996.
- **Transportation Impact Fee Program for the State System's Capacity and Interchanges**. This program was adopted in August 1996.
- **El Dorado Hills/Salmon Falls Area Road Impact Fee Program**. This program was originally adopted in 1984. The Board adopted major revisions to the program in August 1996 and December 2000.
- **Interim Transportation Impact Fee for U.S. Highway 50 Corridor Improvements**. This program was adopted in October 2002.

The County also previously adopted the 2005 Interim TIM fee program and the 2006 TIM fee program. The 2006 program incorporated the previous programs.

Since 2006 the following updates have been adopted by the Board of Supervisors:

- 2007 (Resolution 243-2007) Board of Supervisors updated the TIM Fee Program and fee schedule, and changed the cost index
- 2008 (Resolution 205-2008) Board of Supervisors updated the TIM Fee Program and fee schedule, and changed the cost index
- 2009 (Resolution 114-2009) Board of Supervisors determined to leave the TIM Fee schedule consistent with 2008 rates
- 2010 (Resolution 070-2010) Board of Supervisors determined to leave the TIM Fee schedule consistent with 2008 rates
- 2012 (Resolution 021-2012) Board of Supervisors updated the TIM Fee Program and created two new fee categories

~~In 2010 the El Dorado County Board of Supervisors adopted Resolution 070-2010, which updated the 2004 General Plan Traffic Impact Mitigation Fee Program and the traffic impact mitigation fee schedule. The fees that were adopted in 2010 were applied to all previous programs.~~

The fees set by the Board are tied to the cost of building the needed road improvements to accommodate the projected amount of expected growth during a defined time period (currently based on 20 years of growth). The fee program ~~This~~ implements one of the policies included in the

original Measure Y, which says that new development fully pay for the needed road improvements to handle the traffic generated by that new development.

Generally, funds generated from the TIM fees are applied toward major improvements such as those listed below (El Dorado County 2013).

- All the interchanges from Ponderosa Road/South Shingle west to the County line, and the El Dorado Road and Missouri Flat Road interchanges.
- High occupancy vehicle (HOV) lanes on U.S. Highway 50 from Cameron Park Drive west to the County line.
- Improvements to the County's main arterial roads (e.g., Missouri Flat, Green Valley, Latrobe Road, Cameron Park Drive, Cambridge Road, Pleasant Valley Road, Mother Lode Drive, SR 49).
- Intersection improvements (e.g., Latrobe and White Rock, several along Cameron Park Drive).
- Transit requirements (e.g., purchase of additional commuter buses, park-and-ride lots).
- Safety improvements (e.g., South Latrobe Road improvements).
- Bridge improvements (e.g., Sly Park Road Clear Creek Bridge replacement).

The complete list of projects that are part of the TIM program is included in Exhibit B of the ~~amended~~ 2004 General Plan TIM Fee Program. All money generated from the TIM Fee payments is to be used for these projects.

General Plan

Pursuant to California Planning Law, a general plan must contain a circulation element "consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan" (Government Code Section 65302[b]). The El Dorado County General Plan's Transportation and Circulation Element establishes the key objectives and policies related to traffic. Some key policies are listed below; the rest are found in the General Plan's Transportation and Circulation Element.

> **Policy TC-1a.** The County shall plan and construct County-maintained roads as set forth in Table TC-1. Road design standards for County-maintained roads shall be based on the American Association of State Highway and Transportation Officials (AASHTO) standards, and supplemented by California Department of Transportation (Caltrans) design standards and by County Department of Transportation standards. County standards include typical cross sections by road classification, consistent with right-of-way widths summarized in Table TC-1.

Table TC-1. General Roadway Standards for New Development by Functional Class

	Access Control		Cross Section	
Functional Class	Public Roads Intersections (or Interchanges)	Abutting Property Driveways and Private Roads	ROW	Roadway Width
Six-Lane Divided Road	½ mile minimum spacing	Restricted	130'	108'
Four-Lane Divided Road	½ mile minimum spacing	Limited	100'	84'
Four-Lane Undivided Road				
Community Regions	½ mile minimum spacing	Limited	80'	64'
Rural Centers and Rural Regions	½ mile minimum spacing	Limited	80'	64'
Major Two-Lane Road				
Community Regions	1/4 mile minimum spacing	Limited	60'	64'
Rural Centers and Rural Regions	1/4 mile minimum spacing	Permitted	60'	40'

Local Road	[1]/4 mile minimum spacing	Permitted	60’	Varies

Notes:

[1] Access control and cross sections are desired standards. Details and waiver provisions shall be incorporated to the Design and Improvement Standards Manual (El Dorado County 1990).

[2] Notwithstanding these highway specifications, additional right-of-way may be required for any classification when a road coincides with an adopted route for an additional public facility (e.g., transit facilities, bikeways, or riding and hiking trails), or a scenic highway.

[3] The County may deviate from the adopted standards in circumstances where conditions warrant special treatment of the road. Typical circumstances where exceptions may be warranted include:

[a] Extraordinary construction costs due to terrain, roadside development, or unusual right-of-way needs; or

[b] Environmental constraints that may otherwise entirely preclude road improvement to the adopted standards, as long as environmental impacts are mitigated to the extent feasible.

[4] Travel ways for all highways should be 12 feet wide. Turning lanes should be 12 feet wide, but may be reduced to 10 feet based on topographical or right-of-way constraints. All travel ways on roads should be paved.

Policy TC-1b: In order to provide safe, efficient roads, all roads should incorporate the cross sectional road features set forth in Table TC-1.

Policies TC-1c through **TC-1j:** *intentionally blank*

Policy TC-1k: The County shall continue to work with the El Dorado County Transportation Commission, Sacramento Area Council of Governments, California Department of Transportation, Tahoe Regional Planning Agency, and other agencies to maintain a current Regional Transportation Plan, to identify funding priorities, and to develop expenditure plans for available regional transportation funds in accordance with regional, state, and federal transportation planning and programming procedures. Such regional programming may include improvements to state highways, city streets, and county road.

Policy TC-1l: The County shall actively seek all possible financial assistance, including grant funds available from regional, state, and federal agencies, for street and highway purposes when compatible with General Plan policies and long-term local funding capabilities.

Policy TC-1m: The County shall ensure that road funds allocated directly or otherwise available to the County shall be programmed and expended in ways that maximize the use of federal and other matching funds, including maintenance of effort requirements.

Policy TC-1n: The County shall generally base expenditure of discretionary road funds for road uses on the following sequence of priorities:

A. Maintenance, rehabilitation, reconstruction, and operation of the existing County-maintained road system;

B. Safety improvements where physical modifications or capital improvements would reduce the number and/or severity of accidents; and

C. Capital improvements to expand capacity or reduce congestion on roadways at or below County level of service standards, and to expand the roadway network, consistent with other policies of this General Plan.

Policy TC-1o: The County shall work with the cities of Placerville and South Lake Tahoe to establish a system of designated truck routes through urban areas.

Policy TC-1p: The County shall encourage street designs for interior streets within new subdivisions that minimize the intrusion of through traffic on pedestrians and residential uses while providing efficient connections between neighborhoods and communities.

Policy TC-1q: The County shall utilize road construction methods that seek to reduce air, water, and noise pollution associated with road and highway development.

Policy TC-1r: The County shall accept classified roads, as defined on Figure TC-1, into the County-maintained road system when constructed to County standards.

Policy TC-1s: Notwithstanding Policy TC-1r, the County shall only add new local roads into the existing County-maintained road system if maintenance for these local roads will be provided for through a County Service Area Zone of Benefit or other similar means acceptable to the Board of Supervisors.

Policy TC-1t: The County shall identify locations of needed future road rights-of-way, consistent with Figure TC-1, through analysis and adoption of road alignment plan lines where appropriate. Circumstances where road alignment plan line analysis and adoption are acceptable shall include the following:

A. Where major roads or corridors are expected to require additional through lanes within a 20-year planning horizon;

B. Where the future alignment is expected to deviate from the existing alignment, or to be developed asymmetrically about the existing section or centerline;

C. Where the adjacent properties are substantially undeveloped, so that property owners may benefit from prior knowledge of the location of rights-of-way of planned roads before constructing improvements or developing property in a way that may ultimately conflict with identified transportation needs; and

D. Future facilities as identified in Figure TC-1.

Policy TC-1u: The County shall amend the circulation diagram to include a new arterial roadway from the west side of the El Dorado Hills Business Park to U.S. 50.

Policy TC-1v: The County shall consider modification of the circulation diagram to include a frequent transit service operating on exclusive right-of-way to the El Dorado Hills Business Park from residential communities in El Dorado County and from the City of Folsom.

Policy TC-1w: New streets and improvements to existing rural roads necessitated by new development shall be designed to minimize visual impacts, preserve rural character, and ensure neighborhood quality to the maximum extent possible consistent with the needs of emergency access, on street parking, and vehicular and pedestrian safety.

Policy TC-1x: To reduce heavy truck traffic in residential areas and near noise sensitive land uses associated with discretionary projects, the County will review truck routes to ensure traffic noise impacts are minimized.

Policy TC-1y: Development through 2025, within Traffic Analysis Zones 148 and 344, shall be conditioned so that a cap of 10,045 full-time employees is not exceeded, unless it can be demonstrated that a higher number of employees would not violate established level of service standards.

Policy TC-Xa: The following policies shall remain in effect until December 31, 2018:

1. Traffic from single-family residential subdivision development projects of five or more parcels of land shall not result in, or worsen, Level of Service F (gridlock, stop-and-go) traffic congestion during weekday, peak-hour periods on any highway, road, interchange or intersection in the unincorporated areas of the county.

2. The County shall not add any additional segments of U.S. Highway 50, or any other roads, to the County's list of roads that are allowed to operate at Level of Service F without first getting the voters' approval or by a 4/5ths vote of the Board of Supervisors.

3. Developer-paid traffic impact fees combined with any other available funds shall fully pay for building all necessary road capacity improvements to fully offset and mitigate all direct and cumulative traffic impacts from new development upon any highways, arterial roads and their intersections during weekday, peak-hour periods in unincorporated areas of the county.

Policy TC-Xb: To ensure that potential development in the County does not exceed available roadway capacity, the County shall:

A. Every year prepare an annual Capital Improvement Program (CIP) specifying expenditures for roadway improvements within the next 10 years. At least every five years prepare a CIP specifying expenditures for roadway improvements within the next 20 years. Each plan shall contain identification of funding sources sufficient to develop the improvements identified;

B. At least every five years, prepare a Traffic Impact Mitigation (TIM) Fee Program specifying roadway improvements to be completed within the next 20 years to ensure compliance with all applicable level of service and other standards in this plan; and

C. Annually monitor traffic volumes on the county's major roadway system depicted in the Circulation Diagram.

Policy TC-Xc: intentionally blank

Policy TC-Xd: Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume to capacity ratio of the roadway segments listed in Table TC-2 shall not exceed the ratio specified in that table. Level of Service will be as defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council) and calculated using the methodologies contained in that manual. Analysis periods shall be based on the professional judgment of the Department of Transportation which shall consider periods including, but not limited to, Weekday Average Daily Traffic (ADT), AM peak hour, and PM peak hour traffic volumes.

Table TC-2. El Dorado County Roads Allowed to Operate at Level of Service F1 (through December 31, 2018)

Road Segment(s)		Max V/C[2]
Cambridge Road	Country Club Drive to Oxford Road	1.07
Cameron Park Drive	Robin Lane to Coach Lane	1.11
Missouri Flat Road	U. S. Highway 50 to Mother Lode Drive	1.12
	Mother Lode Drive to State Route 49	1.20
Pleasant Valley Road	El Dorado Road to State Route 49	1.28
U. S. Highway 50	Canal Street to junction of State Route 49 (Spring Street)	1.25
	Junction of State Route 49 (Spring Street) to Coloma Street	1.59
	Coloma Street to Bedford Avenue	1.61
	Bedford Avenue to beginning of freeway	1.73
	Beginning of freeway to Washington Overhead	1.16
	Ice House Road to Echo Lake	1.16
State Route 49	Pacific/Sacramento Street to new four-lane section	1.31
	U.S. Highway 50 to State Route 193	1.32
	State Route 193 to county line	1.51

Notes:
[1] Roads improved to their maximum width given right-of-way and physical limitations.
[2] Volume to Capacity ratio.

Policy TC-Xe: For the purposes of this Transportation and Circulation Element, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

A. A 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or

B. The addition of 100 or more daily trips, or

C. The addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

Policy TC-Xf: At the time of approval of a tentative map for a single family residential subdivision of five or more parcels that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this *Transportation* and Circulation Element based on existing traffic plus traffic generated from the development plus forecasted traffic growth at 10-years from project submittal; or (2) ensure the commencement of construction of the necessary road improvements are included in the County's 10-year CIP.

For all other discretionary projects that worsen (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element; or (2) ensure the construction of the necessary road improvements are included in the County's 20-year CIP.

Policy TC-Xg: Each development project shall dedicate right-of-way and construct or fund improvements necessary to mitigate the effects of traffic from the project. The County shall require an analysis of impacts of traffic *from* the development project, including impacts from truck traffic, and require dedication of needed right-of-way and construction of road facilities as a condition of the development. For road improvements that provide significant benefit to other development, the County may allow a project to fund its fair share of improvement costs through traffic impact fees or receive reimbursement from impact fees for construction of improvements beyond the project's fair share. The amount and timing of reimbursements shall be determined by the County.

Policy TC-Xh: All subdivisions shall be conditioned to pay the traffic impact fees in effect at the time a building permit is issued for any parcel created by the subdivision.

Policy TC-Xi: The planning for the widening of U.S. Highway 50, consistent with the policies of this General Plan, shall be a priority of the County. The County shall coordinate with other affected agencies, such as the City of Folsom, the County of Sacramento, and Sacramento Area Council of Governments (SACOG) to ensure that U.S. Highway 50 capacity enhancing projects are coordinated with these agencies with the goal of delivering these projects on a schedule to meet the requirements of the policies of this General Plan.

Policy TC-3a: The County shall support all standards and regulations adopted by the El Dorado County Air Quality Management District governing transportation control measures and applicable state and federal standards.

Policy TC-3b: The County shall consider Transportation Systems Management measures to increase the capacity of the existing road network prior to constructing new traffic lanes. Such measures may include traffic signal synchronization and additional turning lanes.

Policy TC-3c: The County shall encourage new development within Community Regions and Rural Centers to provide appropriate on-site facilities that encourage employees to use alternative transportation modes. The type of facilities may include bicycle parking, shower and locker facilities, and convenient access to transit, depending on the development size and location.

Policy TC-3d: Signalized intersections shall be synchronized where possible as a means to reduce congestion, conserve energy, and improve air quality.

Policy TC-4a: The County shall implement a system of recreational, commuter, and inter-community bicycle routes in accordance with the County's Bikeway Master Plan. The plan should designate bikeways connecting residential areas to retail, entertainment, and employment centers and near major traffic generators such as recreational areas, parks of regional significance, schools, and other major public facilities, and along recreational routes.

Policy TC-4b: The County shall construct and maintain bikeways in a manner that minimizes conflicts between bicyclists and motorists.

Policy TC-4c: The County shall give priority to bikeways that will serve population centers and destinations of greatest demand and to bikeways that close gaps in the existing bikeway system.

Policy TC-4d: The County shall develop and maintain a program to construct bikeways, in conjunction with road projects, consistent with the County's Bikeway Master Plan, taking into account available funding for construction and maintenance.

Policy TC-4e: The County shall require that rights-of-way or easements be provided for bikeways or trails designated in adopted master plans, as a condition of land development when necessary to mitigate project impacts.

Policy TC-4f: The County shall sign and stripe Class II bicycle routes, in accordance with the County's Bikeway Master Plan, on roads shown on Figure TC-1, when road width, safety, and operational conditions permit safe bicycle operation.

Policy TC-4g: The County shall support development of facilities that help link bicycling with other modes of transportation.

Policy TC-4h: Where hiking and equestrian trails abut public roads, they should be separated from the travel lanes whenever possible by curbs and barriers (such as fences or rails), landscape buffering, and spatial distance. Existing public corridors such as power transmission line easements, railroad rights-of-way, irrigation district easements, and roads should be put to multiple use for trails, where possible.

Policy TC-4i: Within Community Regions and Rural Centers, all development shall include pedestrian/bike paths connecting to adjacent development and to schools, parks, commercial areas and other facilities where feasible. In Rural Regions, pedestrian/bike paths shall be considered as appropriate.

Policy TC-5a: Sidewalks and curbs shall be required throughout residential subdivisions, including land divisions created through the parcel map process, where any residential lot or parcel size is 10,000 square feet or less.

Policy TC-5b: In commercial and research and development subdivisions, curbs and sidewalks shall be required on all roads. Sidewalks in industrial subdivisions may be required as appropriate.

Policy TC-5c: Roads adjacent to schools or parks shall have curbs and sidewalks.

Implementation Measure TC-A: Prepare and adopt a priority list of road and highway improvements for the Capital Improvement Program (CIP) based on a horizon of ten years. The Board of Supervisors shall update the CIP every year, or more frequently as recommended by the responsible departments. The CIP shall prioritize capital maintenance and rehabilitation, reconstruction, capacity, and operational and safety improvements. Non-capital maintenance activities need not be included in the CIP. The CIP shall be coordinated with the five-year major review of the General Plan and shall be included in the annual General Plan review. [Policies TC-1k, TC-1m, and TC-1n]

Implementation Measure TC-B: Revise and adopt traffic impact fee program(s) for unincorporated areas of the county and adopt additional funding mechanisms necessary to ensure that improvements contained in the fee programs are fully funded and capable of being implemented concurrently with new development as defined by Policy TC-Xf. The traffic fees should be designed to achieve the adopted level of service standards and preserve the integrity of the circulation system. The fee program(s) shall be updated annually for changes in project costs, and at least every five years with revised growth forecasts, revised improvement project analysis and list, and revised construction cost estimates to ensure the programs continue to meet the requirements contained in the policies of this General Plan. [Policies TC-Xa, TC-Xb, and TC-Xg]

Implementation Measure TC-C: Revise and update the Design and Improvement Standards Manual (DISM) to accomplish the following:

- Specify minimum rights-of-way and road surface widths for the County road system and other design requirements. [Policies TC-1a, TC-1b, TC-1p, and TC-4h];

- Specify minimum distance between access points onto the County road system [Policy TC-1a];
- Provide detailed specifications for new development improvements, including private roads dedicated to public use [TC-1a];
- Provide detail for bicycle facilities [Goal TC-4]; and
- Provide standards for the requirement of sidewalks in new development and capital improvement projects. [Goal TC-5]

Implementation Measure TC-L: The County shall develop a funding mechanism that requires new development to pay for additional park-and-ride lots identified by transit providers in the county or the California Department of Transportation. The County shall also work with transit providers in the county and other agencies to determine the need for additional or expanded park-and-ride lots, identify additional sites for such lots, and to acquire necessary rights-of-way for them. [Policies TC-2b and TC-2d]

Implementation Measure TC-V(1): Work with the Sacramento Area Council of Governments (SACOG), Sacramento County and the City of Folsom to identify potential alignments for a new arterial roadway from the west side of El Dorado Hills Business Park to U.S. Highway 50. [Policy TC-1u]

Implementation Measure TC-V(2): The County shall implement a mechanism for all new discretionary and ministerial development (which includes approved development that has not yet been built) that would access Latrobe Road or White Rock Road. This mechanism shall be designed to ensure that the 2025 p.m. peak hour volumes on El Dorado Hills Boulevard, Latrobe Road, and White Rock Road do not exceed the minimum acceptable LOS thresholds defined in Policies TC-Xa through TC-Xe with the circulation diagram improvements assumed in place. As such, the measure should consider a variety of methods that control or limit traffic. The County shall monitor peak hour traffic volumes and LOS beyond 2025 and, if necessary, shall implement growth control mechanisms in any part of the county where the LOS thresholds defined in the General Plan policies listed above cannot be maintained.

Implementation Measure TC-V(3): Identify right-of-way needed for potential establishment of a frequent transit service operating on exclusive right-of-way to the El Dorado Hills Business Park from residential communities in El Dorado County and from the City of Folsom. Consider modification of the Circulation Map to include the identified right-of-way. [Policy TC-1v]

Environmental Setting

Regional Roadway System

Much of El Dorado County's roadway network is rural in character; the more suburbanized western portion of the county is the primary exception. U.S. Highway 50 is the primary transportation corridor extending through the county from west to east and directly serves all of the county's major population centers including El Dorado Hills, Cameron Park, Shingle Springs, Placerville, Camino, Pollock Pines, Diamond Springs, and South Lake Tahoe. Other state highways, county arterials, and a network of local public and private roads constitute the remainder of the roadway system. Access to property is either directly from fronting arterial roads or from public or private local roads, many of which are narrow and unpaved.

Commuting, shopping, recreation, and shipping are responsible for most of the travel demand on the transportation system. The Lake Tahoe Basin is a popular recreational attraction, as is the El Dorado National Forest, with destinations such as the Rubicon Trail, Desolation Wilderness, and several ski areas. Other attractions include the South Fork of the American River, Marshall Gold Discovery State Historic Park, Folsom Reservoir, Sly Park Reservoir, historic downtown Placerville, and Apple Hill. Visitors come primarily from population centers to the west of El Dorado County, such as

Sacramento and the San Francisco Bay area. Employment for a large portion of El Dorado County's residents, particularly in the western portion of the county, is in the greater Sacramento area, for which U.S. Highway 50 serves as the main commute route.

The major routes in the regional roadway system are shown according to their functional classification in Figure 3.9-2. The classifications in Figure 3.9-2 indicate the operational hierarchy of the roadway system. This highway network plays an important role in regional travel by connecting to and complementing the local street network. The larger highway and arterial classifications predominantly serve through-travel rather than local trips. Smaller roads function as collectors funneling traffic from local streets to the highways and arterials. Figure 3.9-3 displays the number of through-lanes on major roadways.

State Highways

State highways in El Dorado County include freeways, expressways, and conventional highways, which are operated and maintained by Caltrans. These highways are an integral part of the county's transportation system, serving inter-county and inter-city traffic. Interstate and U.S. numbered routes are also part of the State Highway System, which is maintained by Caltrans. El Dorado County contains one U.S. route (Highway 50) and four other State Routes (SRs 49, 89, 153, and 193) within its boundary.

U.S. Highway 50 is the backbone transportation facility in El Dorado County, providing connections to Sacramento County and the state of Nevada. It accesses nearly all of the recreation areas and tourist attractions for visitors from Sacramento and the San Francisco Bay area. U.S. Highway 50 is also the major commute route to employment locations in the greater Sacramento area and the major shipping route for movement of goods by truck. From the Sacramento County line to Placerville, U.S. Highway 50 is a four-lane freeway with an eastbound auxiliary lane from the East Bidwell interchange in the City of Folsom ~~county line~~ to the steep Bass Lake grade. HOV lanes extend from Watt Avenue in Sacramento County to the Cameron Park Drive interchange. HOV lanes are restricted to carpools (i.e., vehicles with two or more people), vanpools, buses, motorcycles, and electric vehicles during morning and evening peak hours. U.S. Highway 50 transitions to a conventional four-lane highway through Placerville with traffic signals at three major intersections. East of Placerville and extending into the Lake Tahoe Basin, U.S. Highway 50 is primarily an expressway (except for a short section of four-lane freeway between Camino and Pollock Pines) with unsignalized intersections east to Ice House Road near Riverton, where the highway narrows to two lanes with passing opportunities limited mostly to defined passing lanes and turnouts. U.S. Highway 50 is the most heavily traveled route in the County and also incurs the most traffic congestion. Westbound U.S. Highway 50 from El Dorado Hills Boulevard to the Sacramento County line is regularly subject to congestion for about an hour during the weekday morning peak period (i.e., 7 a.m.–8 a.m.).

Caltrans' 2014 TCR/CSMP finds that U.S. Highway 50 exhibited periods of congestion in the western part of the County. As shown in Table 13 of that report, the LOS in the base year of 2012 was F in the segment from the Sacramento County line to El Dorado Hills Boulevard, E on the El Dorado Hills Boulevard to Bass Lake Road segment, and D on the Bass Lake Road to Cameron Park Drive segment. The 2014 TCR/CSMP also notes that there is an existing bottleneck on U.S. Highway 50 at El Dorado Hills Boulevard. The 2014 TCR/CSMP describes the problem as follows: "The bottleneck at El Dorado Hills Blvd is caused by heavy demand on El Dorado Hills Blvd. and traffic from El Dorado Hills Blvd. merging with existing westbound [traffic on] US 50."

Weekend-related travel on U.S. Highway 50 creates other problems. The portion of U.S. Highway 50 in Placerville is particularly affected on Fridays and during weekends when visitors are traveling to and from recreational attractions to the east. The three traffic signals on U.S. Highway 50 in central Placerville reduce the expressway's capacity compared to the approach segments. When Friday or weekend traffic volumes exceed the capacity of this portion of U.S. Highway 50, long queues form and delays increase substantially over typical weekday conditions.

SR 49 serves north–south traffic throughout the Sierra Nevada foothills. In and near El Dorado County, SR 49 runs from Plymouth in Amador County through Diamond Springs, Placerville, Coloma, Pilot Hill, and Cool to Auburn in Placer County. The portions of SR 49 between Plymouth and Placerville, Placerville and Coloma, and Cool and Auburn contain sections that are narrow, winding, and steep.

SR 193 runs from SR 49 in Placerville to SR 49 in Cool by way of Georgetown. This two-lane highway is generally 28 feet wide (less than the Caltrans 40-foot standard for this type of highway) except for a wider section near Georgetown and a narrower, steep, and winding section north of Placerville.

The other two state highways in El Dorado County are SR 89 and SR 153. SR 89, a north–south route in the northern Sierra Nevada, runs entirely within the Lake Tahoe Basin portion of El Dorado County, which is outside the study area for this section. SR 153, a 0.5-mile-long road that provides access from SR 49 to the Marshall Monument in Coloma, does not handle regional traffic and was not analyzed.

Major County Roadways

Major county roadways are also part of the regional roadway system and typically provide the arterial connections to U.S. Highway 50. These major county roadways connect to U.S., Highway 50 at the following interchanges:

- El Dorado Hills Boulevard/Latrobe Road.
- Bass Lake Road.
- Cambridge Road.
- Cameron Park Drive.
- Ponderosa Road/South Shingle Road.
- Shingle Springs Drive.
- Greenstone Road.
- El Dorado Road.
- Missouri Flat Road.

The entire list of county roadway segments included in this study is provided in Table 3.9-13 located at the end of the section.

Public Transportation System

Public transportation in western El Dorado County consists of the following services and facilities.

- El Dorado County Transit Authority (EDCTA).
- Commercial bus services.

- Taxi service.
- Vanpools and carpools.
- Park-and-ride facilities.

EDCTA serves the residents of western El Dorado County and provides scheduled fixed-route service, daily commute service to Sacramento, dial-a-ride service in Placerville and outlying communities, and chartered social service routes. Lifeline service is also provided to the elderly, the disabled, and Sacramento commuters.

In fiscal year 2012, EDCTA served over 423,000 riders; the commuter service was particularly well used with an annual ridership of approximately 139,000 (El Dorado Transportation Commission 2013). Commercial bus service is provided by Greyhound and Amtrak. Greyhound services Placerville customers with pickups and drop-offs at the Placerville Station on Mosquito Road. Greyhound will stop by reservation only on the way to and from Lake Tahoe. Amtrak also services customers at the Placerville Station who need to catch a bus to the Amtrak station in Sacramento, also by reservation only.

Several taxi companies provide service in El Dorado County and are available on demand or by reservation. Formal carpools and vanpools in El Dorado County are organized by the State of California and Vanpool Service, Inc. (VPSI). Six state vanpools are operated to Sacramento for state employees who reside in El Dorado Hills, Shingle Springs, Placerville, Pollock Pines, and Rescue. Five of these vanpools travel to downtown Sacramento while one travels to the Franchise Tax Board in Rancho Cordova. VPSI operates two vans originating in Placerville, both of which are destined for downtown Sacramento. Ridesharing through carpools and vanpools is expected to increase as HOV lanes are added to U.S. Highway 50 from El Dorado County to downtown Sacramento.

Park-and-ride lots provide a place for commuters in single-occupant vehicles to transfer to public transit or carpools. El Dorado County has seven park-and-ride facilities concentrated along U.S. Highway 50 (El Dorado Transit 2014). These parking sites are important in encouraging ridesharing by providing a safe, attractive, and convenient place to leave a personal vehicle in order to use public transportation or another form of ridesharing. Expansion of the existing parking lots or construction of new lots is planned as a result of population growth in El Dorado County, as well as to support the HOV lanes on U.S. Highway 50 and continued expansion of the commuter bus service.

Non-Motorized Transportation System

The non-motorized transportation system in El Dorado County is composed of local and regional bikeways and trails. Bikeways are classified into the following three types.

- Class I—off-street bike paths.
- Class II—on-street bike lanes marked by pavement striping.
- Class III—on-street bike routes that share the road with motorized vehicles.

El Dorado County has six segments of Class I bike path, and nine segments of Class II bike lanes. Generally speaking, the Class I bike paths are located along El Dorado Hills Blvd, and the Class II bike lanes are along the El Dorado Trail. A complete list of all of the bike facilities in the County is

described in the El Dorado County Bicycle Transportation Plan (2010 Update) which can be found on the El Dorado County Transportation Commission website.[5]

Aviation System

There are four general aviation airports within the county. The Placerville Airport and the Georgetown Airport are both owned and operated by El Dorado County. Cameron Airpark Airport is owned and operated by the Cameron Park Airport District, a special district, and the Lake Tahoe Airport is owned and operated by the City of South Lake Tahoe. The County's airports are used by the general public as well as military and other government agencies for training flights, search and rescue missions, and fire suppression support.

3.9.2 Environmental Impacts

Note that the project is unlike most projects subject to CEQA analysis. Where most projects consist of specific actions that would directly affect the environment, the project proposes to amend the General Plan and the Zoning Ordinance and would have only indirect effects. The CEQA analysis examines the prospective changes that would occur as a result of implementation of the project (i.e., TGPA and ZOU) against existing (i.e., baseline) conditions to determine whether the project will result in one or more significant impacts on the environment.

Impact Mechanisms

The project does not include any site-specific development projects. For the most part, it consists of policy changes to the current General Plan and an update of the Zoning Ordinance. As a result, the traffic impact analysis is undertaken at a general level. In other sections of the DEIR, amendments to General Plan policies regarding the amount of open space required, the prohibition on developing on steep slopes, and other similar policies have been identified as impact mechanisms. While these may have some marginal effect on traffic generation, the lack of site-specific development projects that would apply to these amended policies would make a detailed traffic analysis largely speculative.

The following are the key potential impact mechanisms for the traffic analysis and a preliminary screening of the necessity for further review.

- Camino/Pollock Pines Community Region boundary amendment. This amendment would create three Rural Communities in place of the Community Region, but would not otherwise change current General Plan land use designations. Therefore, it would not change traffic generation or patterns and would not affect traffic impacts.
- Expansion of Agricultural Districts. This amendment rectifies the Agricultural District boundaries to add properties that have agricultural value and exclude those that do not. This would not change current General Plan land use designations and would therefore not result in an incrementally greater level of traffic generation. It would not affect traffic impacts.
- Amendments to Policies 2.1.1.3 and 2.1.2.5 and the Multifamily Residential (MFR) and High-Density Residential (HDR) land use designations increasing the maximum allowable residential density for mixed-use projects. These amendments would result in additional residential density

[5] http://www.edctc.org/3/CountyBikePlan2010.html

where market conditions, site conditions, and available services make higher density practical. The potential impact of additional residential density was considered in the analyses that follow.

- New objective and policies encouraging infill development. Any future infill would be subject to the density and intensity limitations of the General Plan. As a result, this change would not incrementally alter land use patterns or intensity. Put another way, it would not alter the way in which development can occur under the current General Plan. The proposal would not affect traffic impacts.
- The proposed ZOU would allow development on slopes with a grade over 30%, subject to specific regulations regarding grading and erosion control. This would potentially allow additional development on existing parcels that is restricted by current General Plan and zoning provisions. However, this increase in development is expected to be small, particularly with implementation of Mitigation Measure BIO-1a which further limits its application. In addition, it would be limited by the General Plan designation of the site. As a result, this change would not alter the pattern or intensity of development that can occur under the current General Plan. The proposal would not affect traffic impacts.
- The project includes rezoning of individual parcels throughout the county as needed to make the zoning classifications on each property consistent with the property's General Plan designation. Where there is more than one zone classification that would be consistent with the General Plan, these changes generally adopt the least intensive of those zones. The development potential of the parcels is currently determined by the densities and intensities established in the General Plan. The rezonings would not change the development potential. As a result, the rezonings would not change the expected traffic impacts that will occur as a result of implementation of the General Plan.
- The ZOU includes various uses that may be allowed by right or upon approval of a discretionary, administrative, or CUP (e.g., off-highway vehicle use on residential parcels over 5 acres, CUP for industrial use in a Timberland Preserve Zone [TPZ]) that are either not allowed by right or with a discretionary permit under the existing ordinance. This expands the list of the types of uses that could be approved. Although many of these would potentially generate traffic, they cannot be specifically analyzed because no development is being proposed at this time (any development proposal would result from an application by the landowner). As a result the number and types of development, site locations (and thereby the condition of the road system serving it), project designs, development intensity, or residential density cannot be known at this time. Therefore, any attempt to analyze the specific potential traffic impact of these components of the ZOU would be purely speculative. <u>It is a reasonable probability that under some conditions these types of uses could result in localized traffic impacts.</u>
- <u>The County proposes to adopt Parking and Loading standards that establish general requirements for the design of parking lots, loading areas/bays, drive-through facilities, and shared parking. This also includes provisions for increasing or reducing parking requirements as part of a discretionary permit review, and new standards for carpool/vanpool, motorcycle, and bicycle parking.</u>
- <u>The ZOU includes Home Occupation standards (Section 17.40.160) that would increase the number of employees that could be allowed by right at a home business in comparison to the existing Zoning Ordinance. Section 17.40.160C would allow up to four employees at a home business in the R3A and RE zones on parcels over 5 acres and less than 10 acres in area; up to four employees in the RE zone on parcels larger than 10 acres; up to 7 employees in the RE zone on parcels greater than 10 acres; up to 7 employees in Rural Lands, Agricultural, and Resource</u>

Zones on parcels over 5 acres and less than 10 acres; and up to 10 employees in Rural Lands, Agricultural, and Resource Zones on parcels over 10 acres. It is not possible to quantify the potential traffic that may be generated from future home occupations because the future number and type of such activities, and the size of parcels on which they may be undertaken, are unknown and cannot be known with any accuracy. However, given the number of additional employees that could be allowed on large lots in rural areas, there is a reasonable probability that there may be localized instances of significant traffic impacts on rural roads.

- Proposed amendments to the Transportation and Circulation Element:

Provide flexibility to allow a reduction in standard roadway widths (Table TC-1) where necessary to accommodate *complete streets* pursuant to state law or mixed use development.

~~Move Table TC-1 from the General Plan to Standards Plans or Land Development Manual.~~

Methods of Analysis

A detailed discussion of the methods used in this analysis is presented in Appendix D, *Traffic Modeling Methodology*, of this DEIR. The analysis is undertaken at a program level. That is, it examines the operation of the County road system on a general scale. Because the exact characteristics of future development are unknown, the analysis does not have the level of specificity that would be found in the analysis of a development project.

For the project (i.e., TGPA/ZOU), LOS was determined by comparing existing and forecasted traffic volumes for selected roadway segments with peak-hour LOS capacity thresholds. These thresholds are shown in Table 3.9-3 and were developed based on the methodologies contained in the *Highway Capacity Manual* (HCM) (Transportation Research Board 2010). Note that LOS refers to the HCM planning level procedures and not the engineering based HCM operational methods specific to basic freeway, merge-diverge influence area and weave sections. The HCM methodology is the prevailing measurement standard used throughout the United States. The most current HCM (2010) was used for this analysis.

Table 3.9-3. Level of Service Typical Traffic Volumes

Operational Class[a]	Class Code	Peak-Hour LOS Traffic Volumes[d]				
		A	B	C	D	E
Minor Two-Lane Highway[b]	2R, W20, W18	-	330	710	1,310	2,480
Major Two-Lane Highway[b]	2U	-	330	710	1,310	2,480
Two-Lane Arterial[a]	2A	-	-	850	1,540	1,650
Four-Lane Arterial, Undivided	4AU	-	-	1,760	3,070	3,130
Four-Lane Arterial, Divided	4AD	-	-	1,850	3,220	3,290
Six-Lane Arterial, Divided	6AD	-	-	2,760	4,680	4,710
Two Freeway Lanes[c]	2F	-	2,070	2,880	3,590	4,150
Two Freeway Lanes + Auxiliary Lane[c]	2FA	-	2,610	3,630	4,520	5,230
Three Freeway Lanes[c]	3F	-	3,100	4,320	5,380	6,230
Three Freeway Lanes + Auxiliary Lane[c]	3FA	-	3,640	5,070	6,320	7,310
Four Freeway Lanes[c]	4F	-	4,140	5,760	7,180	8,310

Operational Class[a]	Class Code	Peak-Hour LOS Traffic Volumes[d]				
		A	B	C	D	E

Source: Kimley-Horn and Associates 2014.

[a] Roadways are classified based on their operational characteristics which do not necessarily correspond to their functional definition.

[b] Only roadways meeting the HCM criteria, including those related to signal spacing, for Two-Lane Highways are designated as such.

[c] Service volumes are for a single direction.

[d] Some LOS thresholds may not be determinable/achievable depending on facility type.

Note:

The planning thresholds shown in this table are provided for the purpose of assisting in the identification of locations where operational problems may exist and are based on information provided in the 2010 HCM and other industry sources. These values are not appropriate for making detailed or final determinations regarding operational or design considerations. Those determinations should only be made after a detailed operational analysis, consistent with current HCM procedures, and/or other design evaluations are completed.

The transportation analysis is based on the AM and PM peak hours, as these represent the highest hourly volume during a typical weekday compared to using average daily trips (ADT) from Monday-Friday as required by General Plan Policy TC-Xd. Peak hour volumes are better indicators of operational performance because they represent the highest volumes under normal conditions. Peak hour volume is used to design future roadways because of its regular weekday occurrence. Using a higher or lower volume hour could lead to inadequate or underused designs. The exception to exclusive use of the PM peak hour is U.S. Highway 50 from the Sacramento County line to Placerville city limits. This section of U.S. Highway 50 serves a high volume of commuter traffic during the AM and PM peak hours. In some cases, the AM peak-hour volume is higher than PM peak-hour volume. U.S. Highway 50 is a divided freeway where improvements can be made to only one direction, if warranted. Therefore, analyzing the AM peak hour was considered necessary to identify potential impacts that may occur only during this time period.

El Dorado County Performance Standard

The Transportation and Circulation Element of the County's General Plan includes Policy TC-Xd which implements the General Plan GOAL TC-X: "To coordinate planning and implementation of roadway improvements with new development to maintain adequate levels of service on County roads." As described earlier, Policy TC-Xd states:

> Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2. The volume to capacity ratio of the roadway segments listed in Table TC-2 shall not exceed the ratio specified in that table. Level of Service will be as defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council) and calculated using the methodologies contained in that manual. Analysis periods shall be based on the professional judgment of the Department of Transportation which shall consider periods including, but not limited to, Weekday Average Daily Traffic (ADT), AM Peak Hour, and PM Peak Hour traffic volumes.

Table 3.9-4. El Dorado County Roads Allowed to Operate at Level of Service F[a] (General Plan Table TC-2)

Road Segment(s)		Max. V/C[b]
Cambridge Road	Country Club Drive to Oxford Road	1.07
Cameron Park Drive	Robin Lane to Coach Lane	1.11
Missouri Flat Road	U.S. Highway 50 to Mother Lode Drive	1.12
	Mother Lode Drive to China Garden Road	1.20
Pleasant Valley Road	El Dorado Road to SR 49	1.28
U.S. Highway 50	Canal Street to junction of SR 49 (Spring Street)	1.25
	Junction of SR 49 (Spring Street) to Coloma Street	1.59
	Coloma Street to Bedford Avenue	1.61
	Bedford Avenue to beginning of freeway	1.73
	Beginning of freeway to Washington overhead	1.16
	Ice House Road to Echo Lake	1.16
SR 49	Pacific/Sacramento Street to new four-lane section	1.31
	U.S. Highway 50 to SR 193	1.32
	SR 193 to county line	1.51

Source: El Dorado County 2004:Table TC-2.

[a] Roads improved to their maximum width given right-of-way and physical limitations.

[b] Volume to Capacity ratio.

Caltrans Performance Standard

U.S. Highway 50 is a Caltrans facility. Caltrans' threshold for highway segments of U.S. Highway 50 in El Dorado County is LOS F and E. The thresholds for U.S. Highway 50 are established in the ~~*U.S. Highway 50 Transportation Corridor Concept Report* and *U.S. Highway 50 Corridor System Management Plan*~~2014 TCR/CSMP. ~~These reports provide~~ This report describes the future or *concept* LOS for the segments in El Dorado County. Table 3.9-1 summarizes the concept LOS for U.S. Highway 50 segments in El Dorado County. Note that the improvements identified in the ~~*U.S. Highway 50 Transportation Corridor Concept Report* and the *US 50 Corridor System Management Plan*~~ 2014 TCR/CSMP have been incorporated into the ~~traffic demand model~~Travel Demand Model (TDM) used to analyze the project. In addition to the Caltrans concept LOS designations, El Dorado County has a higher threshold for level of service on U.S. Highway 50. The threshold is LOS E in Community Regions, and LOS D in Rural Centers and Rural Regions.

State Route 49 is also a Caltrans facility, and is subject to the performance standards of Caltrans for assessing LOS. The threshold for highway segments of State Route 49 in El Dorado County is LOS E, which is established in the *State Route 49, Transportation Concept Report*, which in turn references the El Dorado County General Plan. Table 3.9-2 summarizes the concept LOS for SR 49 segments in El Dorado County. Improvements included in the future concept configurations have been incorporated into the ~~traffic demand model~~TDM for the applicable scenarios.

As noted in Section 3.9-1, the *State Route 193 Transportation Concept Report* accepts the concept service level for SR 193 as LOS E "due to significant topographic and environmental constraints that make capacity enhancement projects financially infeasible." The segments of SR 193 included in the TDM are provided in Table 3.9-13.

Methodology Selected for This Analysis

There has been significant public discussion about current and projected future level of service (LOS) on U.S. Highway 50.

El Dorado County's revised, updated ~~Travel Demand Model (~~TDM~~)~~ was used to model six roadway network scenarios for the TGPA/ZOU project. This analysis indicates that U.S. Highway 50 will not reach LOS F in 2035 under any of the six roadway network scenarios analyzed.

The TDM used to model traffic in the DEIR was revised in response to comments received during review of the Draft EIR. The County received formal Caltrans concurrence on the TDM on September 22, 2014. In its letter, Caltrans states that the TDM conforms to the state-of-practice in travel demand modeling, meets overall traffic assignment validation standards suggested by Caltrans and the Federal Highways Administration, and is an appropriate tool for the County's long range planning purposes. The revised TDM was re-run for all of the scenarios with the updated network requested by Caltrans.

The following key changes were made to the TDM based on comments from Caltrans:

- Land use growth in and around the City of Placerville was inadvertently double-counted in the TDM version used for the DEIR analysis. The land use totals were reduced to the correct levels for the revised analysis.
- School land use was reallocated to the TAZs where schools are located or planned.
- The free-flow speed assumption for the segment of US Highway 50 from East Bidwell Street to Greenstone Road was increased to match Caltrans preferred speed of 58 mph for the general purpose, HOV, and auxiliary lanes. The speed on White Rock Road from Latrobe Road to the Sacramento/El Dorado County line was changed to match SACOG's SACSIM model.
- In addition to the revisions made to the TDM described above, the boundaries used to calculate daily Vehicle Trips (VT), Vehicle Miles Traveled (VMT), and Vehicle Hours Traveled[6] (VHT) were revised. The performance measures in the original DEIR were reported for all of El Dorado County, excluding the Tahoe Basin. The revised performance measures also exclude the VT, VMT, and VHT for the City of Placerville. Additionally, the number of households and employment for each scenario was updated to exclude the City of Placerville. As a result of these changes, the VT, VMT, and VHT for each scenario decreased compared to the original DEIR.

The results of the new runs are reflected in revised Table 3.9-13 of this recirculated Draft EIR. Note that Scenario 1 reflects existing conditions and is based on 2010 traffic counts, not the TDM model forecasts. As a result, its traffic counts and LOS results have not been changed.

~~The *U.S. 50 Corridor System Management Plan* (CSMP) (California Department of Transportation 2009) and draft information from the CSMP update process indicate that~~ In the 2035 horizon year, assuming all Caltrans planned and programmed improvements are installed, the 2014 TCR/CSMP forecasts that the LOS on the Sacramento County line to El Dorado Hills Boulevard, El Dorado Hills Boulevard to Bass Lake Road, and Bass Lake Road to Cameron Park Drive segments will be F, F, and D, respectively. The 2014 TCR/CSMP's long-range, ultimate concept is LOS E for all three of these

[6] Vehicle Hours Travelled is the total vehicle hours expended traveling on the roadway network in a specified area during a specified time period.

segments. ~~U.S. Highway 50 between the Sacramento/El Dorado County line and Cameron Park Drive is currently operating at LOS E and is projected to reach LOS F in the future.~~

The California Department of Transportation (Caltrans) used SACOG's ~~Sacramento Regional Travel Demand Model (SACMET) model~~ Sacramento Activity-Based Travel Simulation (SACSIM) model and other data inputs to determine transportation system performance for the 2014 TCR/CSMP. In a letter to the County dated September 25, 2013, Caltrans staff stated that the portion of the U.S. Highway 50 segment from the County Line to the El Dorado Hills Boulevard interchange currently operates at LOS F during the peak hour. Caltrans Operations staff has also stated that once the ramp metering for the westbound El Dorado Hills Boulevard on-ramp is operational, LOS on this segment ~~should~~may temporarily improve.

That ~~these two studies~~the TDM run and 2014 TCR/CSMP reached different conclusions may be attributed to a number of factors. First, Caltrans used SACOG's ~~SACMET~~SACSIM model and other data inputs for the CSMP, while El Dorado County used its updated TDM to model scenarios for the TGPA/ZOU project. ~~SACMET's~~SACOGs Sacramento Regional Travel Demand Model (SACMET) and SACSIM land use and roadway network assumptions are somewhat general, while the County's TDM is specifically tailored to El Dorado County. The ~~EDC~~El Dorado County TDM consists of 625 Traffic Analysis Zones (TAZs - 497 in El Dorado County and 128 in Sacramento and Placer Counties). This superior zonal resolution (many times more than SACMET) enables a much more detailed analysis of county roadways. In addition, future land uses in the TDM more accurately reflect the County's adopted General Plan land use categories as well as overall land use growth control totals. This is not the case for the SACMET/SACSIM models developed and maintained by SACOG. For example, SACMET's land use identified the El Dorado Hills Business Park as "retail," whereas EDC's TDM more accurately depicts its uses as "industrial" and "office." SACMET also showed golf courses, churches, and storage facilities in EDC as retail. Since retail uses result in higher trip generation rates than industrial, office, golf course, and church uses, these discrepancies could lead to differences in roadway impacts if not corrected.

The TDM more accurately depicts land uses than SACOG's regional land use dataset because of the availability of detailed use information that is documented and maintained by the county in its own parcel dataset. An extensive review process involving checks with aerial imagery was performed where land uses in the SACOG dataset did not match the use information in the county parcel data set. Given its more regional multi-county modeling domain, SACOG applied generalized land use categories for specialized uses such as golf courses, churches and storage facilities – uses that are difficult to identify and confirm at a regional scale that involves millions of parcels across a six-county area.

Second, Caltrans and El Dorado County use different practices regarding how traffic counts are collected and used to model future transportation system performance. Caltrans' count data for freeways are counted throughout the year, with some locations counted continuously. Locations that are not counted throughout the year are sampled every 3 years at different times during the count year. Final volumes are adjusted by compensating for seasonal influence, weekly variation, and other variables that may be present. Caltrans reported counts are Annual Average Daily Traffic, which, by definition, counts for a year divided by 365 days.~~based on a 7-day week.~~ El Dorado County collects traffic counts annually for more than 70 roads within the County. Count information is available in three formats: Hourly Traffic Count Reports, Annual Traffic Count Summary, and Five Year Traffic Count Summary (http://edcapps.edcgov.us/dot/trafficcounts.asp). Annual Daily Traffic Counts are calculated by taking the average of a 1- to 5-day, non-holiday weekday count, as required by the County's General Plan.

Third, Caltrans is planning for the future of the State Highway system while El Dorado County is tasked with the planning, improvement, and maintenance of the local network. It should be noted that Caltrans identifies LOS E as the concept LOS for the U.S. Highway 50 segment from the County Line to the El Dorado Hills Blvd./Latrobe Road interchange, however, Caltrans projects LOS F on the segment in the future without identifing improvements to meet their concept LOS E~~is planning for LOS F on U.S. Highway 50 in the future~~, while El Dorado County is tasked with maintaining LOS E on U.S. Highway 50 as required by the General Plan.

Caltrans and El Dorado County also differ in determining the amount and distribution of future development. Caltrans determines the annual growth from ~~SACOG's models~~all applicable travel demand models in the analysis area as well as linear regression analysis of historical traffic volumes and applies the traffic growth to the baseline conditions to determine the 20-year volumes. El Dorado County determines an appropriate 20-year residential growth forecast by considering the amount and distribution of growth that has historically occurred within the County, future demand and market trends, General Plan policies regarding how and where to accommodate future growth, location and availability of developable parcels, as well as other factors. The County's TDM is used to model future transportation system performance based on forecasted residential, commercial, and employment growth and planned roadway improvements identified in the County's Twenty Year ~~Capital Improvement Program (~~CIP~~)~~.

For ~~these~~the reasons discussed above, El Dorado County has chosen to use its TDM as the study methodology in this analysis.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the proposed project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways.
- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The County examined the following conditions in the EIR for the 2004 General Plan.

- Potential inconsistencies with LOS policies.
- Increase in daily and peak hour traffic.

- Short term unacceptable LOS conditions related to generation of new traffic in advance of transportation improvements.
- Insufficient transit capacity.

These conditions are addressed in the State CEQA Guidelines Appendix G thresholds, and because the thresholds are more comprehensive, they were used in this analysis. In addition, the current project differs from the 2004 General Plan EIR analysis as, prior to adoption of the 2004 General Plan the County's current policy and regulatory environment was quite different than it is today. At that time, the General Plan's current policies restricting development where it would result in an unacceptable LOS on the road system were not in effect. Similarly, the ~~Traffic Impact Mitigation (~~TIM~~)~~ fee and related ~~Capital Improvement Program (~~CIP~~)~~ had not been enacted. Furthermore, the mitigation measures identified in the 2004 Final EIR and incorporated into the General Plan had not been adopted. The current policy and regulatory environment includes measures that help reduce the impacts of future development under the General Plan on the road system and traffic levels. It should be noted that the County does not at this time have a congestion management plan, and it is not required to adopt one. The threshold the County uses is the County Performance Standard as expressed in Policy TC-Xd, described above.

Impacts and Mitigation Measures

2004 General Plan EIR Conclusions

The traffic and circulation impacts, mitigation measures, and level of significance after mitigation are summarized in Table 3.9-5.

Table 3.9-5. 2004 General Plan EIR Traffic and Circulation Summary

Impact	Adopted Mitigation Measures and Related General Plan Policy/Measure	Significance After Mitigation[a]	Discussion
5.4-1. Potential inconsistencies with LOS policies	5.4-1(a) – Policy TC-1u and Measure TC-V(1) 5.4-1(b) – Policy TC-1y and Measure TC-V1(2) 5.4-1(d) – Policy TC-1v and Measure TC-V(3) 5.4-1(e) – Goal TC-X and Policies TC-Xa through TC-Xi	LTS	Based on the analysis results, Latrobe Road and White Rock Road are projected to have three roadway segments with a 2025 LOS that would operate at LOS F. Congestion on the roadway segments projected to operate at LOS F could be severe enough to adversely affect adjacent roadways in El Dorado County, Sacramento County, and the City of Folsom. The combination of the mitigation measures, in particular those related to policy changes and the revised circulation diagram, would reduce the impact to a less than significant level.
5.4-2. Increase in daily and peak hour traffic	5.4-1(a) 5.4-1(b) 5.4-1(d)	SU	LOS D or worse conditions are projected to occur for the 85 roadway segments under implementation of the General Plan. During at least one peak hour, 12 of those segments would operate at LOS E and four would operate at LOS F. For most segments, the existing LOS would degrade from an

Impact	Adopted Mitigation Measures and Related General Plan Policy/Measure	Significance After Mitigation[a]	Discussion
			acceptable level (i.e., LOS A, B, or C) to LOS D, E, or F under 2025 conditions. In some cases existing LOS would be exacerbated.
5.4-3. Short term unacceptable LOS conditions related to generation of new traffic in advance of transportation improvements	5.4-3(a) – Implementation Measure TC-B 5.4-3(b) – Policy 2.2.5.20	SU	The General Plan contains concurrency policies that preclude certain development from proceeding until needed roadway improvements have been made or financed. However, these policies may not apply to all new development. In addition, a portion of the transportation improvements called for in the proposed circulation diagrams are needed to address existing LOS deficiencies caused by existing or approved development, and these deficiencies may be exacerbated by increased traffic generated from development inside and outside the county that is not subject to the concurrency requirements. The County has not yet identified a funding mechanism to provide for these improvements. Policy TC-Xf of the General Plan includes modified language to allow a potential lag to occur between the issuance of use or occupancy permits and required roadway improvements as long as roadway improvements necessary to accommodate "existing plus project" traffic are programmed (i.e., fully funded). This lag would reduce the potential effect that immediate concurrency has on funding feasibility, but it would not eliminate the other components of the impact related to the uncertainty of generating sufficient funding to improve existing deficiencies.
5.4-4. Insufficient transit capacity.	5.4.4 – Implementation Measure TC-L	SU	The existing commuter bus service has capacity problems because of insufficient park-and-ride facilities. Population and employment growth under the General Plan would increase demand for transit service and exacerbate this existing transit capacity problem. With implementation of the mitigation measure, the potential impacts to transit would be reduced, but not to a less-than-significant level.

[a] SU = significant and unavoidable; LTS = less than significant.

Project Impacts

The project would not substantially change the land use patterns set out in the current General Plan, nor does it propose any site-specific development projects that would generate traffic. As a result, the project impacts are not clearly distinguishable from the overall impacts of development pursuant to the current General Plan to the year 2035. As a result, the impacts identified in the following analysis discussions are almost fully the result of future development that could occur under the current General Plan, taking into account, where possible, the increment in traffic generation that would result from the TGPA's increase in density for mixed use projects.

Roadway System Analysis

The results of the transportation analysis are described in the form of six study scenarios. For the roadway system, the analysis focused on modelled project impacts in 2025 and its contribution to 2035 cumulative conditions. Three baselines are represented in the scenarios: 2010, 2025 with future CIP/MTP road improvements (assumes that planned roadway improvements have been constructed), and 2035 cumulative impact. (Technical calculations are provided in Appendix D). These results focused on regional performance measures, which allow for a comparison of the TGPA to the baselines.

The modeling done for each of the six roadway network study scenarios was based on the following.

- Study Scenario 1 (2010 Baseline Conditions)—Existing conditions; includes 2010 road network.
- Study Scenario 2 (Project 2035 Impact)—2035 land use buildout (with 2010 road network) + Project (TGPA/ZOU buildout assumption) with 2010 CIP/RTP Improvements.
- Study Scenario 3 (2025 Baseline Conditions)—2010 road network with 2025 CIP/RTP Improvements.
- Study Scenario 4 (Project 2025 Impact)—2010 road network + Project (TGPA/ZOU buildout assumption) with 2025 CIP/RTP Improvements.
- Study Scenario 5 (2035 Baseline)—2010 road network with 2035 land use buildout outside of El Dorado County with 2010 CIP/RTP Improvements.
- Study Scenario 6 (Cumulative Conditions in 2035)—2035 road network + Project (TGPA/ZOU buildout assumption) with 2035 CIP/RTP Improvements.

For the transit, bicycle, pedestrian, and aviation systems, the analysis was limited to a review of the existing General Plan policies and implementation measures. If a potential inconsistency was discovered, a significant impact was identified.

With regard to the project's impacts on traffic and transportation, the key scenarios are Scenario 2, which describes the impact of the project in 2035, Scenario 4, which describes the impact of the project in the intermediate year of 2025, and Scenario 6, which describes the project's contribution to cumulative traffic impacts within western El Dorado County.

Regional Performance Measure Results

Regional transportation performance measures generated by the travel demand model are shown in Table 3.9-6 for each scenario. Key changes in regional travel demand that are projected to occur for each study scenario include an increase in daily vehicle trips, ~~Vehicle Miles Traveled (~~VMT~~)~~, and ~~Vehicle Hours Traveled (~~VHT~~)~~. Increases occur for both the absolute values of these performance measures, as well as per household values.

In the Draft EIR, Table 3.9-6 inadvertently overrepresented development in the City of Placerville with some double counting of employment. This has been rectified in the most recent version of the TDM. The values have been corrected since release of the Draft EIR to eliminate this double-counting. Note that Placerville is outside of the scope of the TGPA/ZOU and that no revisions to land use data within the County was required based on the revised totals. The revised totals did not result in any change in the significance of the traffic impacts identified in Impacts TRA-1, TRA-2, TRA-4, and TRA-5.

Table 3.9-6. Vehicle Miles Traveled Comparison of Study Scenarios

Performance Measure	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Households (HH)	55,493	~~76,270~~ 71,442	~~68,550~~ 64,472	~~68,742~~ 64,664	55,493	~~76,270~~ 71,442
Employment	44,468	~~71,181~~ 60,139	~~63,964~~ 53,251	~~63,964~~ 53,251	44,468	~~71,181~~ 60,139
Daily Vehicle Trips	~~489,309~~ 449,734	~~701,704~~ 597,855	~~636,650~~ 536,492	~~637,747~~ 537,531	~~488,883~~ 448,701	~~707,185~~ 603,549
Daily Vehicle Miles Traveled (VMT)	~~3,931,502~~ 3,660,397	~~5,349,491~~ 4,729,056	~~4,948,626~~ 4,336,931	~~4,951,639~~ 4,334,534	~~4,123,778~~ 3,868,757	~~5,462,258~~ 4,831.076
Daily Vehicle Hours Traveled (VHT)	~~109,422~~ 102,854	~~162,445~~ 153,816	~~127,781~~ 114,958	~~128,120~~ 115,134	~~113,935~~ 107,776	~~147,384~~ 133,952
Daily Vehicle Trips per HH	~~8.82~~ 8.10	~~9.20~~ 8.37	~~9.29~~ 8.32	~~9.28~~ 8.31	~~8.81~~ 8.09	~~9.27~~ 8.45
Daily VMT per HH	~~70.85~~ 65.96	~~70.14~~ 66.19	~~72.19~~ 67.27	~~72.03~~ 67.03	~~74.31~~ 69.72	~~71.62~~ 67.62
Daily VHT per HH	~~1.97~~ 1.85	~~2.13~~ 2.15	~~1.86~~ 1.78	~~1.86~~ 1.78	~~2.05~~ 1.94	~~1.93~~ 1.87

Source: Kimley-Horn and Associates 2014.

Table 3.9-6 demonstrates that with an increase in the number of households, the VMT and VHT would increase. However, when looking at the increases on a per household basis, the difference is within 5% of the existing condition. This is generally because the TGPA/ZOU affects a limited area within the county and does not result in major changes to the General Plan's land use pattern.

The TDM reflects a minor difference from the BAE Economics growth projections. The land use for the TDM forecasts 2010 - 2035 job growth to be 15,671 employees, compared to 16,078 employees in the BAE report; the 2010 - 2035 residential growth is 17,336 units (or 15,949 HHs), compared to 17,409 units in the BAE report. The residential and employment growth forecasts for the TDM is within 2.5% of the BAE projections when not including incorporated Placerville in the totals.

Impact TRA-1: Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways (significant and unavoidable)

The ~~travel demand model (TDM)~~TDM analysis evaluated 227 roadway segments for each of the six study scenarios to evaluate effects on the County's roadway network. Table 3.9-13, *LOS Summary Table*, summarizing the analysis results is at the end of this chapter. Peak-hour traffic volumes from

the TDM were analyzed through a postprocessor ~~which~~that determines roadway segment LOS based on the LOS capacity thresholds shown in Table 3.9-3. Table 3.9-13 reports LOS using the industry recognized "difference" method (National Cooperative Highway Research Program Report 255, 1982) to post-process or refine the future traffic volumes from the model by applying the difference between the future year assignment and the base year assignment from the model to the count.

As a reminder, Study Scenarios 1, 3, and 5 represent traffic conditions in the years 2010, 2025, and 2035 without the project. Study Scenario 2 represents the impacts of the project in conjunction with future development under the General Plan in 2035, assuming that no additional road improvements are made. Study Scenario 4 represents the impacts of the project in conjunction with future development under the General Plan in 2025 and Study Scenario 6 represents the impacts of the project in conjunction with future cumulative development in 2035.

Tables 3.9-7 through 3.9-12 illustrate which roadway segments have a drop in LOS from an acceptable LOS D or better to LOS E or F under each study scenario. Although LOS E is considered an acceptable LOS for some areas of the County and U.S. Highway 50, it is still shown in the following tables for informational purposes. Changes to Tables 3.9-8 through 3.9-12 resulting from re-running of the TDM are shown in strike-out and underline. There is no change to Table 3.9-7.

Table 3.9-7. Study Scenario 1 (2010 Baseline Conditions)—2010 Conditions; Includes 2010 Road Network

					Scenario 1 - Existing Conditions (2010)				
					Volume		2010 Method LOS		
ID	Roadway	Segment	Class[a] – Scenario Exist, 2, and 5	Minimum LOS	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	Impact? (Y/N)
44	Green Valley Rd[b]	approx 100 ft E of County line	2A	~~4AU~~ E	1,060	1,650	D	F	Y
47	Missouri Flat Rd	100 ft S of China Garden Rd	2A	E	1,250	1,580	D	E	N
151	Green Valley Rd[b]	approx 200 ft W of El Dorado Hills Boulevard	2A	~~4AU~~ E	1,730	2,350	F	F	Y

Source: Kimley-Horn and Associates 2014.

[a] Roadway Classification - See Table 3.9-3 for additional detail.

[b] Traffic Volumes for this roadway are estimates based on adjacent roadway volumes.

2R, W20, W18 = Minor Two-Lane Highway
2U = Major Two-Lane Highway
2A = Two-Lane Arterial
4AU = Four-Lane Arterial, Undivided
4AD = Four-Lane Arterial, Divided
6AD = Six-Lane Arterial, Divided
2F = Two Freeway Lanes (3)
2FA = Two Freeway Lanes + Auxiliary Lane (3)
3F = Three Freeway Lanes (3)
3FA = Three Freeway Lanes + Auxiliary Lane (3)
4F = Four Freeway Lanes (3)

Under existing (i.e., year 2010) conditions only one segment of Missouri Flat Road is anticipated to operate at LOS E in the PM peak hour. This segment is within a Community Region of the county

where LOS E is acceptable. ~~Two~~The two segments of Green Valley Road (IDs 44 and 151) would operate at an unacceptable LOS F and are expected to ~~continue to~~ operate at LOS F in the near future. ~~Because these levels of service reflect existing conditions without the project, no~~This indicates that significant ~~project~~ impacts would occur as a result of future development under the TGPA. However, the following programmed improvements to Green Valley Road are expected to reduce this impact to a less than significant level.

- Segment ID 44 – widen Green Valley Road to a 4 lane roadway. The City of Folsom received a Flexible Funds Program grant from SACOG in December 2013 to widen Green Valley Road from East Natoma Street to Sophia Parkway to a 4 lane roadway. Construction is anticipated to begin in 2016.
- Segment ID 151 - widen Green Valley Road to a 4 lane roadway. The Community Development Agency's Capital Improvement Program Project GP178 proposes to widen Green Valley Road between Franciso Drive and El Dorado Hills Boulevard/Salmon Falls Road to a 4 lane roadway. This widening project is also included in the current County's Traffic Impact Mitigation Fee Program.

Table 3.9-8. Study Scenario 2 (Project 2035 Impact)—2035 Land Use Buildout (with Existing Road Network) + Project TGPA/ZOU Buildout Assumption) with 2010 ~~CIP/RTP~~CIP/RTP/MTP Improvements

ID	Roadway	Segment	Class[a] – Scenario Exist, 2, and 5	Minimum LOS[b]	Scenario 2				Impact? (Y/N)
					Volume		2010 Method LOS		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
5	U.S. Highway 50–EB GP	W of Bass Lake	2FA	F/E	~~2,480~~ 2,300	~~4,650~~ 5,010	B	E	~~Y~~ N
6	U.S. Highway 50–WB GP	W of Bass Lake	2F	F/E	3,750	3,040	E	D	N
9	U.S. Highway 50–EB GP	W of Cameron Park	2F	~~E~~ D/E	~~2,600~~ 2,140	~~3,750~~ 3,680	C	E	~~N~~ Y
13	U.S. Highway 50–EB GP	W of Ponderosa	2F	D/E	~~2,910~~ 2,410	~~3,720~~ 3,660	~~D~~ E	E	~~N~~ Y
14	U.S. Highway 50–WB GP	W of Ponderosa	2F	D/E	~~3,440~~ 3,610	~~3,780~~ 3,230	~~D~~ E	~~E~~ D	~~N~~ Y
32	Cameron Park Dr	200 ft N of Oxford Rd	2A	E	~~1,410~~ 1,420	~~1,700~~ 1,710	D	F	Y
38	El Dorado Hills Bl	300 ft S of Francisco Dr	2A	E	~~1,270~~ 1,390	~~1,570~~ 1,620	D	E	N
44	Green Valley Rd[c]	approx 100 ft E of County line	2A	~~4AU~~ E	1,290	2,060	D	F	Y
47	Missouri Flat Rd	100 ft S of China Garden Rd	2A	~~E~~ F	~~1,400~~ 1,350	~~1,570~~ 1,600	D	E	N
55	South Shingle Rd	100 ft S of Mother Lode Dr	2A	E	~~1,220~~ 1,230	~~1,600~~ 1,590	D	E	N
56	Cameron Park Drive	100 ft N of Robin Ln	2A	F[d]	1,060	1,610	D	E	N

ID	Roadway	Segment	Class[a] – Scenario Exist, 2, and 5	Minimum LOS[b]	Scenario 2				Impact? (Y/N)
					Volume		2010 Method LOS		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
151	Green Valley Rd[c]	~200 ft W of El Dorado Hills Boulevard	2A	~~4AU~~ E	~~2,150~~ 2,270	~~2,940~~ 2,900	F	F	Y
226	White Rock Rd	At County Line	2A	E	~~1,090~~ 1,060	~~1,790~~ 1,910	D	F	Y

Source: Kimley-Horn and Associates 2014.

[a] Roadway Classification - See Table 3.9-3 for additional detail.

[b] The~~se~~ minimum LOS values for U.S. Highway 50 represent the 20-year concept/ultimate concept LOS from the Caltrans ~~TCCR 50~~2014 TCR/MSCP because the model includes the 20-year concept facility improvements shown in Table 3.9-1.

[c] Traffic Volumes for this roadway are estimates based on adjacent roadway volumes

[d] This roadway segment is included in the list of roadway segments allowed to operate at LOS F as shown in Table 3.9-4.

2R, W20, W18 = Minor Two-Lane Highway
2U = Major Two-Lane Highway
2A = Two-Lane Arterial
4AU = Four-Lane Arterial, Undivided
4AD = Four Lane Arterial, Divided
6AD = Six-Lane Arterial, Divided

2F = Two Freeway Lanes (3)
2FA = Two Freeway Lanes + Auxiliary Lane (3)
3F = Three Freeway Lanes (3)
3FA = Three Freeway Lanes + Auxiliary Lane (3)
4F = Four Freeway Lanes (3)

Note: "GP" stands for General Purpose Lanes (includes auxiliary lanes)

Study Scenario 2 examines the potential impact of future development under the General Plan to 2035, with the TGPA/ZOU amendments, absent any additional road improvements. This is a worse-case scenario that would occur in the absence of the road improvements that would otherwise be funded by the TIM and CIP requirements. This is provided solely as a point of comparison; there is no intent on the part of the County to rescind the TIM and CIP requirements. As shown, ~~two~~four County-maintained roadway segments (IDs 32, 44, 151, and 226) would change to an unacceptable LOS F. These roadway segments are not on the list of roadways that are allowed to operate at LOS F pursuant to the General Plan (see Table 3.9-4). The decrease in LOS to LOS F on these roadway segments would be a significant impact. Under this scenario, two segments of Green Valley Road would continue to operate at LOS F with the addition of project traffic. Adding additional traffic to roads operating at LOS F would be a significant impact. ~~One segment~~Three segments of U.S. Highway 50 (IDs 9, 13, 14) would operate at LOS E. ~~This segment of U.S. Highway 50 is located in a rural region of the County where the minimum LOS is D. The additional traffic from the proposed project would cause this segment of the highway to decrease to LOS E~~In each case, the LOS would exceed Caltrans' 20-year concept LOS, but not the ultimate concept LOS. The decrease from LOS D to LOS E on this segment of U.S. Highway 50 for the 2035 planning period would be a significant impact.

Table 3.9-9. Study Scenario 3 (2025 Baseline Conditions)—2010 Road Network with 2025 ~~CIP/RTP~~CIP/RTP/MTP Improvements

ID	Roadway	Segment	Class[a] – Scenario 3, 4, and 6	Minimum LOS	Scenario 3				Impact? (Y/N)
					Volume		2010 Method LOS		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
14	U.S. Highway 50–WB GP	W of Ponderosa	2F	D/E[b]	~~2,940~~ 3,440	~~3,610~~ 3,260	D	~~E~~ D	N
32	Cameron Park Dr	200 ft N of Oxford Rd	2A	E	~~1,360~~ 1,310	~~1,670~~ 1,660	D	F	Y
~~46~~ 47	Missouri Flat Rd	100 ft S of China Garden Rd	2A	E	~~1,280~~ 1,300	~~1,560~~ 1,470	D	~~E~~ D	N
~~48~~ 49	Missouri Flat Rd	400 yds N of Forni Rd	4AD	~~E~~ F[c]	~~2,640~~ 2,390	~~3,450~~ 3,120	D	~~F~~ D	N

Source: Kimley-Horn and Associates 2014.

[a] Roadway Classification - See Table 3.9-3 for additional detail

2R, W20, W18 = Minor Two-Lane Highway
2U = Major Two-Lane Highway
2A = Two-Lane Arterial
4AU = Four-Lane Arterial, Undivided
4AD = Four Lane Arterial, Divided
6AD = Six-Lane Arterial, Divided
2F = Two Freeway Lanes (3)
2FA = Two Freeway Lanes + Auxiliary Lane (3)
3F = Three Freeway Lanes (3)
3FA = Three Freeway Lanes + Auxiliary Lane (3)
4F = Four Freeway Lanes (3)

[b] These minimum LOS values for U.S. Highway 50 represent the 20-year concept LOS from the Caltrans ~~TCCR 50~~2014 TCR/MSCP because the model includes the 20-year concept/ultimate concept facility improvements shown in Table 3.9-1.

[c] ~~Not considered an impact because this~~This roadway segment is included in the list of roadway segments allowed to operate at LOS F as shown in Table 3.9-4.

Note: "GP" stands for General Purpose Lanes (includes auxiliary lanes)

Study Scenario 3 projects 2025 traffic levels taking into consideration improvements to the road system that are expected (i.e., planned and programmed) to be installed by 2025. This study scenario assumes that the General Plan would be implemented without the TGPA/ZOU amendments. Here, ~~two~~one County-maintained roadway segment~~s~~ (ID 32) would change to an unacceptable LOS F. One segment of Missouri Flat Road (ID 48) is identified in the General Plan as a roadway segment that is allowed to operate at LOS F (see Table 3.9-4). ~~With the exception of Missouri Flat Road between Mother Lode Drive and China Garden Drive, the~~ The decrease in LOS on ~~these~~this roadway segment~~s~~ would be a significant impact.

Table 3.9-10. Study Scenario 4 (Project 2025 Impact)—2010 Road Network + Project (TGPA/ZOU Buildout Assumption) With 2025 ~~CIP/RTP~~CIP/RTP/MTP Improvements

ID	Roadway	Segment	Class[a] – Scenario 3, 4, and 6	Minimum LOS	Scenario 4				Impact? (Y/N)
					Volume		2010 Method LOS		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
14	U.S. Highway 50–WB GP	W of Ponderosa	2F	D/E[b]	~~2,930~~ 3,440	~~3,600~~ 3,240	D	~~E~~ D	N
32	Cameron Park Dr.	200 ft N of Oxford Rd	2A	E	~~1,350~~ 1,300	~~1,680~~ 1,650	D	F	Y
~~46~~ 47	Missouri Flat Rd	100 ft S of China Garden Rd	2A	E	~~1,250~~ 1,290	~~1,550~~ 1,440	D	~~E~~ D	N
~~48~~ 49	Missouri Flat Rd	400 yds N of Forni Rd	4AD	~~E~~ F[c]	~~2,630~~ 2,400	~~3,460~~ 3,120	D	~~F~~ D	N[c]

Source: Kimley-Horn and Associates 2014.

[a] Roadway Classification - See Table 3.9-3 for additional detail.

2R, W20, W18 = Minor Two-Lane Highway
2U = Major Two-Lane Highway
2A = Two-Lane Arterial
4AU = Four-Lane Arterial, Undivided
4AD = Four-Lane Arterial, Divided
6AD = Six-Lane Arterial, Divided
2F = Two Freeway Lanes (3)
2FA = Two Freeway Lanes + Auxiliary Lane (3)
3F = Three Freeway Lanes (3)
3FA = Three Freeway Lanes + Auxiliary Lane (3)
4F = Four Freeway Lanes (3)

[b] These minimum LOS values represent the 20-year concept/ultimate concept LOS from the Caltrans ~~TCCR 50~~2014 TCR/MSCP because the model includes the 20-year concept facility improvements shown in Table 3.9-1.

[c] ~~Not considered an impact because this~~This roadway segment is included in the list of roadway segments allowed to operate at LOS F as shown in Table 3.9-4.

Note: "GP" stands for General Purpose Lanes (includes auxiliary lanes)

Study Scenario 4 looks at the impact of the project on the road system that is expected to exist in 2025. The roadway impacts are the same as Study Scenario 3. The impact of the project on the planned 2025 road system would be essentially the same as development under the General Plan without the project in 2025. This indicates that the TGPA's impact is indistinguishable from the roadway impacts expected to occur from future development under the existing General Plan.

~~Two~~One County-maintained roadway segment~~s~~ (32) would change to an unacceptable LOS F. ~~One segment of Missouri Flat Road (ID 48) is identified in the General Plan as a roadway segment that is allowed to operate at LOS F (see Table 3.9-3). With the exception of Missouri Flat Road between Mother Lode Drive and China Garden Drive, the~~The decrease in LOS on ~~these~~this roadway segment~~s~~ would be a significant impact.

Table 3.9-11. Study Scenario 5 (2035 Baseline)—2010 Road Network with 2035 Land Use Buildout Outside of El Dorado County with 2010 ~~CIP/RTP~~CIP/RTP/MTP Improvements

ID	Roadway	Segment	Class[a] – Scenario Exist, 2, and 5	Minimum LOS	Scenario 5				Impact? (Y/N)
					Volume		2010 Method LOS		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
44	Green Valley Rd[b]	approx 100 ft E of County line	2A	~~4AU~~ E	~~1,080~~ 1,130	~~1,800~~ 1,790	D	F	Y
47	Missouri Flat Rd	100 ft S of China Garden Rd	2A	E	1,260	~~1,570~~ 1,610	D	E	N
151	Green Valley Rd[b]	pprox. 200 ft W of El Dorado Hills Boulevard	2A	~~4AU~~ E	~~1,920~~ 2,030	~~2,650~~ 2,620	F	F	Y
226	White Rock Rd	At County Line	2A	E	~~930~~ 900	~~1,670~~ 1,810	D	F	Y

Source: Kimley-Horn and Associates 2014

[a] Roadway Classification - See Table 3.9-3 for additional detail.

[b] Traffic Volumes for this roadway are estimates based on adjacent roadway volumes

2R, W20, W18 = Minor Two-Lane Highway
2U = Major Two-Lane Highway
2A = Two-Lane Arterial
4AU = Four-Lane Arterial, Undivided
4AD = Four-Lane Arterial, Divided
6AD = Six-Lane Arterial, Divided
2F = Two Freeway Lanes (3)
2FA = Two Freeway Lanes + Auxiliary Lane (3)
3F = Three Freeway Lanes (3)
3FA = Three Freeway Lanes + Auxiliary Lane (3)
4F = Four Freeway Lanes (3)

Under Study Scenario 5, which is based on 2035 projections, three County-maintained roadway segments (IDs 44, 151, 226) are anticipated to operate at an unacceptable LOS F in the PM peak hour. These segments are not listed in Table 3.9-4 as ~~one~~any of the roadway segments that ~~is~~are allowed to operate at LOS F by the General Plan. For this reason, the decrease in level of service on these segments under Study Scenario 5 would be significant.

Table 3.9-12. Study Scenario 6 (Cumulative Conditions in 2035)—2035 Road Network + Project (TGPA/ZOU Buildout Assumption) with 2035 ~~CIP/~~CIP/RTP/MTP Improvements

ID	Roadway	Segment	Class[a] – Scenario 3, 4, and 6	Minimum LOS	Scenario 6				Impact? (Y/N)
					Volume		2010 Method LOS		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
5	U.S. Highway 50–EB GP	W of Bass Lake	2FA	F/E[b]	2,530	4,700	B	E	N
9	U.S. Highway 50–EB GP	W of Cameron Park	2F	D/E[b]	~~2,640~~ 2,280	~~3,650~~ 3,600	C	E	N
13	U.S. Highway 50–EB GP	W of Ponderosa	2F	D/E[b]	2,660	3,810	C	E	N
14	U.S. Highway 50–WB GP	W of Ponderosa	2F	D/E[b]	~~3,320~~ 3,900	~~3,830~~ 3,500	~~D~~ E	~~E~~ D	~~N~~ Y
32	Cameron Park Dr	200 ft N of Oxford Rd	2A	E	~~1,530~~ 1,500	~~1,870~~ 1,840	D	F	Y
38	El Dorado Hills Bl	300 ft S of Francisco Dr	2A	E	~~1,260~~ 1,230	~~1,570~~ 1,540	D	E	N
~~46~~ 47	Missouri Flat Rd	100 ft S of China Garden Rd	2A	E	~~1,290~~ 1,240	~~1,540~~ 1,450	D	~~E~~ D	N
~~48~~ 49	Missouri Flat Rd	400 yds N of Forni Rd	4AD	~~E~~ F[c]	~~2,810~~ 2,510	~~3,640~~ 3,310	D	F	N[c]
~~55~~ 56	Cameron Park Dr	100 ft N of Robin Ln	2A	~~E~~ F[c]	~~1,150~~ 1,170	~~1,620~~ 1,730	D	~~E~~ F	N
~~194~~ 196	Pleasant Valley Rd	200 yds E of SR 49 (E)	2A	E	~~1,320~~ 1,300	~~1,590~~ 1,560	D	E	N

Source: Kimley-Horn and Associates 2014.

[a] Roadway Classification - See Table 3.9-3 for details.

2R, W20, W18 = Minor Two-Lane Highway
2U = Major Two-Lane Highway
2A = Two-Lane Arterial
4AU = Four-Lane Arterial, Undivided
4AD = Four-Lane Arterial, Divided
6AD = Six-Lane Arterial, Divided
2F = Two Freeway Lanes (3)
2FA = Two Freeway Lanes + Auxiliary Lane (3)
3F= Three Freeway Lanes (3)
3FA= Three Freeway Lanes + Auxiliary Lane (3)
4F= Four Freeway Lanes (3)

[b] These minimum LOS values represent the 20-year concept/ultimate concept LOS from the Caltrans ~~TCCR 50~~2014 TCR/MSCP because the model includes the 20-year concept facility improvements shown in Table 3.9-1.

[c] Not considered an impact because this roadway segment is included in the list of roadway segments allowed to operate at LOS F as shown in Table 3.9-4.

Note: "GP" stands for General Purpose Lanes (includes auxiliary lanes)

Study Scenario 6 presents traffic conditions in 2035 assuming that planned CIP/RTP/MTP improvements have been installed and the TGPA/ZOU amendments have been approved. Two roadway segments (IDs 14 and 32) would ~~change to LOS F~~exceed the minimum LOS. This includes one-segment of U.S. Highway 50 (ID 14) that would operate at LOS E. LOS E would exceed Caltrans' 20-year concept LOS (although it does not exceed the ultimate concept LOS). The decrease to LOS E on this segment of U.S. Highway 50 for the 2035 planning period would be a significant impact. ~~One of roadway segments Missouri Flat Road, is allowed to operate at LOS F per General Plan Policy TC-Xa.~~ The decrease in service to LOS F on Cameron Park Drive (ID 32) would be a significant impact. Missouri Flat Road (ID 49) and Cameron Park Road (ID 56) however, are allowed to operate at LOS F per General Plan Policy TC-Xa and there would be no significant impact on those segments. The General Plan sets the maximum V/C ratio of Missouri Flat Road from Highway 50 to Mother Lode Drive at 1.12 and from Mother Load Drive to China Garden Road at 1.20. This encompasses segments 48 and 49 of Missouri Flat Road. Neither of these segments would exceed a maximum V/C of 1.01 in the PM peak hour.

The impacts associated with the project would occur over time as new development is approved and constructed pursuant to the changes proposed in the TGPA/ZOU. Programmatic improvements to roadways such as CIP or RTP improvements will be developed as additional capacity is needed and funding ~~is~~becomes available. The County has established mechanisms for implementing roadway improvements for County-maintained roadways that are adversely affected as a result of ~~the~~ new development proposals~~, the County has established mechanisms for implementing roadway improvements~~.

Goal TC-X of the Transportation and Circulation Element of the General Plan reflects the requirements of Measure Y. The policies under this goal require the County and individual discretionary projects to construct or to provide funding towards CIP roadway improvements and payment of TIM fees. The Transportation and Circulation Element Policies that would apply to all future discretionary projects, including future discretionary projects within the TGPA/ZOU area, are described in the regulatory setting, above.

In addition, the General Plan policies essentially require the County to operate a TIM fee program for new development that requires payment of fees to the County based on the ~~land use~~project type and number of units of the project. The fees paid into this program fund major roadway, bridge, intersection, interchange, and HOV lane projects in the county pursuant to the adopted CIP. The CIP identifies road network improvements and their cost, ensuring that TIM fees collected are used for specific road improvements to avoid creating congested roadway conditions.

The TIM Fee and CIP ensure that adequate off-site roadway facilities are built to serve qualifying new development projects. The facilities may not be built concurrently with the individual development projects because sufficient funds must be accrued from the TIM Fee to fund the full improvements necessary. Under the "takings clause" of the U.S. Constitution, the County cannot require a developer to pay more than their fair share of the cost of improvements. The state Mitigation Fee Act (Government Code Section 66000-66008.) requires the County to maintain the TIM Fee proceeds in a dedicated account and to apply those fees only to the road improvements for which they have been collected. The County accounts for the fees collected and commits the funds to the required road improvements through the CIP. Many of the CIP projects are funded by a combination of TIM fees and other revenue sources. Roadways that are determined to be solely the result of new development are placed in TIM Fee Program, which is then 100% TIM fee funded through the CIP program. As allowed under the Mitigation Fee Act, developers may be required to

construct offsite improvements as part of their project, and are reimbursed over time via a road reimbursement agreement as other developments relying on the same offsite improvements pays their pro-rata shares of the total cost.

The timing of actual construction of road improvements funded through the TIM fee program may lag behind development given that growth patterns may have changed or the TIM program zone may have financial obligations that delay the construction of planned improvements. The County's CIP is reviewed annually, as required by the General Plan, to update the most current costs of material, land, labor etc. which cause variations in cost estimates, with right-of-way acquisition costs being one of the biggest factors. Because forecasts are imperfect, actual permit activity is checked annually to update the current year, five year and 10-year budget of which recommendations for amending the CIP are brought to the Board. Timing of roadway improvements also shift due to actual growth patterns (checked annually when compared to 20-year forecast). The Board of Supervisors ultimately determines the prioritization of projects within the Capital Improvement Program and adjusts the TIM fee accordingly.

With the exception of Study Scenario 1, which represents the existing condition, future development, whether under the project or the existing General Plan, would result in a decrease in service to an unacceptable LOS F on certain roadway segments. The County has programs in place that can be used to mitigate potential transportation impacts that result in unacceptable levels of service. The mitigation measures, such as payment of TIM fees to fund roadway improvements to increase capacity and improve LOS, apply to discretionary projects. Future discretionary projects that are developed within the TGPA/ZOU areas would be required to construct on-site roadway improvements as conditions of approval or as a condition of a subdivision map and pay TIM fees as required by the existing County policies described above. ~~Because the~~The County has specific traffic mitigation policies that require future development projects to construct adequate on-site and off-site roadway facilities to maintain acceptable levels of service and payment of fees that go toward making regional traffic improvements designed for improving traffic operations. Alternatively, the developer may be required to construct offsite and be reimbursed as deemed appropriate via a road reimbursement agreement. In either case, necessary improvements are required as part of project approval. Therefore, potential impacts are considered less than significant.

Some of the scenarios would result in a decrease in LOS on U.S. Highway 50 and other County roads that could be addressed through construction of additional lanes, including HOV lanes or other widening projects that would add capacity to the freeway. Specifically, the 2014 TCR/CSMP ~~*U.S. 50 Corridor System Management Plan*~~ identifies U.S. Highway 50 improvements to include ~~four freeway lanes and the development of two HOV lanes plus~~ auxiliary lanes and ITS from the Sacramento/El Dorado County Line to Ponderosa Road, two HOV lanes plus ITS from there to Greenstone, and auxiliary lanes and ITS from Greenstone to Missouri Flat Road~~., and four freeway lanes plus an auxiliary lane from Missouri Flat Road to the end of the freeway in Placerville~~ during the 2035 planning period. The improvements are shown by roadway segment in Table ~~3.9-1~~1 of the 2014 TCR/CSMP. These improvements are considered concept facilities, meaning they are the roadway improvements that are ~~needed in~~ planned and programmed over the next 20 years (California Department of Transportation ~~2010~~2014b). The TDM included these improvements in the analysis of the study scenarios. However, there is no assurance that these improvements to U.S. Highway 50 would be in place at this time. This is because of the inherent limitations in Measure Y's fee-based funding approach, as discussed above. Therefore, potential short-term impacts would be significant and unavoidable until these improvements are in place.

Impacts to County-maintained roads could be approved by a vote of the El Dorado County electorate or the Board of Supervisors to include on a list of roads that are allowed to operate at LOS F. However, it cannot be assured that this would happen. Furthermore, Policy TC-Xa is only in effect until December 31, 2018 at which time it may or may not be extended. The Board of Supervisors could extend this policy by voting to extend the deadline or voting to include the policy as a permanent component of the Transportation and Circulation Element of the General Plan.

The proposed Parking and Loading Standards establish general requirements for the number of off-street parking spaces to be provided, by type of land use. The standards also establish requirements for parking lot design, loading areas, and shared parking, among other things. The standards are described in Chapter 2, *Project Description*, of the DEIR.

In general, the Parking and Loading Standards mandate that new development and many re-use projects provide substantial amounts of off-street parking. The standards require two off-street parking spaces for each single-family dwelling unit, as well as two spaces for each unit in a duplex or triplex. The standards require 1.5 or 2 parking spaces per unit for apartments, townhouses and condominiums depending on the size of the unit, plus one guest parking space per four dwelling units. Standards for nonresidential development vary greatly depending on the type and size of land use. The standards are typical for suburban areas in which the vast majority of trips are made by automobile. By requiring plentiful parking, the standards encourage people to drive, even for short trips. For example, the standards require neighborhood shopping centers to provide one parking space per 300 square feet of gross floor area, which is more parking than must be provided for regional shopping centers (one space per 500 square feet of gross floor area). That sort of requirement for neighborhood-serving shops and services encourages use of automobiles for short trips that might otherwise be made by walking or bicycling, meaning marginally more traffic on local roads. Also, building parking lots in front of commercial, civic, and other uses requires pedestrians and bicyclists to compete with automobiles for space, which discourages pedestrians and bicyclists.

The standards provide the County with discretion to reduce or increase off-street parking requirements depending upon, among other things, the amount of adjoining on-street parking, the type and size of use or activity, the composition of tenants, peak parking and traffic loads, the availability of public transportation, the payment of in-lieu fees for public transportation, and the extent of any transportation demand management program. The standards also permit uses to share off-street parking in a fashion that provides maximum parking for each use.

Although the standards mandate plentiful off-street parking, they also require significant amounts of bicycle parking, which encourages people to use bicycles rather than cars. The standards, however, do not require covered or secure bicycle parking, provision of which would make bicycling to work, shopping and other activities more attractive. The 2010 Bicycle Transportation Plan notes that only about 0.3 percent of work trips were made by bicycle in El Dorado County in 2000. Nonetheless, "[t]he small communities of El Dorado County provide unique opportunities for increased short, local bicycle transportation trips" (El Dorado County Transportation Commission 2010). The proposed Parking and Loading Standards, by both providing more bicycle parking and more automobile parking, will likely have a neutral effect on the frequency of bicycle use over auto use for short shopping trips.

The proposed Parking and Loading Standards requirements for off-street parking in mixed-use development are more flexible, which could encourage alternative modes of travel in compact neighborhoods. However, the County anticipates that only a small portion of development in the next 20 years will be mixed-use.

The proposed ZOU Home Occupation standards (Section 17.40.160) would increase the number of employees that could be allowed by right at a home business in comparison to the existing Zoning Ordinance. Section 17.40.160C would allow up to four employees at a home business in the R3A and RE zones on parcels over 5 acres and less than 10 acres in area; up to four employees in the RE zone on parcels larger than 10 acres; up to 7 employees in the RE zone on parcels greater than 10 acres; up to 7 employees in Rural Lands, Agricultural, and Resource Zones on parcels over 5 acres and less than 10 acres; and up to 10 employees in Rural Lands, Agricultural, and Resource Zones on parcels over 10 acres.

It is not possible to quantify the potential traffic that may be generated from future home occupations over the term of the planning horizon because the future number and type of such activities, and the size of parcels on which they may be undertaken, is unknown and cannot be known with any accuracy. However, given that additional employees could be allowed on large lots in rural areas, there is a reasonable probability that traffic impacts on rural roads could be significant in some instances where roads are narrow.

Mitigation Measure TRA-2 would reduce this impact by reducing the number of employees allowed by right. If a proposed home business is large enough to require a larger number of employees, then that number can be considered under a discretionary conditional use permit, as provided in proposed Section 17.40.170G. This would allow a traffic study to be undertaken and, if impacts could not be mitigated, an EIR prepared.

The following mitigation measures would reduce this impact to a less-than-significant level over the longer-term. The short-term impacts before improvements are installed would remain significant and unavoidable.

Mitigation Measure TRA-1: Extend timeframe of General Plan Transportation and Circulation Element Policy TC-Xa

The Board of Supervisors shall review and consider an extension to Policy TC-Xa of the Transportation and Circulation Element of the General Plan prior to its expiration on December 31, 2018. The intent of this measure is to ensure that the current mitigation policies of TC-Xa are applied to future discretionary development within the TGPA/ZOU areas should the Board of Supervisors conclude the measures are still appropriate for development in El Dorado County.

The first two lines of Policy TC-Xa will be amended as follows. The remainder of the policy will remain unchanged.

Policy TC-Xa. ~~The following policies shall remain in effect until December 31, 2018.~~ The following policies shall remain in effect unless repealed or amended by majority vote of El Dorado County's electorate.

Mitigation Measure TRA-2: Reduce the Proposed Number of Employees Allowed by Right at Home Occupations

Table 17.40.160.2 shall be amended prior to adoption as follows:

Table 17.40.160.2 – Home Occupation Employee Limits

	RM	R1	R20K	R1A/R2A	R3A	RE	Rural Lands, Agricultural, and Resource Zones
< 1 acres	1	1	1	1	1	1	1
1-5 acres	1	1	2	2	2	2	~~4~~2
> 5 but less than 10 acres	1	1	2	2	~~4~~2	~~4~~2	~~7~~2
> 10 acres	1	1	2	2	~~4~~2	~~7~~2	~~10~~2

Section 17.40.160G shall be amended prior to adoption as follows:

G. **Conditional Use Permit.** Where a proposed home occupation exceeds the standards under Subsections C or D above, a Conditional Use Permit shall be required. A Conditional Use Permit shall not be approved for a proposed home occupation that would result in a potential traffic hazard.

Impact TRA-2: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit (less than significant)

Circulation System

The following analysis applies to all six study scenarios. The project proposes changes to the Transportation and Circulation Element of the General Plan. These changes are minor in nature and are intended to streamline or clarify policies in the Transportation and Circulation Element. A review of the proposed revisions has determined that none of the changes would have any adverse effect on the TDM update or result in an adverse effect on LOS or roadway operations. Therefore, potential impacts would be less than significant and no mitigation is required.

As noted in the discussion above, with the exception of Study Scenario 1, Existing Conditions, all of the study scenarios would conflict with a portion of the County's General Plan as a result of decreasing LOS on one or more roadway segments to an unacceptable LOS F. The analysis shows the project would result in a decrease in LOS in at least one road segment in Study Scenarios 2, 4, and 6. The County has traffic mitigation policies in place, specifically Policy TC-Xd and the TIM fee program that would apply to future discretionary projects that are developed within the TGPA/ZOU areas. These measures would reduce or avoid decreasing LOS and require payment of TIM fees that would go toward making regional traffic improvements designed for improving traffic operations. Therefore, potential impacts would be less than significant.

Public Transportation System

The following analysis applies to all six study scenarios. A review of the TGPA/ZOU did not reveal potential internal policy inconsistencies or inconsistencies with other adopted plans or programs supporting the provision of public transportation facilities or services in El Dorado County. None of

the TGPA/ZOU study scenarios (i.e., Study Scenarios 2, 4, and 6) would preclude attainment of the objectives of these plans. The potential impacts would be less than significant.

Non-Motorized Transportation System

The following analysis applies to all six study scenarios. A review of the TGPA/ZOU did not reveal potential internal policy inconsistencies or inconsistencies with other adopted plans or programs supporting the provision of non-motorized transportation facilities or services in El Dorado County. The TGPA/ZOU would not preclude attainment of the objectives of these plans. Potential impacts would be less than significant. No mitigation is required.

The General Plan incorporates a range of measures, described above, to help reduce the potential impact of future growth on regional roadways. Mitigation would be required for future individual development projects approved through the County's review of discretionary permits. Therefore, potential impacts are considered less than significant.

Impact TRA-3: Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks (no impact)

The project would not change any existing land use designations or propose changes to existing traffic patterns that would adversely affect air traffic patterns. The project does not propose any changes to existing land uses that would result in conflicts with the adopted Airport Land Use Compatibility Plans adopted for the airports in El Dorado County. The updates to the TDM are planned to provide long-term solutions to traffic demand management including the CIP and the TIM Fee Program which are programs intended to reduce traffic congestion. None of the components of the project would result in substantial safety risks to aviation because the project does not propose significant changes to land use patterns within the airport safety zones nor propose significant increases in traffic levels that would pose safety risks to air traffic. For these reasons the project would have no impact on air traffic patterns or air traffic safety.

Impact TRA-4: Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (no impact)

There are no specific development projects associated with the project. As subsequent development projects are proposed in the county, each project will be reviewed for consistency with relevant General Plan policies (e.g., Policy TC-1a and Implementation Measure TC-U) and appropriate design guidelines that address roadway safety. The project does not propose any site-specific changes in land uses or development patterns that would result in incompatible uses on the roadways.

The Parking and Loading sections of the Community Design Standards and Guidelines contain provisions that are intended to promote safety. For example, Section 4.7 in Chapter 1 of the standards and guidelines requires that all parking stalls except those for single-family residential dwellings be designed in a way that prohibits motorists from backing vehicles directly onto a public road. Another example is the requirement in Section 4.8 for parking lot directional signage and striping that facilitate traffic movement and provide pedestrian safety.

Therefore, the project would have no impact on increased hazards or incompatible uses because of changes in design features.

Impact TRA-5: Result in inadequate emergency access (no impact)

There are no specific development projects associated with the project. As subsequent development projects are proposed in the county, each project will be reviewed for consistency with relevant General Plan policies (e.g., Policy TC-1a and Implementation Measure TC-U) that address roadway safety. The project does not propose any changes in land uses or development patterns that would result in incompatible uses on the roadways.

Although the proposed Parking and Loading Standards do not directly address emergency access, they do contain provisions that would help maintain access in adverse conditions. Section 4.7 in Chapter 1 requires that parking areas located at or above 4,000 feet in elevation have 10 percent of their parking areas available for snow removal storage. This requirement would help ensure that snow is not stored in a way that reduces or eliminates access. Section 4.7 also requires that parking areas have adequate drainage, which would reduce the likelihood of limited access caused by a flooded parking lot.

Therefore, the project would have no impact on emergency access~~increased hazards or incompatible uses~~ because of changes in design features.

Impact TRA-6: Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities (less than significant impact)

Subsequent development projects within the county would be reviewed for conformance with existing County design guidelines applicable to the type of development proposed (e.g., multi-family, single-family, commercial). Implementation of the project would not disrupt or interfere with existing bicycle, pedestrian, or transit facilities, and would not disrupt or interfere with the implementation of any planned bicycle, pedestrian, or transit facilities. Subsequent projects would be required to provide connections to bicycle and pedestrian facilities in compliance with General Plan policies and the El Dorado County Bicycle Transportation Plan, Sacramento-Placerville Transportation Corridor Draft Master Plan, and the El Dorado County Long-Range and Short-Range Transit Plans. No conflicts with any of the components of the project and existing pedestrian, bicycle, or transit plans have been identified. Therefore, the project would have a less-than-significant impact as a result of conflicts with adopted polices, plans or programs on alternative transportation programs.

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Table 3.9-13. LOS Summary Table

ID	Roadway	Segment	Class – Scenario Exist, 2, and 5	Class – Scenario 3, 4, and 6	Existing Conditions (2010)				Scenario 2				Scenario 3				Scenario 4				Scenario 5				Scenario 6			
					Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	U.S. Highway 50–EB GP	W of Latrobe	2FA	2FA	1,090	2,760	B	C	2,030	3,440	B	C	1,320	2,350	B	B	1,290	2,380	B	B	1,170	3,210	B	C	1,630	2,560	B	B
2	U.S. Highway 50–WB GP	W of Latrobe	2F	2FA	2,240	1,340	C	B	2,810	3,210	C	D	1,930	1,580	B	B	1,890	1,550	B	B	2,560	1,630	C	B	1,990	1,780	B	B
3	U.S. Highway 50–EB HOV	W of Latrobe	-	-	620	800	-	-	-	-	-	-	710	830	-	-	720	820	-	-	-	-	-	-	780	960	-	-
4	U.S. Highway 50–WB HOV	W of Latrobe	-	-	620	800	-	-	-	-	-	-	760	980	-	-	790	980	-	-	-	-	-	-	960	1,080	-	-
5	U.S. Highway 50–EB GP	W of Bass Lake	2FA	2FA	1,450	3,630	B	C	2,480	4,650	B	E	2,260	3,880	B	D	2,250	3,890	B	D	1,630	3,680	B	D	2,600	4,300	B	D
6	U.S. Highway 50–WB GP	W of Bass Lake	2F	2FA	2,900	2,110	D	C	3,490	3,420	D	D	2,710	2,840	C	C	2,690	2,850	C	C	2,950	2,260	D	C	3,180	3,240	C	C
7	U.S. Highway 50–EB HOV (future)	W of Bass Lake	-	-	-	-	-	-	-	-	-	-	390	650	-	-	400	640	-	-	-	-	-	-	440	780	-	-
8	U.S. Highway 50–WB HOV (future)	W of Bass Lake	-	-	-	-	-	-	-	-	-	-	550	560	-	-	570	550	-	-	-	-	-	-	730	640	-	-
9	U.S. Highway 50–EB GP	W of Cameron Park	2F	2F	1,610	3,170	B	D	2,600	3,750	C	E	2,390	3,330	C	D	2,370	3,320	C	D	1,750	3,230	B	D	2,640	3,650	C	E
10	U.S. Highway 50–WB GP	W of Cameron Park	2F	2F	2,910	2,120	D	C	3,270	3,360	D	D	2,930	3,540	D	D	2,920	3,040	D	D	2,910	2,280	D	C	3,280	3,330	D	D
11	U.S. Highway 50–EB HOV (future)	W of Cameron Park	-	-	-	-	-	-	-	-	-	-	340	530	-	-	350	520	-	-	-	-	-	-	390	630	-	-
12	U.S. Highway 50–WB HOV (future)	W of Cameron Park	-	-	-	-	-	-	-	-	-	-	430	510	-	-	450	500	-	-	-	-	-	-	580	580	-	-
13	U.S. Highway 50–EB GP	W of Ponderosa	2F	2F	2,020	2,930	B	D	2,910	3,720	D	E	2,860	3,220	C	D	2,840	3,230	C	D	2,130	2,970	C	D	3,010	3,550	D	D
14	U.S. Highway 50–WB GP	W of Ponderosa	2F	2F	2,970	2,700	D	C	3,440	3,780	D	E	2,940	3,610	D	E	2,930	3,600	D	E	2,960	2,820	D	C	3,320	3,830	D	E
15	U.S. Highway 50–EB HOV (future)	W of Ponderosa	-	-	-	-	-	-	-	-	-	-	290	420	-	-	290	410	-	-	-	-	-	-	300	500	-	-
16	U.S. Highway 50–WB HOV (future)	W of Ponderosa	-	-	-	-	-	-	-	-	-	-	370	410	-	-	380	400	-	-	-	-	-	-	490	440	-	-
17	U.S. Highway 50–EB GP	W of Shingle Springs	2F	2F	1,570	2,330	B	C	2,420	3,140	C	D	2,390	2,640	C	C	2,370	2,640	C	C	1,670	2,380	B	C	2,480	2,910	C	D
18	U.S. Highway 50–WB GP	W of Shingle Springs	2F	2F	1,870	1,850	B	B	2,420	2,940	C	D	1,860	2,720	B	C	2,210	2,720	C	C	1,870	1,950	B	B	2,210	2,870	C	C
19	U.S. Highway 50–EB HOV (future)	W of Shingle Springs	-	-	-	-	-	-	-	-	-	-	260	390	-	-	270	380	-	-	-	-	-	-	280	460	-	-
20	U.S. Highway 50–WB HOV (future)	W of Shingle Springs	-	-	-	-	-	-	-	-	-	-	330	410	-	-	350	400	-	-	-	-	-	-	430	420	-	-
21	U.S. Highway 50–EB GP	W of Greenstone	2F	2F	1,440	2,220	B	C	2,350	2,960	C	D	2,220	2,430	C	C	2,210	2,440	C	C	1,550	2,270	B	C	2,320	2,670	C	C
22	U.S. Highway 50–WB GP	W of Greenstone	2F	2F	1,850	1,710	B	B	2,380	2,770	C	C	1,750	2,490	B	C	1,760	2,490	B	C	1,840	1,800	B	B	2,070	2,620	C	C
23	U.S. Highway 50–EB HOV (future)	W of Greenstone	-	-	-	-	-	-	-	-	-	-	340	430	-	-	340	430	-	-	-	-	-	-	340	500	-	-
24	U.S. Highway 50–WB HOV (future)	W of Greenstone	-	-	-	-	-	-	-	-	-	-	400	470	-	-	400	460	-	-	-	-	-	-	500	480	-	-
25	U.S. Highway 50–EB GP	Greenstone	2F	2F	1,480	2,160	B	C	2,450	2,940	C	D	2,630	2,830	C	C	2,620	2,830	C	C	1,590	2,210	B	C	2,730	3,080	C	D
26	U.S. Highway 50–WB GP	Greenstone	2F	2F	1,740	1,700	B	B	2,240	2,770	C	C	2,050	2,980	B	D	2,060	2,970	B	D	1,730	1,800	B	B	2,420	3,080	C	D
27	U.S. Highway 50–EB GP	Missouri Flat	2F	2F	1,430	2,040	B	B	2,380	2,740	C	C	2,510	2,650	C	C	2,500	2,660	C	C	1,530	2,080	B	C	2,590	2,870	C	C
28	U.S. Highway 50–WB GP	Missouri Flat	2F	2F	1,650	1,650	B	B	2,150	2,650	C	C	1,950	2,880	B	C	1,950	2,880	B	C	1,640	1,730	B	B	2,300	2,980	C	D
29	U.S. Highway 50–EB GP	W of Placerville	2F	2F	1,110	1,660	B	B	1,734	2,184	B	C	1,920	2,230	B	C	1,890	2,270	B	C	1,188	1,674	B	B	1,970	2,470	B	C
30	U.S. Highway 50–WB GP	W of Placerville	2F	2F	1,510	1,440	B	B	1,921	2,109	B	C	1,440	2,210	B	C	1,430	2,270	B	C	1,500	1,493	B	B	1,680	2,240	B	C
31	Cameron Park Dr	300 yds S of Hacienda Dr	2A	4AD	1,030	1,210	D	D	1,290	1,440	D	D	1,520	1,790	C	C	1,500	1,790	C	C	1,060	1,210	D	D	1,610	1,890	C	D
32	Cameron Park Dr	200 ft N of Oxford Rd	2A	2A	1,080	1,370	D	D	1,410	1,700	D	F	1,360	1,670	D	F	1,350	1,680	D	F	1,120	1,400	D	D	1,530	1,870	D	F
33	El Dorado Hills Bl	200 ft S of Saratoga Wy	6AD	6AD	2,090	2,530	C	C	2,560	2,810	C	D	2,020	2,350	C	C	2,060	2,350	C	C	2,160	2,560	C	C	2,440	2,720	C	C
34	El Dorado Hills Bl	100 ft S of Wilson Bl	4AD	4AD	1,860	1,800	D	C	2,200	2,060	D	D	2,440	2,210	D	D	2,440	2,210	D	D	1,880	1,810	D	C	2,640	2,390	D	D
35	El Dorado Hills Bl	100 ft S of Olson Ln	4AD	4AD	1,830	1,780	C	C	2,050	1,950	D	D	2,120	2,010	D	D	2,130	2,010	D	D	1,870	1,810	D	C	2,240	2,100	D	D
36	El Dorado Hills Bl	10 ft N of Olson Ln	4AD	4AD	1,790	1,590	C	C	2,010	1,760	D	C	2,070	1,820	D	C	2,080	1,820	D	C	1,830	1,620	C	C	2,190	1,910	D	D
37	El Dorado Hills Bl	100 ft N of Harvard Wy	4AD	4AD	1,060	1,480	C	C	1,410	1,800	C	C	1,330	1,740	C	C	1,340	1,730	C	C	1,160	1,590	C	C	1,420	1,830	C	C
38	El Dorado Hills Bl	300 ft S of Francisco Dr	2A	2A	990	1,340	D	D	1,270	1,570	D	E	1,190	1,510	D	D	1,200	1,510	D	D	1,110	1,450	D	D	1,260	1,570	D	E
39	El Dorado Hills Bl	100 ft S of Green Valley Rd	2A	2A	320	440	C	C	440	400	C	C	470	550	C	C	490	550	C	C	320	380	C	C	540	620	C	C
40	Francisco Dr	200 ft S of Green Valley Rd	2A	2A	950	1,130	D	D	1,160	1,430	D	D	970	1,200	D	D	960	1,200	D	D	1,100	1,320	D	D	960	1,180	D	D
41	Green Valley Rd	200 ft W of Mormon Island Dr	4AD	4AD	1,870	2,460	D	D	2,290	3,050	D	D	1,550	2,300	C	D	1,530	2,310	C	D	2,060	,760	D	D	1,660	2,490	C	D
42	Green Valley Rd	200 ft E of Mormon Island Dr	4AD	4AD	1,860	2,430	D	D	2,280	3,010	D	D	1,540	2,260	C	D	1,520	2,280	C	D	2,050	2,720	D	D	1,650	2,460	C	D
43	Green Valley Rd	200 ft E of Francisco Dr	4AD	4AD	1,060	1,650	C	C	1,290	2,060	C	D	960	1,700	C	C	950	1,710	C	C	1,080	1,800	C	C	1,030	1,820	C	C
44	Green Valley Rd	approx. 100 ft E of Countyline	2A	4AU	1,060	1,650	D	F	1,290	2,060	D	F	960	1,700	C	C	950	1,710	C	C	1,080	1,800	D	F	1,030	1,820	C	D
45	Latrobe Rd	300 ft N of White Rock Rd	6AD	6AD	2,000	2,120	C	C	3,400	3,820	D	D	1,650	1,760	C	C	1,630	1,790	C	C	2,370	2,840	C	D	1,810	2,150	C	C
46	Missouri Flat Rd	100 ft N of SR 49	2A	2A	1,050	1,220	D	D	1,140	1,170	D	D	940	1,020	D	D	910	1,010	D	D	1,060	1,210	D	D	940	980	D	D
47	Missouri Flat Rd	100 ft S of China Garden Rd	2A	2A	1,250	1,580	D	E	1,400	1,570	D	E	1,280	1,560	D	E	1,250	1,550	D	E	1,260	1,570	D	E	1,290	1,540	D	E
48	Missouri Flat Rd	S of Forni Rd	4AD	4AD	1,470	1,850	C	C	1,820	2,220	C	D	2,000	2,590	D	D	2,000	2,600	D	D	1,440	1,820	C	C	2,180	2,780	D	D
49	Missouri Flat Rd	400 yds N of Forni Rd	4AD	4AD	2,040	2,650	D	D	2,430	3,100	D	D	2,640	3,450	D	F	2,630	3,460	D	F	2,060	2,670	D	D	2,810	3,640	D	F
50	Missouri Flat Rd	100 ft S of Plaza Dr	4AD	4AD	1,340	1,930	C	D	1,540	2,210	C	D	1,480	2,150	C	D	1,480	2,160	C	D	1,340	1,920	C	D	1,540	2,280	C	D
51	Missouri Flat Rd	100 ft N of Plaza Dr	4AD	4AD	590	650	C	C	790	930	C	C	720	870	C	C	720	880	C	C	580	650	C	C	780	1,000	C	C

ID	Roadway	Segment	Class – Scenario Exist, 2, and 5	Class – Scenario 3, 4, and 6	Existing Conditions (2010)				Scenario 2				Scenario 3				Scenario 4				Scenario 5				Scenario 6			
					Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
52	Missouri Flat Rd	300 ft S of El Dorado Rd	2A	2A	640	790	C	C	900	1,220	D	D	750	1,020	C	D	750	1,010	C	D	640	810	C	C	800	1,100	C	D
53	North Shingle Rd	400 yds E of Ponderosa Rd	2A	2A	510	650	C	C	800	980	C	D	730	870	C	D	730	870	C	D	510	630	C	C	900	1,060	D	D
54	North Shingle Rd	100 ft S of Green Valley Rd	W22	W22	380	500	C	C	570	700	C	C	540	640	C	C	540	640	C	C	380	480	C	C	660	760	C	C
55	South Shingle Rd	100 ft S of Mother Lode Dr	2A	2A	720	1,030	C	D	1,220	1,600	D	E	970	1,300	D	D	970	1,310	D	D	740	1,060	C	D	1,080	1,470	D	D
56	Cameron Park Dr	100 ft N of Robin Ln	2A	2A	520	820	C	C	1,060	1,540	D	D	940	1,330	D	D	940	1,330	D	D	560	830	C	C	1,150	1,620	D	E
57	Cameron Park Dr	100 ft N of Coach Ln	4AD	4AD	1,370	2,100	C	D	2,080	2,930	D	D	1,910	2,740	D	D	1,910	2,720	D	D	1,420	2,130	C	D	2,250	3,070	D	D
58	Cameron Park Dr	200 yds N of Mira Loma Dr	2A	2A	920	1,240	D	D	1,150	1,440	D	D	1,150	1,470	D	D	1,150	1,470	D	D	960	1,260	D	D	1,210	1,530	D	D
59	Cameron Park Dr	200 yds S of Green Valley Rd	2A	2A	680	810	C	C	840	950	C	D	840	950	C	D	850	960	C	D	700	830	C	C	890	990	D	D
60	Country Club Dr	0.1 mile E of Merrychase Dr	2A	2A	350	230	C	C	610	560	C	C	530	340	C	C	530	340	C	C	360	230	C	C	690	600	C	C
61	Durock Rd	50 ft S of Robin Ln	2A	2A	380	580	C	C	730	950	C	D	660	850	C	D	660	860	C	D	400	580	C	C	790	980	C	D
62	Palmer Dr	100 ft E of Cameron Park Dr	2A	2A	570	820	C	C	810	1,130	C	D	720	1,010	C	D	720	1,010	C	D	570	820	C	C	820	1,150	C	D
63	Serrano Pkwy	450 ft E of Silva Valley Pkwy	4AD	4AD	1,080	930	C	C	1,350	1,110	C	C	990	880	C	C	990	880	C	C	1,030	940	C	C	1,160	1,060	C	C
64	Silva Valley Pkwy	100 ft S of Serrano Pkwy	4AD	4AD	850	640	C	C	1,230	1,140	C	C	1,370	1,170	C	C	1,380	1,180	C	C	790	740	C	C	1,570	1,400	C	C
65	Silva Valley Pkwy	100 ft N of Serrano Pkwy	4AD	4AD	1,270	900	C	C	1,510	1,210	C	C	1,530	1,170	C	C	1,540	1,170	C	C	1,300	990	C	C	1,620	1,280	C	C
65	Silva Valley Pkwy	100 ft S of Harvard Wy	4AD	4AD	1,050	860	C	C	1,280	1,170	C	C	1,260	1,070	C	C	1,270	1,070	C	C	1,090	960	C	C	1,330	1,160	C	C
67	Silva Valley Pkwy	100 ft N of Harvard Wy	2A	2A	790	630	C	C	880	790	D	C	970	730	D	C	970	730	D	C	790	670	C	C	1,050	800	D	C
68	Silva Valley Pkwy	100 ft S of Green Valley Rd	2A	2A	590	530	C	C	730	750	C	C	700	580	C	C	700	580	C	C	620	620	C	C	780	660	C	C
69	Sophia Pkwy	200 ft S of Green Valley Rd	2A	2A	450	590	C	C	660	900	C	D	270	520	C	C	260	540	C	C	490	810	C	C	330	670	C	C
70	White Rock Rd	100 ft E of Latrobe Rd	4AD	6AD	760	1,380	C	C	1,080	1,880	C	D	1,130	1,980	C	C	1,160	1,970	C	C	780	1,570	C	C	1,600	2,360	C	C
71	Barkley Rd	50 ft N of Carson Rd	2A	2A	70	80	C	C	80	100	C	C	80	90	C	C	80	90	C	C	70	80	C	C	80	100	C	C
72	Bedford Av	At City Limits	2A	2A	30	40	C	C	40	50	C	C	40	50	C	C	40	50	C	C	30	40	C	C	40	50	C	C
73	Big Cut Rd	100 ft N of Pleasant Vly Rd	W18	W18	70	90	B	B	220	270	B	B	170	220	B	B	170	220	B	B	70	90	B	B	270	270	B	B
74	Bucks Bar Rd	50 ft S of Pleasant Vly Rd	W20	W20	380	390	C	C	500	520	C	C	460	480	C	C	460	480	C	C	360	360	B	B	520	540	C	C
75	Bucks Bar Rd	300 ft N of Mt Aukum Rd	W18	W18	300	290	B	B	400	410	C	C	370	370	B	C	370	370	B	C	270	270	B	B	430	430	C	C
76	China Garden Rd	150 ft N of SR 49	2A	2A	80	80	C	C	83	86	C	C	60	70	C	C	40	90	C	C	49	83	C	C	50	80	C	C
77	China Garden Rd	200 yds E of Missouri Flat Rd	2A	2A	240	330	C	C	510	750	C	C	110	240	C	C	110	340	C	C	230	340	C	C	210	330	C	C
78	El Dorado Rd	200 yds N of Pleasant Vly Rd	W22	W22	210	250	B	B	410	530	C	C	350	460	B	C	350	480	B	C	210	250	B	B	390	530	C	C
79	Enterprise Dr	100 ft E of Forni Rd	2A	2A	220	320	C	C	250	400	C	C	230	320	C	C	230	330	C	C	220	320	C	C	230	330	C	C
80	Fairplay Rd	100 ft S of Mt Aukum Rd	W20	W20	150	170	B	B	180	210	B	B	180	200	B	B	180	200	B	B	140	160	B	B	200	220	B	B
81	Forebay Rd	100 ft N of Pony Express Tr	2A	2A	120	170	C	C	150	210	C	C	140	190	C	C	140	190	C	C	120	170	C	C	160	210	C	C
82	Forni Rd	200 ft N of SR 49	2A	2A	340	330	C	C	360	370	C	C	360	350	C	C	360	350	C	C	340	320	C	C	360	360	C	C
83	Forni Rd	300 ft W of Missouri Flat Rd	2A	2A	500	820	C	C	630	1,010	C	D	600	950	C	D	590	950	C	D	540	860	C	D	600	950	C	D
84	Forni Rd	30 ft W of Arroyo Vista Wy	2A	2A	100	150	C	C	180	300	C	C	190	280	C	C	180	280	C	C	100	150	C	C	190	280	C	C
85	Forni Rd	W of Placerville Dr at City Limits	W20	W20	70	120	B	B	630	830	C	D	130	270	B	B	130	260	B	B	70	140	B	B	240	410	B	C
86	French Creek Rd	300 ft S of Mother Lode Dr	2A	2A	200	240	C	C	250	270	C	C	220	250	C	C	220	250	C	C	200	240	C	C	280	280	C	C
87	Garden Valley Rd	300 ft N of SR 193	W20	W20	40	40	B	B	50	60	B	B	50	50	B	B	50	50	B	B	40	40	B	B	50	50	B	B
88	Garden Valley Rd	0.45 mile S of Marshall Rd	W20	W20	140	120	B	B	150	130	B	B	150	120	B	B	150	120	B	B	140	120	B	B	150	130	B	B
89	Greenwood Rd	100 ft W of Marshall Rd	2A	2A	80	110	C	C	180	220	C	C	140	170	C	C	140	170	C	C	80	100	C	C	180	220	C	C
90	Greenwood Rd	0.03 mile S of SR 193	2A	2A	60	90	C	C	60	90	C	C	60	90	C	C	60	90	C	C	60	80	C	C	60	90	C	C
91	Harvard Wy	0.15 mile E of El Dorado Hills Bl	4AU	4AU	930	730	C	C	1,090	850	C	C	940	790	C	C	930	790	C	C	970	770	C	C	980	810	C	C
92	Harvard Wy	200 ft W of Silva Valley Pkwy	4AU	4AU	820	560	C	C	1,010	740	C	C	880	620	C	C	870	620	C	C	870	610	C	C	910	640	C	C
93	Icehouse Rd	300 ft N of US 50	2A	2A	80	130	C	C	70	110	C	C	80	120	C	C	80	120	C	C	60	100	C	C	80	120	C	C
94	Lime Kiln Rd	100 ft E of China Garden Rd	2A	2A	130	230	C	C	380	670	C	C	30	120	C	C	30	190	C	C	120	230	C	C	90	190	C	C
95	Meder Rd	300 ft E of Cameron Park Dr	W22	W22	590	580	C	C	900	990	D	D	700	760	C	C	700	760	C	C	600	600	C	C	910	1,010	D	D
96	Meder Rd	200 yds W of Ponderosa Rd	W22	W22	490	510	C	C	730	740	C	C	620	610	C	C	620	610	C	C	500	490	C	C	710	680	C	C
97	Mosquito Rd	300 ft S of Union Ridge Rd	2A	2A	150	150	C	C	350	370	C	C	290	300	C	C	290	300	C	C	140	140	C	C	360	380	C	C
98	Mosquito Rd	At American River Br	W18	W18	100	100	B	B	170	170	B	B	150	150	B	B	150	150	B	B	80	90	B	B	180	180	B	B
99	Newtown Rd	200 yds N of Pleasant Vly Rd	2A	2A	250	240	C	C	370	410	C	C	340	400	C	C	330	400	C	C	220	240	C	C	390	440	C	C
100	Oak Hill Rd	300 ft S of Pleasant Vly Rd	2A	2A	130	170	C	C	130	170	C	C	140	170	C	C	140	170	C	C	130	160	C	C	140	170	C	C
101	Patterson Dr	200 ft S of Pleasant Vly Rd	2A	2A	270	370	C	C	350	470	C	C	320	420	C	C	340	440	C	C	270	370	C	C	350	470	C	C
102	Ponderosa Rd	100 ft N of Meder Rd	W20	W20	130	130	B	B	140	140	B	B	140	140	B	B	140	140	B	B	140	130	B	B	150	140	B	B
103	Ponderosa Rd	100 ft S of Green Valley Rd	W20	W20	110	100	B	B	120	110	B	B	120	110	B	B	120	110	B	B	110	100	B	B	120	110	B	B
104	Rock Creek Rd	100 ft E of SR 193	2A	2A	20	20	C	C	20	30	C	C	20	20	C	C	20	20	C	C	20	20	C	C	20	30	C	C

ID	Roadway	Segment	Class – Scenario Exist, 2, and 5	Class – Scenario 3, 4, and 6	Existing Conditions (2010)				Scenario 2				Scenario 3				Scenario 4				Scenario 5				Scenario 6			
					Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
105	Sand Ridge Rd	100 ft W of Bucks Bar Rd	2A	2A	100	100	C	C	130	130	C	C	130	130	C	C	130	130	C	C	100	100	C	C	130	140	C	C
106	Serrano Pkwy	250 ft W of Silva Valley Pkwy	4AD	4AD	770	590	C	C	820	650	C	C	550	410	C	C	560	410	C	C	780	610	C	C	640	470	C	C
107	Sliger Mine Rd	50 ft N of SR 193	2A	2A	50	70	C	C	60	80	C	C	60	80	C	C	60	80	C	C	40	60	C	C	70	90	C	C
108	Snows Rd	400 ft N of Newtown Rd	2A	2A	80	90	C	C	100	120	C	C	90	110	C	C	90	110	C	C	80	90	C	C	100	130	C	C
109	Snows Rd	200 ft S of Carson Rd	2A	2A	280	240	C	C	310	270	C	C	300	260	C	C	300	260	C	C	280	240	C	C	310	270	C	C
110	South Shingle Rd	0.5 mile E of Latrobe Rd	W18	W18	130	70	B	B	300		B	B	150	150	B	B	150	150	B	B	150	100	B	B	180	180	B	B
111	South Shingle Rd	100 ft N of Barnett Ranch Rd	W20	W20	190	230	B	B	380	510	C	C	240	320	B	B	240	320	B	B	220	270	B	B	260	340	B	B
112	Starbuck Rd	110 ft N of Green Valley Rd	2A	2A	100	150	C	C	160	210	C	C	160	210	C	C	150	200	C	C	100	150	C	C	160	220	C	C
113	Union Ridge Rd	100 ft W of Hassler Rd	2A	2A	40	50	C	C	70	110	C	C	60	80	C	C	60	90	C	C	40	50	C	C	70	110	C	C
114	Wentworth Springs Rd	100 ft W of Quintette Rd	2A	2A	40	60	C	C	40	70	C	C	40	70	C	C	40	70	C	C	40	60	C	C	40	70	C	C
115	White Rock Rd	100 ft S of Silva Valley Pkwy	2A	6AD	690	900	C	D	1,090	1,370	D	D	1,200	1,540	C	C	1,220	1,540	C	C	610	980	C	D	1,720	2,010	C	C
116	Bass Lake Rd	400 yd N of Country Club Dr	2A	2A	930	880	D	D	1,420	1,360	D	D	1,150	1,140	D	D	1,150	1,130	D	D	980	840	D	C	1,320	1,340	D	D
117	Bass Lake Rd	100 yd S of Green Vly Rd	W22	2A	510	450	C	C	720	670	C	C	520	470	C	C	520	470	C	C	530	460	C	C	590	560	C	C
118	Bassi Rd	200 ft W of Lotus Rd	2A	2A	80	100	C	C	90	110	C	C	90	110	C	C	90	110	C	C	80	100	C	C	90	110	C	C
119	Broadway	At City Limits	2A	2A	350	350	C	C	560	600	C	C	500	510	C	C	500	510	C	C	320	340	C	C	580	610	C	C
120	Cambridge Rd	At U.S. Highway 50 OC	2A	2A	620	860	C	D	940	1,040	D	D	820	990	C	D	820	990	C	D	630	860	C	D	900	1,040	D	D
121	Cambridge Rd	300 ft S of Country Club Dr	2A	2A	580	750	C	C	830	950	C	D	720	850	C	D	720	850	C	C	600	780	C	C	810	920	C	D
122	Cambridge Rd	100 ft N of Country Club Dr	2A	2A	520	740	C	C	810	1,090	C	D	640	820	C	C	650	820	C	C	550	750	C	C	790	1,000	C	D
123	Cambridge Rd	300 yds N of Oxford Rd	2A	2A	330	480	C	C	500	710	C	C	420	610	C	C	410	600	C	C	350	490	C	C	460	680	C	C
124	Cambridge Rd	300 ft S of Green Valley Rd	2A	2A	350	410	C	C	660	720	C	C	500	610	C	C	490	610	C	C	360	430	C	C	570	700	C	C
125	Carson Rd	0.6 mile E of City Limits	2A	2A	120	170	C	C	140	210	C	C	140	190	C	C	140	200	C	C	120	170	C	C	150	210	C	C
126	Carson Rd	300 yds E of Gatlin Rd	2A	2A	80	140	C	C	100	170	C	C	90	150	C	C	90	150	C	C	70	120	C	C	100	170	C	C
127	Carson Rd	At Carson Ct	2A	2A	110	180	C	C	110	200	C	C	100	190	C	C	100	190	C	C	100	160	C	C	110	200	C	C
128	Carson Rd	100 ft W of Barkley Rd	2A	2A	210	280	C	C	300	380	C	C	280	360	C	C	280	360	C	C	210	280	C	C	310	390	C	C
129	Carson Rd	100 ft E of Ponderosa Wy	2A	2A	170	220	C	C	170	230	C	C	170	230	C	C	170	230	C	C	170	220	C	C	170	230	C	C
130	Cedar Ravine Rd	0.1 mile N of Pleasant Valley Rd	W20	2A	170	170	B	B	410	440	C	C	340	350	C	C	330	360	C	C	170	160	B	B	460	440	C	C
131	Cedar Ravine Rd	0.25 mile S of Country Club Dr	2A	2A	220	220	C	C	420	460	C	C	380	400	C	C	380	400	C	C	210	210	C	C	430	450	C	C
132	Cold Springs Rd	At City Limits	2A	2A	270	300	C	C	600	750	C	C	520	620	C	C	510	630	C	C	270	300	C	C	580	690	C	C
133	Cold Springs Rd	300 yds S of Gold Hill Rd	2A	2A	190	280	C	C	430	590	C	C	370	490	C	C	360	500	C	C	190	280	C	C	400	540	C	C
134	Cold Springs Rd	100 ft S of SR 153	W22	2A	120	180	B	B	290	410	B	C	230	310	C	C	220	330	C	C	120	180	B	B	260	360	C	C
135	Country Club Dr	0.4 mile E of Bass Lake Rd	2A	2A	440	350	C	C	780	790	C	C	680	530	C	C	690	530	C	C	460	370	C	C	890	850	D	C
136	Country Club Dr	0.15 mile W of Knollwood Dr	2A	2A	480	310	C	C	810	740	C	C	720	500	C	C	720	500	C	C	480	310	C	C	900	750	D	C
137	Country Club Dr	300 yds E of Cambridge Rd	2A	2A	240	270	C	C	710	820	C	C	490	560	C	C	500	560	C	C	250	270	C	C	650	750	C	C
138	Country Club Dr	0.2 mile W of Cameron Park Dr	2A	2A	230	370	C	C	520	670	C	C	320	530	C	C	320	530	C	C	230	360	C	C	450	600	C	C
139	Durock Rd	50 ft W of S Shingle Rd	2A	2A	360	560	C	C	700	860	C	D	560	720	C	C	550	730	C	C	360	550	C	C	660	840	C	C
140	El Dorado Rd	0.2 mile S of US 50	W22	2A	440	500	C	C	660	850	C	D	620	800	C	C	630	810	C	C	440	500	C	C	690	900	C	D
141	El Dorado Rd	0.11 mile N of U.S. Highway 50	W22	2A	160	200	B	B	390	660	C	C	380	550	C	C	390	540	C	C	160	220	B	B	460	650	C	C
142	El Dorado Rd	50 ft N of Missouri Flat Rd	W22	2A	150	260	B	B	360	750	B	C	250	530	C	C	250	510	C	C	150	280	B	B	280	570	C	C
143	Francisco Dr	200 ft N of Green Valley Rd	2A	2A	900	1,210	D	D	960	1,270	D	D	940	1,280	D	D	940	1,280	D	D	940	1,260	D	D	980	1,300	D	D
144	Francisco Dr	100 ft S of Sheffield Dr	2A	2A	160	200	C	C	170	190	C	C	160	160	C	C	150	170	C	C	160	180	C	C	170	190	C	C
145	Francisco Dr	300 yds N of Sheffield Dr	2A	2A	60	80	C	C	70	80	C	C	60	70	C	C	50	70	C	C	60	70	C	C	70	70	C	C
146	Gold Hill Rd	100 ft E of Lotus Rd	W22	2A	230	140	B	B	350	280	B	B	320	250	C	C	320	250	C	C	230	140	B	B	340	270	C	C
147	Gold Hill Rd	200 ft W of Cold Springs Rd	W22	2A	220	150	B	B	340	290	B	B	320	260	C	C	320	260	C	C	220	150	B	B	340	280	C	C
148	Gold Hill Rd	100 yds E of Cold Springs Rd	W22	2A	50	40	B	B	110	110	B	B	90	80	C	C	90	80	C	C	50	40	B	B	100	100	C	C
149	Green Valley Rd	200 ft W of Sophia Pkwy	4AU	4AU	1,730	2,050	C	D	1,940	2,230	D	D	1,730	2,070	C	D	1,710	2,080	C	D	1,820	2,070	D	D	1,750	2,120	C	D
150	Green Valley Rd	200 ft E of Sophia Pkwy	4AU	4AU	1,730	2,350	C	D	2,150	2,940	D	D	1,450	2,240	C	D	1,440	2,250	C	D	1,920	2,650	D	D	1,560	2,420	C	D
151	Green Valley Rd	~200 ft W of El Dorado Hills Boulevard	2A	4AU	1,730	2,350	F	F	2,150	2,940	F	F	1,450	2,240	C	D	1,440	2,250	C	D	1,920	2,650	F	F	1,560	2,420	C	D
152	Green Valley Rd	300 ft W of Silva Valley Pkwy	2A	4AU	970	1,120	D	D	1,130	1,390	D	D	1,150	1,390	C	C	1,150	1,380	C	C	990	1,240	D	D	1,290	1,530	C	C
153	Green Valley Rd	200 ft W of Bass Lake Rd	2A	2A	1,200	980	D	D	1,410	1,290	D	D	1,220	1,080	D	D	1,220	1,080	D	D	1,230	1,060	D	D	1,270	1,130	D	D
154	Green Valley Rd	300 ft W of Cameron Park Dr	2A	2A	930	940	D	D	1,300	1,380	D	D	1,080	1,160	D	D	1,080	1,160	D	D	960	1,000	D	D	1,200	1,290	D	D
155	Green Valley Rd	300 ft E of La Crescenta Dr	W22	2A	610	630	C	C	900	1,020	D	D	620	700	C	C	620	700	C	C	620	650	C	C	700	800	C	C
156	Green Valley Rd	500 ft E of Deer Valley Rd (E)	W18	2A	360	420	B	C	580	750	C	C	290	400	C	C	290	390	C	C	370	440	B	C	340	470	C	C
157	Green Valley Rd	300 ft W of Lotus Rd	W18	2A	570	650	C	C	1,030	1,220	D	D	730	860	C	D	730	860	C	D	560	650	C	C	930	1,060	D	D

					Existing Conditions (2010)				Scenario 2				Scenario 3				Scenario 4				Scenario 5				Scenario 6			
					Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Scenario Exist, 2, and 5	Class – Scenario 3, 4, and 6	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
158	Green Valley Rd	100 ft W of Greenstone Rd	W20	2A	300	360	B	B	610	770	C	C	490	570	C	C	490	570	C	C	310	360	B	B	530	650	C	C
159	Green Valley Rd	400 ft W of Campus Dr	W20	2A	370	420	B	C	570	720	C	C	490	590	C	C	490	600	C	C	380	430	C	C	520	680	C	C
160	Green Valley Rd	200 ft W of Missouri Flat Rd	W20	2A	710	760	C	C	910	1,060	D	D	840	930	C	D	840	940	C	D	720	770	C	C	870	1,020	D	D
161	Green Valley Rd	100 ft W of Weber Creek Br	W18	2A	230	310	B	B	560	930	C	D	440	650	C	C	440	640	C	C	240	320	B	B	470	700	C	C
162	Greenstone Rd	300 ft N of Mother Lode Dr	W18	2A	80	110	B	B	130	160	B	B	110	140	C	C	110	140	C	C	80	110	B	B	130	160	C	C
163	Greenstone Rd	0.20 mile N of US 50	2A	2A	210	220	C	C	380	410	C	C	330	330	C	C	330	330	C	C	200	210	C	C	370	350	C	C
164	Grizzly Flat Rd	200 yds E of Mt Aukum Rd	2A	2A	160	190	C	C	230	270	C	C	210	240	C	C	210	240	C	C	150	170	C	C	250	280	C	C
165	Lake Hills Dr	100 ft N of Salmon Falls Rd	2A	2A	250	260	C	C	250	270	C	C	270	290	C	C	270	290	C	C	250	270	C	C	260	280	C	C
166	Latrobe Rd	250 ft N of County Line	2A	2A	240	300	C	C	500	550	C	C	220	260	C	C	220	260	C	C	420	470	C	C	320	330	C	C
167	Latrobe Rd	1.5 mi N of S Shingle Rd	2A	2A	250	310	C	C	570	630	C	C	240	280	C	C	240	280	C	C	470	530	C	C	350	360	C	C
168	Latrobe Rd	At Deer Creek Bridge	2A	2A	330	390	C	C	600	640	C	C	310	330	C	C	310	340	C	C	520	560	C	C	410	420	C	C
169	Latrobe Rd	100 ft S of Investment Bl	2A	2A	380	420	C	C	740	790	C	C	400	410	C	C	400	420	C	C	600	640	C	C	550	540	C	C
170	Latrobe Rd	100 ft N of Investment Bl	2A	2A	650	710	C	C	940	1,020	D	D	670	710	C	C	680	720	C	C	890	950	D	D	810	830	C	C
171	Latrobe Rd	100 ft N of Golden Foothill Pw	4AD	4AD	1,750	1,740	C	C	2,420	2,400	D	D	1,130	1,100	C	C	1,140	1,100	C	C	1,830	1,780	C	C	1,300	1,260	C	C
172	Lotus Rd	300 ft N of Green Valley Rd	2A	2A	470	570	C	C	1,030	1,260	D	D	780	960	C	D	780	960	C	D	450	550	C	C	1,020	1,230	D	D
173	Lotus Rd	300 ft S of Thompson Hill Rd	2A	2A	310	430	C	C	520	690	C	C	400	550	C	C	410	550	C	C	290	410	C	C	530	680	C	C
174	Lotus Rd	0.25 mile S of SR 49	2A	2A	260	460	C	C	490	720	C	C	380	590	C	C	380	590	C	C	250	440	C	C	490	710	C	C
175	Luneman Rd	100 ft W of Lotus Rd	2A	2A	270	180	C	C	350	280	C	C	340	250	C	C	330	250	C	C	270	180	C	C	360	280	C	C
176	Marshall Rd	200 yds E of SR 49	2A	2A	260	300	C	C	360	410	C	C	300	350	C	C	300	360	C	C	250	290	C	C	370	410	C	C
177	Marshall Rd	300 ft E of Garden Valley Rd	2A	2A	430	370	C	C	590	550	C	C	530	480	C	C	530	480	C	C	410	360	C	C	600	550	C	C
178	Marshall Rd	300 yds S of Lower Main St	2A	2A	40	50	C	C	100	110	C	C	70	90	C	C	70	90	C	C	40	50	C	C	110	120	C	C
179	Missouri Flat Rd	300 ft N of El Dorado Rd	2A	2A	650	620	C	C	780	800	C	C	730	740	C	C	730	740	C	C	650	630	C	C	760	820	C	C
180	Mormon Emigrant Tr	100 ft E of Sly Park Rd	2A	2A	60	90	C	C	120	150	C	C	100	140	C	C	100	130	C	C	60	90	C	C	140	170	C	C
181	Mosquito Rd	At City Limits	2A	2A	270	310	C	C	720	770	C	C	670	730	C	C	670	720	C	C	260	300	C	C	730	790	C	C
182	Mother Lode Dr	200 ft W of Sunset Ln	2A	2A	910	1,100	D	D	1,210	1,380	D	D	1,090	1,260	D	D	1,090	1,260	D	D	920	1,120	D	D	1,200	1,350	D	D
183	Mother Lode Dr	400 yds W of Pleasant Valley Rd	2A	2A	570	740	C	C	890	1,130	D	D	710	910	C	D	730	920	C	D	560	730	C	C	810	1,040	C	D
184	Mother Lode Dr	0.43 mile E of Pleasant Valley Rd	2A	2A	240	320	C	C	300	410	C	C	290	390	C	C	290	390	C	C	240	330	C	C	310	420	C	C
185	Mt Aukum Rd	0.25 mile N of County Line	2A	2A	120	160	C	C	130	160	C	C	150	190	C	C	150	190	C	C	120	150	C	C	150	200	C	C
186	Mt Aukum Rd	300 ft S of Bucks Bar Rd	2A	2A	300	290	C	C	380	390	C	C	360	380	C	C	360	380	C	C	270	270	C	C	420	430	C	C
187	Mt Aukum Rd	300 ft S of Pleasant Vly Rd	2A	2A	200	270	C	C	280	370	C	C	270	360	C	C	270	360	C	C	190	270	C	C	310	410	C	C
188	Mt Murphy Rd	50 ft S of Marshall Rd	2A	2A	90	100	C	C	170	200	C	C	140	160	C	C	140	160	C	C	80	90	C	C	170	200	C	C
189	Mt Murphy Rd	200 yds N of SR 49	2A	2A	20	30	C	C	160	190	C	C	120	130	C	C	120	130	C	C	20	30	C	C	170	190	C	C
190	Newtown Rd	200 yds N of Pioneer Hill Rd	2A	2A	200	220	C	C	350	390	C	C	290	310	C	C	300	310	C	C	180	210	C	C	350	380	C	C
191	Newtown Rd	100 ft E of Broadway	2A	2A	280	320	C	C	420	480	C	C	370	400	C	C	370	400	C	C	260	310	C	C	430	470	C	C
192	Old Frenchtown Rd	400 yds S of Mother Lode Dr	2A	2A	90	100	C	C	150	170	C	C	120	140	C	C	120	140	C	C	90	100	C	C	150	170	C	C
193	Omo Ranch Rd	100 ft E of Mt Aukum Rd	2A	2A	60	80	C	C	70	80	C	C	70	80	C	C	70	80	C	C	60	70	C	C	70	90	C	C
194	Oxford Rd	50 ft E of Salida Wy	2A	2A	290	420	C	C	730	900	C	D	650	730	C	C	660	730	C	C	340	440	C	C	770	890	C	D
195	Pleasant Valley Rd	200 yds E of Mother Lode Dr	2A	2A	440	560	C	C	690	860	C	D	530	670	C	C	540	670	C	C	430	550	C	C	620	770	C	C
196	Pleasant Valley Rd	200 yds E of SR 49 (E)	2A	2A	1,030	1,230	D	D	1,270	1,510	D	D	1,190	1,460	D	D	1,190	1,460	D	D	1,020	1,210	D	D	1,320	1,590	D	E
197	Pleasant Valley Rd	300 ft W of Oak Hill Rd	2A	2A	860	980	D	D	940	1,060	D	D	910	1,050	D	D	910	1,050	D	D	830	950	C	D	940	1,120	D	D
198	Pleasant Valley Rd	100 ft E of Cedar Ravine Rd	2A	2A	800	830	C	C	1,100	1,150	D	D	1,000	1,060	D	D	1,000	1,060	D	D	780	790	C	C	1,140	1,190	D	D
199	Pleasant Valley Rd	0.10 mile E of Bucks Bar Rd	2A	2A	530	450	C	C	710	640	C	C	650	590	C	C	640	590	C	C	540	440	C	C	730	670	C	C
200	Pleasant Valley Rd	0.40 mi E of Newtown Rd	2A	2A	410	450	C	C	560	620	C	C	520	580	C	C	520	580	C	C	390	440	C	C	590	650	C	C
201	Ponderosa Rd	300 ft N of Wild Chaparral Dr	2A	2A	680	600	C	C	920	800	D	C	820	690	C	C	820	690	C	C	680	580	C	C	910	760	D	C
202	Pony Express Tr	200 yds E of Carson Rd	2A	2A	180	240	C	C	270	300	C	C	240	290	C	C	240	290	C	C	170	230	C	C	270	310	C	C
203	Pony Express Tr	300 ft E of Gilmore Rd	2A	2A	280	420	C	C	350	510	C	C	330	480	C	C	330	480	C	C	270	420	C	C	360	510	C	C
204	Pony Express Tr	300 ft W of Forebay Rd	2A	2A	350	510	C	C	370	530	C	C	370	530	C	C	370	530	C	C	350	510	C	C	370	530	C	C
205	Salmon Falls Rd	50 ft S of Malcolm Dixon Rd	2A	2A	560	620	C	C	750	750	C	C	690	780	C	C	690	780	C	C	550	630	C	C	810	890	C	D
206	Salmon Falls Rd	At New York Creek Bridge	2A	2A	200	220	C	C	340	330	C	C	220	230	C	C	220	230	C	C	190	220	C	C	340	330	C	C
207	Salmon Falls Rd	400 yds S of Pedro Hill Rd	2A	2A	120	170	C	C	240	260	C	C	130	180	C	C	130	180	C	C	100	160	C	C	240	260	C	C
208	Salmon Falls Rd	200 yds S of Rattlesnake Bar Rd	2A	2A	30	50	C	C	160	140	C	C	50	50	C	C	50	50	C	C	30	40	C	C	150	140	C	C
209	Sand Ridge Rd	300 ft E of SR 49	2A	2A	50	50	C	C	100	110	C	C	80	90	C	C	80	90	C	C	50	50	C	C	110	110	C	C
210	Serrano Pkwy	300 ft W of Bass Lake Rd	4AD	4AD	370	380	C	C	850	820	C	C	340	430	C	C	350	430	C	C	380	410	C	C	520	630	C	C

					Existing Conditions (2010)				Scenario 2				Scenario 3				Scenario 4				Scenario 5				Scenario 6			
					Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Scenario Exist, 2, and 5	Class – Scenario 3, 4, and 6	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
211	Shingle Springs Dr	0.20 mile S of U.S. Highway 50	2A	2A	420	400	C	C	590	750	C	C	530	630	C	C	530	630	C	C	410	400	C	C	600	760	C	C
212	Sly Park Rd	0.35 mile E of Mt Aukum Rd	2A	2A	240	290	C	C	300	360	C	C	290	340	C	C	290	340	C	C	240	280	C	C	310	370	C	C
213	Sly Park Rd	1.62 miles W of Mormon Emigrant Tr	W18	W18	150	190	B	B	190	240	B	B	170	220	B	B	170	220	B	B	140	190	B	B	200	250	B	B
214	Sly Park Rd	0.35 mile E of Mormon Emigrant Tr	2A	2A	260	330	C	C	350	430	C	C	310	390	C	C	310	390	C	C	250	320	C	C	380	460	C	C
215	Sly Park Rd	100 ft S of Gold Ridge Tr (N)	2A	2A	310	310	C	C	440	450	C	C	370	380	C	C	370	380	C	C	290	300	C	C	480	490	C	C
216	Sly Park Rd	100 ft S of Pony Express Tr	2A	2A	590	710	C	C	640	770	C	C	630	750	C	C	630	750	C	C	590	710	C	C	650	770	C	C
217	South Shingle Rd	100 ft S of Sunset Ln	W20	W20	420	530	C	C	710	950	C	D	480	640	C	C	480	640	C	C	450	580	C	C	570	780	C	C
218	SR49	North of China Hill	2A	2A	480	510	C	C	670	770	C	C	610	670	C	C	600	670	C	C	470	490	C	C	650	730	C	C
219	SR49	West of Missouri Flat Rd	2A	2A	980	950	D	D	1,390	1,390	D	D	1,220	1,180	D	D	1,240	1,190	D	D	980	950	D	D	1,280	1,230	D	D
220	SR49	West of Hastings Creed Rd	2A	2A	260	310	C	C	480	590	C	C	430	530	C	C	430	520	C	C	250	300	C	C	480	600	C	C
221	SR49	At the Placer County Line	2A	2A	640	750	C	C	810	930	C	D	740	860	C	D	740	860	C	D	620	730	C	C	810	940	C	D
222	SR 193	West of American River Road	2A	2A	470	580	C	C	580	700	C	C	530	640	C	C	530	640	C	C	450	560	C	C	590	710	C	C
223	SR 193	North of SR 49 in Placerville	2A	2A	180	190	C	C	220	240	C	C	200	220	C	C	200	220	C	C	170	180	C	C	230	250	C	C
224	Union Mine Rd	200 yds S of SR 49	2A	2A	290	140	C	C	300	160	C	C	310	160	C	C	310	160	C	C	250	130	C	C	320	170	C	C
225	Wentworth Springs Rd	0.7 mile E of Main St	2A	2A	170	220	C	C	190	250	C	C	180	240	C	C	180	240	C	C	160	210	C	C	200	260	C	C
226	White Rock Rd	At County Line	2A	4AD	530	1,070	C	D	1,090	1,790	D	F	620	1,210	C	C	620	1,220	C	C	930	1,670	D	F	980	1,710	C	C
227	White Rock Rd	100 ft W of Latrobe Rd	4AD	4AD	710	1,150	C	C	1,210	2,010	C	D	600	1,190	C	C	600	1,200	C	C	1,020	1,880	C	D	830	1,620	C	C

Table 3.9-13. LOS Summary Table

ID	Roadway	Segment	Class – Scenario Exist. 2, and 5	Class – Scenario 3, 4, and 6	Existing Conditions (2010)				Scenario 2				Scenario 3				Scenario 4				Scenario 5				Scenario 6			
					Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	U.S. Highway 50–EB GP	W of Latrobe	2FA	2FA	1,090	2,760	B	C	1,750	3,970	B	D	1,240	2,580	B	B	1,200	2,600	B	B	1,330	3,500	B	C	1,560	2,860	B	C
2	U.S. Highway 50–WB GP	W of Latrobe	2F	2FA	2,240	1,340	C	B	3,110	2,950	D	D	2,350	1,450	B	B	2,280	1,410	B	B	2,920	1,610	D	B	2,450	1,690	B	B
3	U.S. Highway 50–EB HOV	W of Latrobe	-	-	620	800	-	-	-	-	-	-	740	850	-	-	750	850	-	-	-	-	-	-	800	970	-	-
4	U.S. Highway 50–WB HOV	W of Latrobe	-	-	620	800	-	-	-	-	-	-	690	1,030	-	-	720	1,040	-	-	-	-	-	-	900	1,150	-	-
[redacted]	U.S. Highway 50–EB GP	W of Silva Valley Pkwy	2FA	2FA	1,450	3,630	B	C	2,300	5,010	B	E	2,180	3,920	B	D	2,150	3,930	B	D	1,850	4,000	B	D	2,540	4,320	B	D
[redacted]	U.S. Highway 50–WB GP	W of Silva Valley Pkwy	2F	2FA	2,900	2,110	D	C	3,750	3,040	E	D	3,320	2,670	C	C	3,290	2,660	C	C	2,990	2,290	D	C	3,610	3,070	C	C
[redacted]	U.S. Highway 50–EB HOV (future)	W of Silva Valley Pkwy	-	-	-	-	-	-	-	-	-	-	330	630	-	-	340	630	-	-	-	-	-	-	380	760	-	-
[redacted]	U.S. Highway 50–WB HOV (future)	W of Silva Valley Pkwy	-	-	-	-	-	-	-	-	-	-	530	480	-	-	550	490	-	-	-	-	-	-	700	560	-	-
5	U.S. Highway 50–EB GP	W of Bass Lake	2FA	2FA	1,450	3,630	B	C	2,300	5,010	B	E	2,200	4,230	B	D	2,180	4,210	B	D	1,850	4,000	B	D	2,530	4,700	B	E
6	U.S. Highway 50–WB GP	W of Bass Lake	2F	2FA	2,900	2,110	D	C	3,750	3,040	E	D	3,250	2,590	C	B	3,220	2,570	C	B	2,990	2,290	D	C	3,000	2,360	C	B
7	U.S. Highway 50–EB HOV (future)	W of Bass Lake	-	-	-	-	-	-	-	-	-	-	310	600	-	-	320	610	-	-	-	-	-	-	360	740	-	-
8	U.S. Highway 50–WB HOV (future)	W of Bass Lake	-	-	-	-	-	-	-	-	-	-	370	460	-	-	390	460	-	-	-	-	-	-	490	530	-	-
[redacted]	U.S. Highway 50–EB GP	W of Cambridge Rd	2F	2F	1,540	3,530	B	D	2,100	3,670	C	E	1,700	3,540	B	D	1,680	3,530	B	D	1,800	3,260	B	D	1,980	3,930	B	E
[redacted]	U.S. Highway 50–WB GP	W of Cambridge Rd	2F	2F	3,070	2,120	D	C	3,210	2,890	D	D	2,260	2,240	C	C	2,240	2,220	C	C	2,960	2,310	D	C	2,500	2,560	C	C
[redacted]	U.S. Highway 50–EB HOV (future)	W of Cambridge Rd	-	-	-	-	-	-	-	-	-	-	200	440	-	-	210	450	-	-	-	-	-	-	240	560	-	-
[redacted]	U.S. Highway 50–WB HOV (future)	W of Cambridge Rd	-	-	-	-	-	-	-	-	-	-	230	340	-	-	240	340	-	-	-	-	-	-	310	390	-	-
9	U.S. Highway 50–EB GP	W of Cameron Park	2F	2F	1,610	3,170	B	D	2,140	3,680	C	E	2,060	3,420	B	D	2,040	3,420	B	D	1,800	3,260	B	D	2,280	3,600	C	E
10	U.S. Highway 50–WB GP	W of Cameron Park	2F	2F	2,910	2,120	D	C	3,470	2,890	D	D	3,260	2,940	D	D	3,250	2,520	D	C	2,960	2,310	D	C	3,490	2,850	D	C
11	U.S. Highway 50–EB HOV (future)	W of Cameron Park	-	-	-	-	-	-	-	-	-	-	250	490	-	-	260	490	-	-	-	-	-	-	290	610	-	-
12	U.S. Highway 50–WB HOV (future)	W of Cameron Park	-	-	-	-	-	-	-	-	-	-	360	400	-	-	380	400	-	-	-	-	-	-	490	460	-	-
13	U.S. Highway 50–EB GP	W of Ponderosa	2F	2F	2,020	2,930	B	D	2,410	3,660	C	E	2,520	3,410	C	D	2,510	3,410	C	D	2,170	3,030	C	D	2,660	3,810	C	E
14	U.S. Highway 50–WB GP	W of Ponderosa	2F	2F	2,970	2,700	D	C	3,610	3,230	E	D	3,440	3,260	D	D	3,440	3,240	D	D	3,010	2,830	D	C	3,900	3,500	E	D
17	U.S. Highway 50–EB GP	W of Shingle Springs	2F	2F	1,570	2,330	B	C	1,880	3,050	B	D	1,960	2,750	B	C	1,950	2,750	B	C	1,680	2,410	B	C	2,080	3,140	C	D
18	U.S. Highway 50–WB GP	W of Shingle Springs	2F	2F	1,870	1,850	B	B	2,610	2,340	C	C	2,310	2,340	C	C	2,300	2,330	C	C	1,910	1,960	B	B	2,760	2,540	C	C
21	U.S. Highway 50–EB GP	W of Greenstone	2F	2F	1,440	2,220	B	C	1,700	2,800	B	C	1,760	2,600	B	C	1,750	2,600	B	C	1,540	2,290	B	C	1,870	2,920	B	D
22	U.S. Highway 50–WB GP	W of Greenstone	2F	2F	1,850	1,710	B	B	2,550	2,140	C	C	2,260	2,140	C	C	2,260	2,130	C	C	1,880	1,810	B	B	2,680	2,310	C	C
25	U.S. Highway 50–EB GP	Greenstone	2F	2F	1,480	2,160	B	C	1,750	2,740	B	C	1,790	2,530	B	C	1,780	2,530	B	C	1,580	2,230	B	C	1,900	2,820	B	C
26	U.S. Highway 50–WB GP	Greenstone	2F	2F	1,740	1,700	B	B	2,320	2,040	C	B	2,060	2,040	B	B	2,060	2,030	B	B	1,760	1,800	B	B	2,440	2,180	C	C
27	U.S. Highway 50–EB GP	Missouri Flat	2F	2F	1,430	2,040	B	B	1,700	2,600	B	C	1,710	2,350	B	C	1,710	2,350	B	C	1,530	2,110	B	C	1,820	2,630	B	C
28	U.S. Highway 50–WB GP	Missouri Flat	2F	2F	1,650	1,650	B	B	2,240	1,990	C	B	1,950	2,000	B	B	1,950	2,000	B	B	1,680	1,730	B	B	2,310	2,110	C	C
29	U.S. Highway 50–EB GP	W of Placerville	2F	2F	1,110	1,660	B	B	1,249	2,161	B	C	1,200	1,900	B	B	1,200	1,880	B	B	1,175	1,718	B	B	1,260	2,150	B	C
30	U.S. Highway 50–WB GP	W of Placerville	2F	2F	1,510	1,440	B	B	1,895	1,661	B	B	1,410	1,400	B	B	1,400	1,400	B	B	1,510	1,486	B	B	1,660	1,510	B	B
31	Cameron Park Dr	300 yds S of Hacienda Dr	2A	4AD	1,030	1,210	D	D	1,280	1,440	D	D	1,420	1,630	C	C	1,410	1,630	C	C	1,100	1,210	D	D	1,570	1,830	C	C
32	Cameron Park Dr	200 ft N of Oxford Rd	2A	2A	1,080	1,370	D	D	1,420	1,710	D	F	1,310	1,660	D	F	1,300	1,650	D	F	1,150	1,390	D	D	1,500	1,840	D	F
33	El Dorado Hills Bl	200 ft S of Saratoga Wy	6AD	6AD	2,090	2,530	C	C	2,740	3,020	C	D	2,010	2,270	C	C	2,040	2,330	C	C	2,290	2,680	C	C	2,260	2,650	C	C
34	El Dorado Hills Bl	100 ft S of Wilson Bl	4AD	4AD	1,860	1,800	D	C	2,350	2,170	D	D	2,420	2,220	D	D	2,420	2,220	D	D	2,010	1,910	D	D	2,650	2,410	D	D
35	El Dorado Hills Bl	100 ft S of Olson Ln	4AD	4AD	1,830	1,780	C	C	2,270	2,090	D	D	2,180	2,060	D	D	2,180	2,060	D	D	1,970	1,910	D	D	2,340	2,160	D	D
36	El Dorado Hills Bl	10 ft N of Olson Ln	4AD	4AD	1,790	1,590	C	C	2,220	1,900	D	D	2,130	1,870	D	D	2,130	1,870	D	D	1,920	1,720	D	C	2,290	1,970	D	D
37	El Dorado Hills Bl	100 ft N of Harvard Wy	4AD	4AD	1,060	1,480	C	C	1,530	1,850	C	C	1,290	1,720	C	C	1,290	1,720	C	C	1,270	1,660	C	C	1,380	1,800	C	C
38	El Dorado Hills Bl	300 ft S of Francisco Dr	2A	2A	990	1,340	D	D	1,390	1,620	D	E	1,160	1,510	D	D	1,160	1,510	D	D	1,190	1,480	D	D	1,230	1,540	D	E
39	El Dorado Hills Bl	100 ft S of Green Vly Rd	2A	2A	320	440	C	C	460	440	C	C	480	550	C	C	500	560	C	C	290	350	C	C	570	630	C	C
40	Francisco Dr	200 ft S of Green Valley Rd	2A	2A	950	1,130	D	D	1,250	1,440	D	D	930	1,190	D	D	900	1,190	D	D	1,180	1,390	D	D	900	1,150	D	D
41	Green Valley Rd	200 ft W of Mormon Island Dr	4AD	4AD	1,870	2,460	D	D	2,430	3,020	D	D	1,520	2,270	C	D	1,520	2,270	C	D	2,180	2,730	D	D	1,670	2,480	C	D
42	Green Valley Rd	200 ft E of Mormon Island Dr	4AD	4AD	1,860	2,430	D	D	2,420	2,980	D	D	1,510	2,230	C	D	1,510	2,240	C	D	2,170	2,690	D	D	1,660	2,440	C	D
43	Green Valley Rd	200 ft E of Francisco Dr	4AD	4AD	1,060	1,650	C	C	1,370	2,050	C	D	970	1,740	C	C	950	1,730	C	C	1,130	1,790	C	C	1,090	1,850	C	C
44	Green Valley Rd	100 ft W of El Dorado Hills Blvd	2A	4AU	1,060	1,650	D	F	1,370	2,050	D	F	970	1,740	C	C	950	1,730	C	C	1,130	1,790	D	F	1,090	1,850	C	D
45	Latrobe Rd	300 ft N of White Rock Rd	6AD	6AD	2,000	2,120	C	C	3,730	3,870	D	D	2,020	1,860	C	C	2,030	1,860	C	C	2,780	2,890	D	D	2,300	2,200	C	C
46	Missouri Flat Rd	100 ft N of SR 49	2A	2A	1,050	1,220	D	D	1,130	1,200	D	D	950	960	D	D	940	960	D	D	1,060	1,240	D	D	890	940	D	D
47	Missouri Flat Rd	100 ft S of China Garden Rd	2A	2A	1,250	1,580	D	E	1,350	1,600	D	E	1,300	1,470	D	D	1,290	1,440	D	D	1,260	1,610	D	E	1,240	1,450	D	D
48	Missouri Flat Rd	S of Forni Rd	4AD	4AD	1,470	1,850	C	C	1,660	2,100	C	D	1,800	2,250	C	D	1,810	2,270	C	D	1,450	1,830	C	C	1,950	2,440	D	D

ID	Roadway	Segment	Class – Scenario Exist. 2, and 5	Class – Scenario 3, 4, and 6	Existing Conditions (2010)				Scenario 2				Scenario 3				Scenario 4				Scenario 5				Scenario 6			
					Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
49	Missouri Flat Rd	400 yds N of Forni Rd	4AD	4AD	2,040	2,650	D	D	2,250	2,910	D	D	2,390	3,120	D	D	2,400	3,120	D	D	2,020	2,640	D	D	2,510	3,310	D	F
50	Missouri Flat Rd	100 ft S of Plaza Dr	4AD	4AD	1,340	1,930	C	D	1,520	2,130	C	D	1,490	2,130	C	D	1,480	2,130	C	D	1,350	1,910	C	D	1,560	2,240	C	D
51	Missouri Flat Rd	100 ft N of Plaza Dr	4AD	4AD	590	650	C	C	760	850	C	C	730	850	C	C	730	850	C	C	590	650	C	C	800	960	C	C
52	Missouri Flat Rd	300 ft S of El Dorado Rd	2A	2A	640	790	C	C	740	990	C	D	620	740	C	C	620	730	C	C	640	800	C	C	660	860	C	D
53	North Shingle Rd	400 yds E of Ponderosa Rd	2A	2A	510	650	C	C	820	1,060	C	D	750	930	C	D	760	930	C	D	490	630	C	C	920	1,120	D	D
54	North Shingle Rd	100 ft S of Green Valley Rd	W22	W22	380	500	C	C	580	760	C	C	550	690	C	C	550	690	C	C	370	480	B	C	660	810	C	D
55	South Shingle Rd	100 ft S of Mother Lode Dr	2A	2A	720	1,030	C	D	1,230	1,590	D	E	960	1,300	D	D	960	1,290	D	D	770	1,070	C	D	1,110	1,530	D	D
56	Cameron Park Dr	100 ft N of Robin Ln	2A	2A	520	820	C	C	1,060	1,610	D	E	930	1,430	D	D	930	1,420	D	D	540	860	C	D	1,170	1,730	D	F
57	Cameron Park Dr	100 ft N of Coach Ln	4AD	4AD	1,370	2,100	C	D	2,180	2,950	D	D	1,960	2,860	D	D	1,970	2,860	D	D	1,400	2,130	C	D	2,250	3,050	D	D
58	Cameron Park Dr	200 yds N of Mira Loma Dr	2A	2A	920	1,240	D	D	1,150	1,450	D	D	1,090	1,420	D	D	1,080	1,420	D	D	990	1,270	D	D	1,170	1,480	D	D
59	Cameron Park Dr	200 yds S of Green Valley Rd	2A	2A	680	810	C	C	860	960	D	D	800	930	C	D	800	930	C	D	710	830	C	C	860	950	D	D
60	Country Club Dr	0.1 mi E of Merrychase Dr	2A	2A	350	230	C	C	570	460	C	C	520	310	C	C	520	310	C	C	350	230	C	C	650	510	C	C
61	Durock Rd	50 ft S of Robin Ln	2A	2A	380	580	C	C	740	1,030	C	D	640	940	C	D	640	930	C	D	390	600	C	C	810	1,110	C	D
[redacted]	Latrobe Rd Connection	South of White Rock Road	-	4AD	-	-	-	-	-	-	-	-	1,340	1,460	C	C	1,320	1,440	C	C	-	-	-	-	1,790	1,890	C	D
62	Palmer Dr	100 ft E of Cameron Park Dr	2A	2A	570	820	C	C	800	1,130	C	D	730	1,030	C	D	730	1,030	C	D	570	820	C	C	820	1,150	C	D
[redacted]	Saratoga Way	West of El Dorado Hills Blvd	-	4AD	-	-	-	-	-	-	-	-	2,240	2,360	D	D	2,220	2,370	D	D	-	-	-	-	2,470	2,580	D	D
63	Serrano Pkwy	450 ft E of Silva Valley Pkwy	4AD	4AD	1,080	930	C	C	1,460	1,170	C	C	1,130	1,020	C	C	1,130	1,020	C	C	1,040	970	C	C	1,290	1,210	C	C
64	Silva Valley Pkwy	100 ft S of Serrano Pkwy	4AD	4AD	850	640	C	C	1,370	1,220	C	C	1,620	1,360	C	C	1,620	1,360	C	C	890	800	C	C	1,760	1,550	C	C
65	Silva Valley Pkwy	100 ft N of Serrano Pkwy	4AD	4AD	1,270	900	C	C	1,640	1,250	C	C	1,600	1,180	C	C	1,590	1,170	C	C	1,340	1,000	C	C	1,720	1,310	C	C
66	Silva Valley Pkwy	100 ft S of Harvard Wy	4AD	4AD	1,050	860	C	C	1,340	1,170	C	C	1,280	1,050	C	C	1,270	1,040	C	C	1,110	970	C	C	1,350	1,140	C	C
67	Silva Valley Pkwy	100 ft N of Harvard Wy	2A	2A	790	630	C	C	940	820	D	C	1,000	720	D	C	990	710	D	C	760	670	C	C	1,070	790	D	C
68	Silva Valley Pkwy	100 ft S of Green Valley Rd	2A	2A	590	530	C	C	770	760	C	C	720	570	C	C	720	560	C	C	610	620	C	C	800	630	C	C
69	Sophia Pkwy	200 ft S of Green Valley Rd	2A	2A	450	590	C	C	710	870	C	D	320	530	C	C	320	530	C	C	640	750	C	C	380	650	C	C
70	White Rock Rd	100 ft E of Latrobe Rd	4AD	6AD	760	1,380	C	C	1,090	1,900	C	D	1,110	1,940	C	C	1,090	1,900	C	C	740	1,600	C	C	1,520	2,300	C	C
71	Barkley Rd	50 ft N of Carson Rd	2A	2A	70	80	C	C	80	90	C	C	80	90	C	C	80	90	C	C	70	80	C	C	80	100	C	C
72	Bedford Av	At City Limits	2A	2A	30	40	C	C	40	50	C	C	40	50	C	C	40	50	C	C	30	40	C	C	40	50	C	C
73	Big Cut Rd	100 ft N of Pleasant Vly Rd	W18	W18	70	90	B	B	210	260	B	B	160	200	B	B	160	200	B	B	80	90	B	B	240	260	B	B
74	Bucks Bar Rd	50 ft S of Pleasant Vly Rd	W20	W20	380	390	C	C	470	510	C	C	450	470	C	C	450	470	C	C	360	360	B	B	500	530	C	C
75	Bucks Bar Rd	300 ft N of Mt Aukum Rd	W18	W18	300	290	B	B	380	400	C	C	360	370	B	C	360	380	B	C	270	270	B	B	410	430	C	C
76	China Garden Rd	150 ft N of SR 49	2A	2A	80	80	C	C	90	80	C	C	90	80	C	C	90	80	C	C	80	80	C	C	90	90	C	C
77	China Garden Rd	200 yds E of Missouri Flat Rd	2A	2A	240	330	C	C	410	610	C	C	90	150	C	C	90	260	C	C	220	300	C	C	170	300	C	C
78	El Dorado Rd	200 yds N of Pleasant Vly Rd	W22	W22	210	250	B	B	390	440	C	C	330	390	B	C	340	390	B	C	220	250	B	B	370	440	B	C
79	Enterprise Dr	100 ft E of Forni Rd	2A	2A	220	320	C	C	240	360	C	C	220	320	C	C	210	320	C	C	220	320	C	C	220	330	C	C
80	Fairplay Rd	100 ft S of Mt Aukum Rd	W20	W20	150	170	B	B	180	200	B	B	170	190	B	B	170	190	B	B	140	160	B	B	190	220	B	B
81	Forebay Rd	100 ft N of Pony Express Tr	2A	2A	120	170	C	C	150	210	C	C	140	190	C	C	140	190	C	C	120	170	C	C	160	210	C	C
82	Forni Rd	200 ft N of SR 49	2A	2A	340	330	C	C	350	350	C	C	350	350	C	C	350	350	C	C	320	320	C	C	350	360	C	C
83	Forni Rd	300 ft W of Missouri Flat Rd	2A	2A	500	820	C	C	520	840	C	C	420	720	C	C	420	710	C	C	510	820	C	C	420	720	C	C
84	Forni Rd	30 ft W of Arroyo Vista Wy	2A	2A	100	150	C	C	110	160	C	C	110	170	C	C	110	170	C	C	100	150	C	C	110	170	C	C
85	Forni Rd	W of Placerville Dr at City Limits	W20	W20	70	120	B	B	240	190	B	B	-	-	B	B	-	-	B	B	70	110	B	B	20	-	B	B
86	French Creek Rd	300 ft S of Mother Lode Dr	2A	2A	200	240	C	C	250	280	C	C	220	230	C	C	220	230	C	C	200	240	C	C	260	260	C	C
87	Garden Valley Rd	300 ft N of SR 193	W20	W20	40	40	B	B	50	60	B	B	50	50	B	B	50	50	B	B	40	40	B	B	50	60	B	B
88	Garden Valley Rd	0.45 mi S of Marshall Rd	W20	W20	140	120	B	B	150	130	B	B	150	120	B	B	150	120	B	B	140	120	B	B	150	130	B	B
89	Greenwood Rd	100 ft W of Marshall Rd	2A	2A	80	110	C	C	170	200	C	C	130	160	C	C	130	160	C	C	70	110	C	C	170	210	C	C
90	Greenwood Rd	0.03 mi S of SR 193	2A	2A	60	90	C	C	60	90	C	C	60	90	C	C	60	90	C	C	60	80	C	C	60	90	C	C
91	Harvard Wy	0.15 mi E of El Dorado Hills Bl	4AU	4AU	930	730	C	C	1,220	890	C	C	1,010	840	C	C	1,010	840	C	C	960	760	C	C	1,120	890	C	C
92	Harvard Wy	200 ft W of Silva Valley Pkwy	4AU	4AU	820	560	C	C	1,080	740	C	C	890	590	C	C	880	590	C	C	870	600	C	C	950	640	C	C
93	Icehouse Rd	300 ft N of US 50	2A	2A	80	130	C	C	70	110	C	C	80	120	C	C	80	120	C	C	60	100	C	C	80	120	C	C
94	Lime Kiln Rd	100 ft E of China Garden Rd	2A	2A	130	230	C	C	290	550	C	C	30	70	C	C	30	150	C	C	110	200	C	C	70	180	C	C
95	Meder Rd	300 ft E of Cameron Park Dr	W22	W22	590	580	C	C	840	950	D	D	670	760	C	C	670	760	C	C	600	590	C	C	860	1,010	D	D
96	Meder Rd	200 yds W of Ponderosa Rd	W22	W22	490	510	C	C	570	660	C	C	520	540	C	C	520	540	C	C	490	510	C	C	550	600	C	C
97	Mosquito Rd	300 ft S of Union Ridge Rd	2A	2A	150	150	C	C	330	350	C	C	270	280	C	C	270	280	C	C	140	140	C	C	350	360	C	C
98	Mosquito Rd	At American River Br	W18	W18	100	100	B	B	160	170	B	B	140	140	B	B	140	140	B	B	80	90	B	B	180	180	B	B
99	Newtown Rd	200 yds N of Pleasant Vly Rd	2A	2A	250	240	C	C	370	360	C	C	310	320	C	C	310	310	C	C	230	240	C	C	380	360	C	C

ID	Roadway	Segment	Class – Scenario Exist. 2, and 5	Class – Scenario 3, 4, and 6	Existing Conditions (2010)				Scenario 2				Scenario 3				Scenario 4				Scenario 5				Scenario 6			
					Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
100	Oak Hill Rd	300 ft S of Pleasant Vly Rd	2A	2A	130	170	C	C	130	170	C	C	140	170	C	C	140	170	C	C	130	160	C	C	140	170	C	C
101	Patterson Dr	200 ft S of Pleasant Vly Rd	2A	2A	270	370	C	C	350	460	C	C	300	410	C	C	320	430	C	C	270	370	C	C	350	470	C	C
102	Ponderosa Rd	100 ft N of Meder Rd	W20	W20	130	130	B	B	140	130	B	B	140	140	B	B	140	140	B	B	130	130	B	B	150	140	B	B
103	Ponderosa Rd	100 ft S of Green Valley Rd	W20	W20	110	100	B	B	110	110	B	B	110	100	B	B	110	100	B	B	100	100	B	B	110	110	B	B
104	Rock Creek Rd	100 ft E of SR 193	2A	2A	20	20	C	C	20	20	C	C	20	20	C	C	20	20	C	C	20	20	C	C	20	20	C	C
105	Sand Ridge Rd	100 ft W of Bucks Bar Rd	2A	2A	100	100	C	C	120	130	C	C	130	130	C	C	130	130	C	C	100	100	C	C	120	130	C	C
106	Serrano Pkwy	250 ft W of Silva Valley Pkwy	4AD	4AD	770	590	C	C	860	690	C	C	550	370	C	C	550	370	C	C	780	610	C	C	660	470	C	C
107	Sliger Mine Rd	50 ft N of SR 193	2A	2A	50	70	C	C	60	80	C	C	60	80	C	C	60	80	C	C	40	60	C	C	70	90	C	C
108	Snows Rd	400 ft N of Newtown Rd	2A	2A	80	90	C	C	100	120	C	C	90	110	C	C	90	110	C	C	70	90	C	C	100	120	C	C
109	Snows Rd	200 ft S of Carson Rd	2A	2A	280	240	C	C	310	270	C	C	300	260	C	C	300	260	C	C	280	240	C	C	310	270	C	C
110	South Shingle Rd	0.5 mi E of Latrobe Rd	W18	W18	130	70	B	B	340	290	B	B	150	120	B	B	150	120	B	B	140	100	B	B	180	160	B	B
111	South Shingle Rd	100 ft N of Barnett Ranch Rd	W20	W20	190	230	B	B	400	430	C	C	200	260	B	B	200	260	B	B	230	260	B	B	230	290	B	B
112	Starbuck Rd	110 ft N of Green Valley Rd	2A	2A	100	150	C	C	150	200	C	C	150	200	C	C	150	200	C	C	100	150	C	C	160	210	C	C
113	Union Ridge Rd	100 ft W of Hassler Rd	2A	2A	40	50	C	C	70	80	C	C	60	70	C	C	60	70	C	C	40	50	C	C	80	90	C	C
114	Wentworth Springs Rd	100 ft W of Quintette Rd	2A	2A	40	60	C	C	40	70	C	C	40	70	C	C	40	70	C	C	40	60	C	C	50	70	C	C
115	White Rock Rd	100 ft S of Silva Valley Pkwy	2A	6AD	690	900	C	D	1,190	1,460	D	D	1,230	1,490	C	C	1,210	1,450	C	C	670	1,050	C	D	1,710	1,910	C	C
116	Bass Lake Rd	400 yd N of Country Club Dr	2A	2A	930	880	D	D	1,370	1,340	D	D	1,070	1,050	D	D	1,070	1,040	D	D	990	840	D	C	1,260	1,230	D	D
117	Bass Lake Rd	100 yd S of Green Vly Rd	W22	2A	510	450	C	C	790	670	C	C	570	480	C	C	570	480	C	C	520	460	C	C	670	570	C	C
118	Bassi Rd	200 ft W of Lotus Rd	2A	2A	80	100	C	C	100	120	C	C	90	110	C	C	90	110	C	C	80	100	C	C	100	120	C	C
119	Broadway	At City Limits	2A	2A	350	350	C	C	530	550	C	C	440	460	C	C	450	460	C	C	330	330	C	C	540	560	C	C
120	Cambridge Rd	At U.S. Highway 50 OC	2A	2A	620	860	C	D	840	1,060	C	D	770	980	C	D	770	960	C	D	640	840	C	C	910	1,010	D	D
121	Cambridge Rd	300 ft S of Country Club Dr.	2A	2A	580	750	C	C	740	980	C	D	600	880	C	D	590	860	C	D	590	760	C	C	660	910	C	D
122	Cambridge Rd	100 ft N of Country Club Dr	2A	2A	520	740	C	C	800	1,100	C	D	580	870	C	D	570	850	C	D	530	750	C	C	710	990	C	D
123	Cambridge Rd	300 yds N of Oxford Rd	2A	2A	330	480	C	C	520	700	C	C	370	570	C	C	380	560	C	C	360	480	C	C	440	670	C	C
124	Cambridge Rd	300 ft S of Green Valley Rd	2A	2A	350	410	C	C	710	720	C	C	440	570	C	C	440	570	C	C	370	430	C	C	590	730	C	C
125	Carson Rd	0.6 mi E of City Limits	2A	2A	120	170	C	C	130	180	C	C	120	180	C	C	130	180	C	C	120	170	C	C	130	180	C	C
126	Carson Rd	300 yds E of Gatlin Rd	2A	2A	80	140	C	C	110	160	C	C	100	150	C	C	100	150	C	C	70	110	C	C	110	160	C	C
127	Carson Rd	At Carson Ct	2A	2A	110	180	C	C	110	200	C	C	110	190	C	C	110	190	C	C	100	170	C	C	110	200	C	C
128	Carson Rd	100 ft W of Barkley Rd	2A	2A	210	280	C	C	280	360	C	C	260	330	C	C	260	330	C	C	210	280	C	C	290	360	C	C
129	Carson Rd	100 ft E of Ponderosa Wy	2A	2A	170	220	C	C	180	230	C	C	180	230	C	C	180	230	C	C	170	220	C	C	180	240	C	C
130	Cedar Ravine Rd	0.1 mi N of Pleasant Vly Rd	W20	2A	170	170	B	B	330	340	B	B	250	270	C	C	250	270	C	C	160	160	B	B	340	340	C	C
131	Cedar Ravine Rd	0.25 mi S of Country Club Dr	2A	2A	220	220	C	C	340	350	C	C	290	300	C	C	290	300	C	C	210	210	C	C	330	340	C	C
132	Cold Springs Rd	At City Limits	2A	2A	270	300	C	C	430	480	C	C	360	400	C	C	360	400	C	C	260	300	C	C	430	470	C	C
133	Cold Springs Rd	300 yds S of Gold Hill Rd	2A	2A	190	280	C	C	270	370	C	C	230	330	C	C	230	330	C	C	180	270	C	C	270	360	C	C
134	Cold Springs Rd	100 ft S of SR 153	W22	2A	120	180	B	B	190	260	B	B	150	220	C	C	150	210	C	C	120	180	B	B	190	250	C	C
	Country Club Dr	West of Bass Lake Road	-	2A	-	-	-	-	-	-	-	-	330	110	C	C	330	110	C	C	-	-	-	-	500	230	C	C
135	Country Club Dr	0.4 mi E of Bass Lake Rd	2A	2A	440	350	C	C	820	720	C	C	740	540	C	C	730	540	C	C	470	370	C	C	930	810	D	C
136	Country Club Dr	0.15 mi W of Knollwood Dr	2A	2A	480	310	C	C	760	620	C	C	710	420	C	C	690	410	C	C	480	310	C	C	890	630	D	C
137	Country Club Dr	300 yds E of Cambridge Rd	2A	2A	240	270	C	C	710	870	C	D	520	590	C	C	510	590	C	C	240	300	C	C	750	790	C	C
138	Country Club Dr	0.2 mi W of Cameron Park Dr	2A	2A	230	370	C	C	500	680	C	C	380	550	C	C	370	550	C	C	230	390	C	C	520	620	C	C
139	Durock Rd	50 ft W of S Shingle Rd	2A	2A	360	560	C	C	730	950	C	D	600	790	C	C	600	780	C	C	370	550	C	C	720	940	C	D
140	El Dorado Rd	0.2 mi S of US 50	W22	2A	440	500	C	C	600	710	C	C	570	670	C	C	580	680	C	C	450	500	C	C	630	750	C	C
141	El Dorado Rd	0.11 N of U.S. Highway 50	W22	2A	160	200	B	B	270	390	B	C	280	350	C	C	280	350	C	C	150	210	B	B	340	450	C	C
142	El Dorado Rd	50 ft N of Missouri Flat Rd	W22	2A	150	260	B	B	160	320	B	B	130	220	C	C	130	220	C	C	150	260	B	B	140	260	C	C
143	Francisco Dr	200 ft N of Green Valley Rd	4AD	4AD	900	1,210	C	C	940	1,220	C	C	930	1,240	C	C	930	1,240	C	C	900	1,200	C	C	970	1,270	C	C
144	Francisco Dr	100 ft S of Sheffield Dr	2A	2A	160	200	C	C	180	210	C	C	170	190	C	C	170	190	C	C	170	200	C	C	180	210	C	C
145	Francisco Dr	300 yds N of Sheffield Dr	2A	2A	60	80	C	C	70	90	C	C	70	70	C	C	60	70	C	C	60	80	C	C	70	90	C	C
146	Gold Hill Rd	100 ft E of Lotus Rd	W22	2A	230	140	B	B	290	190	B	B	270	180	C	C	270	180	C	C	230	140	B	B	290	200	C	C
147	Gold Hill Rd	200 ft W of Cold Springs Rd	W22	2A	220	150	B	B	280	200	B	B	260	180	C	C	260	180	C	C	220	150	B	B	280	200	C	C
148	Gold Hill Rd	100 yds E of Cold Springs Rd	W22	2A	50	40	B	B	80	60	B	B	70	50	C	C	70	50	C	C	60	40	B	B	80	60	C	C
149	Green Valley Rd	200 ft W of Sophia Pkwy	4AU	4AU	1,730	2,050	C	D	2,000	2,230	D	D	1,650	2,050	C	D	1,640	2,050	C	D	1,840	2,080	D	D	1,690	2,090	C	D
150	Green Valley Rd	200 ft E of Sophia Pkwy	4AU	4AU	1,730	2,350	C	D	2,270	2,900	D	D	1,420	2,200	C	D	1,420	2,200	C	D	2,030	2,620	D	D	1,560	2,390	C	D
151	Green Valley Rd	200 ft E of County Line	2A	4AU	1,730	2,050	F	F	2,000	2,230	F	F	1,650	2,050	C	D	1,640	2,050	C	D	1,840	2,080	F	F	1,690	2,090	C	D

ID	Roadway	Segment	Class – Scenario Exist. 2. and 5	Class – Scenario 3. 4. and 6	Existing Conditions (2010)				Scenario 2				Scenario 3				Scenario 4				Scenario 5				Scenario 6			
					Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
152	Green Valley Rd	300 ft W of Silva Valley Pkwy	2A	4AU	970	1,120	D	D	1,120	1,360	D	D	1,100	1,330	C	C	1,090	1,320	C	C	1,000	1,250	D	D	1,280	1,440	C	C
153	Green Valley Rd	200 ft W of Bass Lake Rd	2A	2A	1,200	980	D	D	1,400	1,240	D	D	1,120	1,020	D	D	1,130	1,010	D	D	1,240	1,040	D	D	1,230	1,090	D	D
154	Green Valley Rd	300 ft W of Cameron Park Dr	2A	2A	930	940	D	D	1,340	1,340	D	D	1,040	1,120	D	D	1,040	1,110	D	D	970	990	D	D	1,230	1,270	D	D
155	Green Valley Rd	300 ft E of La Crescenta Dr	W22	2A	610	630	C	C	930	980	D	D	710	730	C	C	700	730	C	C	630	640	C	C	800	820	C	C
156	Green Valley Rd	500 ft E of Deer Valley Rd (E)	W18	2A	360	420	B	C	580	670	C	C	340	400	C	C	340	400	C	C	370	430	C	C	420	480	C	C
157	Green Valley Rd	300 ft W of Lotus Rd	W18	2A	570	650	C	C	990	1,170	D	D	760	870	C	D	760	870	C	D	560	650	C	C	940	1,070	D	D
158	Green Valley Rd	100 ft W of Greenstone Rd	W20	2A	300	360	B	B	470	590	C	C	390	460	C	C	390	460	C	C	310	360	B	B	430	520	C	C
159	Green Valley Rd	400 ft W of Campus Dr	W20	2A	370	420	B	C	450	540	C	C	420	480	C	C	420	480	C	C	380	430	C	C	430	540	C	C
160	Green Valley Rd	200 ft W of Missouri Flat Rd	W20	2A	710	760	C	C	800	880	D	D	770	820	C	C	760	820	C	C	720	770	C	C	780	880	C	D
161	Green Valley Rd	100 ft W of Weber Creek Br	W18	2A	230	310	B	B	300	410	B	C	290	330	C	C	290	330	C	C	230	320	B	B	310	390	C	C
162	Greenstone Rd	300 ft N of Mother Lode Dr	W18	2A	80	110	B	B	120	160	B	B	110	130	C	C	110	130	C	C	80	110	B	B	120	160	C	C
163	Greenstone Rd	0.20 mi N of US 50	2A	2A	210	220	C	C	350	400	C	C	320	340	C	C	320	340	C	C	210	220	C	C	360	360	C	C
164	Grizzly Flat Rd	200 yds E of Mt Aukum Rd	2A	2A	160	190	C	C	230	260	C	C	210	240	C	C	210	240	C	C	150	170	C	C	240	270	C	C
165	Lake Hills Dr	100 ft N of Salmon Falls Rd	2A	2A	250	260	C	C	260	270	C	C	260	280	C	C	260	280	C	C	240	260	C	C	260	270	C	C
166	Latrobe Rd	250 ft N of County Line	2A	2A	240	300	C	C	540	650	C	C	260	300	C	C	260	300	C	C	450	480	C	C	380	400	C	C
167	Latrobe Rd	1.5 mi N of S Shingle Rd	2A	2A	250	310	C	C	620	710	C	C	300	340	C	C	290	340	C	C	490	550	C	C	430	440	C	C
168	Latrobe Rd	At Deer Creek Bridge	2A	2A	330	390	C	C	640	730	C	C	360	390	C	C	350	390	C	C	540	570	C	C	480	490	C	C
169	Latrobe Rd	100 ft S of Investment Bl	2A	2A	380	420	C	C	780	870	C	D	470	490	C	C	460	490	C	C	620	660	C	C	620	620	C	C
170	Latrobe Rd	100 ft N of Investment Bl	2A	2A	650	710	C	C	970	1,080	D	D	730	770	C	C	720	770	C	C	890	960	D	D	870	880	D	D
171	Latrobe Rd	100 ft N of Golden Foothill Pw	4AD	4AD	1,750	1,740	C	C	2,570	2,610	D	D	1,320	1,280	C	C	1,320	1,280	C	C	1,970	1,950	D	D	1,490	1,440	C	C
172	Lotus Rd	300 ft N of Green Valley Rd	2A	2A	470	570	C	C	1,010	1,220	D	D	770	930	C	D	770	930	C	D	450	560	C	C	1,010	1,190	D	D
173	Lotus Rd	300 ft S of Thompson Hill Rd	2A	2A	310	430	C	C	530	680	C	C	390	540	C	C	390	540	C	C	290	410	C	C	530	670	C	C
174	Lotus Rd	0.25 mi S of SR 49	2A	2A	260	460	C	C	480	710	C	C	350	570	C	C	350	570	C	C	250	440	C	C	490	700	C	C
175	Luneman Rd	100 ft W of Lotus Rd	2A	2A	270	180	C	C	330	260	C	C	310	230	C	C	310	230	C	C	270	180	C	C	330	260	C	C
176	Marshall Rd	200 yds E of SR 49	2A	2A	260	300	C	C	370	410	C	C	310	350	C	C	310	350	C	C	250	290	C	C	380	410	C	C
177	Marshall Rd	300 ft E of Garden Valley Rd	2A	2A	430	370	C	C	560	500	C	C	490	440	C	C	490	440	C	C	410	360	C	C	580	510	C	C
178	Marshall Rd	300 yds S of Lower Main St	2A	2A	40	50	C	C	90	100	C	C	60	70	C	C	60	70	C	C	40	50	C	C	110	110	C	C
179	Missouri Flat Rd	300 ft N of El Dorado Rd	2A	2A	650	620	C	C	730	740	C	C	690	680	C	C	690	680	C	C	650	630	C	C	720	750	C	C
180	Mormon Emigrant Tr	100 ft E of Sly Park Rd	2A	2A	60	90	C	C	110	150	C	C	100	140	C	C	100	140	C	C	60	90	C	C	140	180	C	C
181	Mosquito Rd	At City Limits	2A	2A	270	310	C	C	490	550	C	C	410	460	C	C	410	460	C	C	260	300	C	C	510	570	C	C
182	Mother Lode Dr	200 ft W of Sunset Ln	2A	2A	910	1,100	D	D	1,140	1,330	D	D	1,050	1,260	D	D	1,060	1,260	D	D	940	1,130	D	D	1,130	1,320	D	D
183	Mother Lode Dr	400 yds W of Pleasant Valley Rd	2A	2A	570	740	C	C	910	1,120	D	D	730	910	C	D	750	920	C	D	590	750	C	C	870	1,060	D	D
184	Mother Lode Dr	0.43 mi E of Pleasant Valley Rd	2A	2A	240	320	C	C	280	360	C	C	260	350	C	C	260	350	C	C	240	330	C	C	280	370	C	C
185	Mt Aukum Rd	0.25 mi N of County Line	2A	2A	120	160	C	C	130	160	C	C	150	190	C	C	150	190	C	C	120	150	C	C	150	190	C	C
186	Mt Aukum Rd	300 ft S of Bucks Bar Rd	2A	2A	300	290	C	C	370	380	C	C	350	360	C	C	350	360	C	C	280	280	C	C	400	410	C	C
187	Mt Aukum Rd	300 ft S of Pleasant Vly Rd	2A	2A	200	270	C	C	290	340	C	C	260	330	C	C	260	330	C	C	190	270	C	C	300	370	C	C
188	Mt Murphy Rd	50 ft S of Marshall Rd	2A	2A	90	100	C	C	140	160	C	C	110	130	C	C	110	130	C	C	80	90	C	C	140	160	C	C
189	Mt Murphy Rd	200 yds N of SR 49	2A	2A	20	30	C	C	110	130	C	C	60	80	C	C	60	80	C	C	20	30	C	C	110	130	C	C
190	Newtown Rd	200 yds N of Pioneer Hill Rd	2A	2A	200	220	C	C	330	350	C	C	260	280	C	C	260	280	C	C	180	210	C	C	340	350	C	C
191	Newtown Rd	100 ft E of Broadway	2A	2A	280	320	C	C	410	450	C	C	340	380	C	C	340	380	C	C	260	310	C	C	420	450	C	C
192	Old Frenchtown Rd	400 yds S of Mother Lode Dr	2A	2A	90	100	C	C	130	150	C	C	110	130	C	C	110	130	C	C	90	110	C	C	130	150	C	C
193	Omo Ranch Rd	100 ft E of Mt Aukum Rd	2A	2A	60	80	C	C	70	80	C	C	70	90	C	C	70	90	C	C	60	70	C	C	70	90	C	C
194	Oxford Rd	50 ft E of Salida Wy	2A	2A	290	420	C	C	710	850	C	D	390	640	C	C	390	630	C	C	290	440	C	C	620	850	C	D
195	Pleasant Valley Rd	200 yds E of Mother Lode Dr	2A	2A	440	560	C	C	740	900	C	D	580	710	C	C	600	720	C	C	450	570	C	C	700	830	C	C
196	Pleasant Valley Rd	200 yds E of SR 49 (E)	2A	2A	1,030	1,230	D	D	1,240	1,500	D	D	1,200	1,440	D	D	1,200	1,430	D	D	1,010	1,210	D	D	1,300	1,560	D	E
197	Pleasant Valley Rd	300 ft W of Oak Hill Rd	2A	2A	860	980	D	D	940	1,090	D	D	930	1,060	D	D	930	1,060	D	D	830	950	C	D	970	1,130	D	D
198	Pleasant Valley Rd	100 ft E of Cedar Ravine Rd	2A	2A	800	830	C	C	1,020	1,080	D	D	950	990	D	D	940	990	D	D	780	800	C	C	1,060	1,120	D	D
199	Pleasant Valley Rd	0.10 mi E of Bucks Bar Rd	2A	2A	530	450	C	C	670	580	C	C	600	530	C	C	610	530	C	C	540	450	C	C	670	600	C	C
200	Pleasant Valley Rd	0.40 mi E of Newtown Rd	2A	2A	410	450	C	C	550	580	C	C	500	530	C	C	500	530	C	C	400	440	C	C	570	600	C	C
201	Ponderosa Rd	300 ft N of Wild Chaparral Dr	2A	2A	680	600	C	C	860	760	D	C	810	660	C	C	810	660	C	C	690	600	C	C	860	720	D	C
202	Pony Express Tr	200 yds E of Carson Rd	2A	2A	180	240	C	C	200	270	C	C	200	260	C	C	200	260	C	C	170	240	C	C	200	270	C	C
203	Pony Express Tr	300 ft E of Gilmore Rd	2A	2A	280	420	C	C	350	500	C	C	330	480	C	C	330	480	C	C	270	420	C	C	360	510	C	C
204	Pony Express Tr	300 ft W of Forebay Rd	2A	2A	350	510	C	C	370	530	C	C	370	530	C	C	370	530	C	C	350	520	C	C	370	540	C	C

ID	Roadway	Segment	Class – Scenario Exist. 2, and 5	Class – Scenario 3, 4, and 6	Existing Conditions (2010)				Scenario 2				Scenario 3				Scenario 4				Scenario 5				Scenario 6			
					Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS		Volume		2010 Method LOS	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
205	Salmon Falls Rd	50 ft S of Malcolm-Dixon Rd	2A	2A	560	620	C	C	860	790	D	C	770	810	C	C	770	810	C	C	650	620	C	C	920	940	D	D
206	Salmon Falls Rd	At New York Creek Bridge	2A	2A	200	220	C	C	430	410	C	C	280	300	C	C	280	300	C	C	190	210	C	C	440	420	C	C
207	Salmon Falls Rd	400 yds S of Pedro Hill Rd	2A	2A	120	170	C	C	290	310	C	C	180	230	C	C	180	230	C	C	110	160	C	C	300	320	C	C
208	Salmon Falls Rd	200 yds S of Rattlesnake Bar Rd	2A	2A	30	50	C	C	210	190	C	C	100	100	C	C	100	100	C	C	30	40	C	C	210	200	C	C
209	Sand Ridge Rd	300 ft E of SR 49	2A	2A	50	50	C	C	130	120	C	C	90	90	C	C	90	90	C	C	50	50	C	C	140	130	C	C
210	Serrano Pkwy	300 ft W of Bass Lake Rd	4AD	4AD	370	380	C	C	870	760	C	C	410	470	C	C	410	480	C	C	400	430	C	C	580	690	C	C
211	Shingle Springs Dr	0.20 mi S of U.S. Highway 50	2A	2A	420	400	C	C	650	780	C	C	560	570	C	C	560	570	C	C	400	390	C	C	670	760	C	C
212	Sly Park Rd	0.35 mi E of Mt Aukum Rd	2A	2A	240	290	C	C	310	360	C	C	280	330	C	C	280	330	C	C	240	280	C	C	310	360	C	C
213	Sly Park Rd	1.62 mi W of Mormon Emigrant Tr	W18	W18	150	190	B	B	190	240	B	B	170	220	B	B	170	220	B	B	150	190	B	B	200	250	B	B
214	Sly Park Rd	0.35 mi E of Mormon Emigrant Tr	2A	2A	260	330	C	C	350	430	C	C	320	400	C	C	320	400	C	C	250	320	C	C	380	460	C	C
215	Sly Park Rd	100 ft S of Gold Ridge Tr (N)	2A	2A	310	310	C	C	430	450	C	C	370	380	C	C	370	380	C	C	300	310	C	C	470	480	C	C
216	Sly Park Rd	100 ft S of Pony Express Tr	2A	2A	590	710	C	C	640	770	C	C	630	750	C	C	630	750	C	C	590	710	C	C	650	770	C	C
217	South Shingle Rd	100 ft S of Sunset Ln	W20	W20	420	530	C	C	720	870	C	D	450	610	C	C	450	610	C	C	460	570	C	C	580	760	C	C
218	SR49	North of China Hill	2A	2A	480	510	C	C	590	650	C	C	540	570	C	C	540	570	C	C	450	480	C	C	580	630	C	C
219	SR49	West of Missouri Flat Rd	2A	2A	980	950	D	D	1,240	1,280	D	D	1,090	1,080	D	D	1,110	1,100	D	D	960	940	D	D	1,160	1,150	D	D
220	SR49	West of Hastings Creed Rd	2A	2A	260	310	C	C	410	500	C	C	360	440	C	C	360	430	C	C	250	290	C	C	410	510	C	C
221	SR49	At the Placer County Line	2A	2A	640	750	C	C	810	940	C	D	750	870	C	D	750	870	C	D	620	730	C	C	820	950	C	D
222	SR 193	West of American River Road	2A	2A	470	580	C	C	590	710	C	C	540	650	C	C	540	650	C	C	460	560	C	C	600	710	C	C
223	SR 193	North of SR 49 in Placerville	2A	2A	180	190	C	C	210	230	C	C	200	210	C	C	200	210	C	C	170	180	C	C	210	230	C	C
224	Union Mine Rd	200 yds S of SR 49	2A	2A	290	140	C	C	300	160	C	C	290	150	C	C	290	150	C	C	280	140	C	C	300	160	C	C
225	Wentworth Springs Rd	0.7 mi E of Main St	2A	2A	170	220	C	C	190	250	C	C	180	240	C	C	180	240	C	C	160	210	C	C	200	260	C	C
226	White Rock Rd	At County Line	2A	4AD	530	1,070	C	D	1,060	1,910	D	F	660	1,330	C	C	660	1,280	C	C	900	1,810	D	F	1,020	1,740	C	C
227	White Rock Rd	100 ft W of Latrobe Rd	4AD	4AD	710	1,150	C	C	1,340	2,220	C	D	740	1,330	C	C	740	1,270	C	C	1,180	2,070	C	D	1,050	1,650	C	C

3.10 Water Supply

As discussed in Chapter 3, *Impact Analysis*, the project would not have a significant effect on public utilities and service systems. The County's development standards require the installation of utilities and service systems as new development occurs.

To the extent that such works may have impacts on the environment, the design, size, and location of the works are unknown and cannot be known at this time; therefore, useful environmental analysis is infeasible. Further discussion would be speculative. In any event, projects involving the future expansion and operation of utilities and service systems will be subject to their own CEQA documents.

Water supply, particularly the ability of the El Dorado Irrigation District (EID) to continue to meet the demands of new development, is a perennial concern to the residents of El Dorado County. For that reason, this DEIR will examine the availability of water to meet the future demands under the TGPA/ZOU.

The water supply discussion is based on the changes that would be expected to occur in current land uses with approval of the TGPA and development pursuant to the General Plan under the ZOU. Note that under the TGPA, no changes are proposed to the land use map that would substantially increase the expected level of development beyond that set out in the 2004 General Plan. The ZOU will bring the County zoning ordinance into conformity with the General Plan as required by state law. The ZOU would conditionally allow uses that may have a greater demand on water supplies than would otherwise be expected of uses in that particular zone. One example is a health resort and retreat center in a Forest Resource zone.

For the reader's information, the 2004 General Plan EIR found that the General Plan would have the following significant and unavoidable impacts related to water supply.

- Increased Water Demand and Likelihood of Surface Water Shortages Resulting from Expected Development.
- Potential Environmental Impacts Associated with the Development of New Surface Water Supplies and Related Infrastructure.
- Increase in Groundwater Demand and Related Impacts.

3.10.1 Existing Conditions

Regulatory Setting

State

California Environmental Quality Act and Case Law

CEQA requires an EIR to discuss whether a project's projected demand for water is anticipated to exceed existing and planned supplies. Regarding this topic, the ultimate question under CEQA is not whether an EIR identifies a likely source of water, but whether it adequately addresses the reasonably foreseeable impacts of supplying water to the project. The EIR must also disclose

whether there is insufficient water to serve the projected level of development. The California Supreme Court stated in *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412 that an adequate water supply analysis should contain the following elements.

- An identification of the water sources needed for full buildout.
- An assessment of the environmental impacts associated with providing water for the project.
- Where there are both short-term and long-term supplies needed, an analysis of long-term supplies and their impacts in at least a programmatic level of detail.
- An assessment of the extent to which identified water sources are "certain" or "likely" to be available.
- When "some uncertainty" exists with respect to the availability of such supplies, the identification of possible alternative water sources and analysis of the environmental impacts of curtailing planned development due to inadequate supplies.

Senate Bill 610 (Chapter 643, Statutes of 2001)

Senate Bill (SB) 610 (Water Code Section 10910, et seq.) establishes a procedure by which the public water supply agency or agencies that provide or will provide water to a qualifying development project is required to prepare a water supply assessment (WSA) describing demand and supply capacity under a number of circumstances. That assessment is to be included in the project EIR.

SB 610 applies to development projects, as described in Water Code Section 10912, and not to projects that consist of the adoption of a general plan or zoning ordinance. However, the essential contents of the WSA are similar to the required considerations set out by the California Supreme Court in the *Vineyard Area Citizens* decision.

Urban Water Master Plan

The Urban Water Management Planning Act (Water Code Section 10610, et seq.) requires each public water supply agency with 3,000 or more customers or supplying more than 3,000 acre-feet (AF) annually to prepare an urban water master plan (UWMP). The UWMP comprehensively describes, among other things, the ability of the water agency to meet long-term water demand in wet and dry years, its conservation practices for dry years, and additional water supplies to be acquired to meet future long-term demand, if any. The UWMP is to be prepared in compliance with the Department of Water Resources' *Guidebook to Assist Urban Water Suppliers*. A UWMP is essentially a report on the current and future demand and supply of water within the public water supply agency's service area. It does not commit the public water supply agency to any activity with the potential to lead to a physical change in the environment and, therefore, is not subject to CEQA. Both EID and the Georgetown Divide Public Utilities District are subject to the requirement to prepare an UWMP and both have done so.

SBx7-7 (Chapter 4, Statutes of 2009)

SBx7-7, the Water Conservation Act of 2009, requires the state to achieve a 20% reduction in urban per capita water use by December 31, 2020. The responsibility for this conservation falls to local water agencies, which must increase water use efficiency through promotion of water conservation standards that are consistent with the California Urban Water Conservation Council's (CUWCC's) best management practices. Each urban retail water supplier is also required to develop urban

water use targets and an interim urban water use target by July 1, 2011, based on the alternative methods set out in the 2009 Act. The agencies must meet those targets by the 2020 deadline.

Both EID and the Georgetown Divide Public Utility District (GDPUD) are signatories to the Memorandum of Understanding (MOU) that commits CUWCC members to implementation of the best management practices.

Sustainable Groundwater Management Act

On September 16, 2014, Governor Edmund G. Brown, Jr. signed historic legislation to strengthen local management and monitoring of groundwater basins most critical to the state's water needs. The three bills—SB 1168 (Pavley), SB 1319 (Pavley), and AB 1739 (Dickinson)—together make up the Sustainable Groundwater Management Act. The bills would establish phased requirements for high- and medium-priority basins to adopt groundwater sustainability plans, depending on whether or not a basin is in critical overdraft. The act would require adoption of groundwater sustainability plans by January 31, 2020, for all high or medium-priority basins in overdraft condition and by January 31, 2022, for all other high- and medium-priority basins unless legally adjudicated or otherwise managed sustainably.

These bills do not apply to this project because western El Dorado County has no groundwater basins.

Local

El Dorado County General Plan (2004)

The Public Services and Utilities Element of the General Plan contains the following objectives and policies relevant to water supply and water supply planning.

Objective 5.1.1: Planning. Ensure that public infrastructure needs are anticipated and planned for in an orderly and cost effective manner.

Policy 5.1.1.1: The County, in cooperation with other affected service providing agencies, shall develop long-range facilities plans for public services and utilities including water supply, wastewater treatment and disposal, solid waste disposal capacity, storm drainage, and schools. The Capital Improvement Program (CIP) for the County road system shall be coordinated with the infrastructure plan of the above services and utilities.

Policy 5.1.1.2: The County shall review the Capital Improvement Plans of all public service and infrastructure entities to ensure coordination with the General Plan in order to maintain an adequate level of service.

Objective 5.1.2: Concurrency. Ensure through consultation with responsible service and utility purveyors that adequate public services and utilities, including water supply, wastewater treatment and disposal, solid waste disposal capacity, storm drainage, fire protection, police protection, and ambulance service are provided concurrent with discretionary development or through other mitigation measures provided, and ensure that adequate school facilities are provided concurrent with discretionary development to the maximum extent permitted by State law. It shall be the policy of the County to cooperate with responsible service and utility purveyors in ensuring the adequate provision of service. Absent evidence beyond a reasonable doubt, the County will rely on the information received from such purveyors and shall not substitute its judgment for that of the responsible purveyors on questions of capacity or levels of service.

Policy 5.1.2.1: Prior to the approval of any discretionary development, the approving authority shall make a determination of the adequacy of the public services and utilities to be impacted by

that development. Where, according to the purveyor responsible for the service or utility as provided in Table 5-1, demand is determined to exceed capacity, the approval of the development shall be conditioned to require expansion of the impacted facility or service to be available concurrent with the demand, mitigated, or a finding made that a CIP project is funded and authorized which will increase service capacity.

Policy 5.1.2.2: Provision of public services to new discretionary development shall not result in a reduction of service below minimum established standards to current users, pursuant to Table 5-1.

The following Levels of Service shall apply to the review of discretionary projects.

Table 5-1. Minimum Levels of Service

	Community Region	Rural Center and Rural Region
Public water source	As determined by purveyor	As determined by purveyor, when applicable
Private wells	Environmental Management	Environmental Management
Public water treatment capacity	As determined by purveyor	As determined by purveyor
Public sewer treatment capacity	As determined by purveyor	As determined by purveyor
On-site sewage disposal	Environmental Management	Environmental Management
Storm drainage	Department of Transportation	Department of Transportation
Solid waste	Environmental Management	Environmental Management
County and State road circulation system	E	D
Schools	As determined appropriate by the school districts	As determined appropriate by the school districts
Parks	Specific plan for new communities or Quimby Fee/dedication program for tentative maps	Quimby Fee/dedication program for tentative maps
Fire district response	8-minute response to 80% of the population	15 to 45-minute response
Sheriff	8-minute response to 80% of the population	No standard
Ambulance	10-minute response to 80% of the population	20-minute response in Rural Regions and “as quickly as possible” in wilderness areas*
*In accordance with State standards.		

Policy 5.1.2.3: New development shall be required to pay its proportionate share of the costs of infrastructure improvements required to serve the project to the extent permitted by State law. Lack of available public or private services or adequate infrastructure to serve the project which cannot be satisfactorily mitigated shall be grounds for denial of any project or cause for the reduction of size, density, and/or intensity otherwise indicated on the General Plan land use map to the extent allowed by State law.

Policy 5.1.2.4: Service standards for public services and emergency services in Rural Centers and Rural Regions are different than in Community Regions based on lower intensity and density of land use.

Objective 5.2.1: County-Wide Water Resources Program. Establish a County-wide water resources development and management program to include the activities necessary to ensure adequate future water supplies consistent with the General Plan.

Policy 5.2.1.1: The El Dorado County Water Agency shall support a County-wide water resources development and management program which is coordinated with water purveyors and is consistent with the demands generated by the General Plan land use map.

Policy 5.2.1.2: An adequate quantity and quality of water for all uses, including fire protection, shall be provided for with discretionary development.

Policy 5.2.1.3: All medium-density residential, high-density residential, multifamily residential, commercial, industrial and research and development projects shall be required to connect to public water systems when located within Community Regions and to either a public water system or to an approved private water systems in Rural Centers. [This policy is proposed to be revised by the TGPA.]

Policy 5.2.1.4: Rezoning and subdivision approvals in Community Regions or other areas dependent on public water supply shall be subject to the availability of a permanent and reliable water supply.

Policy 5.2.1.5: Approval of development projects requiring annexations to water districts in Rural Regions may only occur if groundwater sources are not available to serve, or are unable to continue serving, the development, or if existing infrastructure abuts the property and sufficient water is available to serve the annexed area.

Policy 5.2.1.6: Priority shall be given to discretionary developments that are infill or where there is an efficient expansion of the water supply delivery system.

Policy 5.2.1.7: In times of declared water shortages, the Board of Supervisors shall give priority within the affected water district to approving affordable housing and non-residential development projects.

Policy 5.2.1.8: The preparation and approval of specific plans may occur without the availability of water guarantees. The timing for water guarantees shall be established within the policies of each specific plan consistent with Policy 5.2.1.4.

Policy 5.2.1.9: In an area served by a public water purveyor or an approved private water system, the applicant for a tentative map or for a building permit on a parcel that has not previously complied with this requirement must provide a Water Supply Assessment that contains the information that would be required if a water supply assessment were prepared pursuant to Water Code section 10910. In order to approve the tentative map or building permit for which the assessment was prepared the County must (a) find that by the time the first grading or building permit is issued in connection with the approval, the water supply from existing water supply facilities will be adequate to meet the highest projected demand associated with the approval on the lands in question; and (b) require that before the first grading permit or building permit is issued in connection with the approval, the applicant will have received a sufficient water meters or a comparable supply guarantee to provide adequate water supply to meet the projected demand associated with the entire approval. A water supply is adequate if the total entitled water supplies available during normal, single, dry, and multiple dry years within a 20-year projection will meet the highest projected demand associated with the approval, in addition to existing and 20-year projected future uses within the area served by the water supplier, including but not limited to, fire protection, agricultural, and industrial uses, 95% of the time, with cutbacks calculated not to exceed 20% in the remaining 5% of the time.

Policy 5.2.1.10: The County shall support water conservation and recycling programs and projects that can reduce future water demand consistent with the policies of this General Plan. The County will develop and implement a water use efficiency program for existing and new residential, commercial/industrial, and agricultural uses. The County will also work with each of the county's water purveyors to develop a list of the type of uses that must utilize reclaimed water if feasible. The feasibility of using reclaimed water will be defined with specific criteria developed with public input and with the assistance of the EID, and will be coordinated with their ongoing reclaimed water (also referred to as recycled water) planning and implementation

process. The County shall encourage all water purveyors to implement the water conservation-related Best Management Practices already implemented by EID and in compliance with the related criteria established by USBR.

Policy 5.2.1.11: The County shall direct new development to areas where public water service already exists. In Community Regions, all new development shall connect to a public water system. In Rural Centers, all new development shall connect either to a public water system or to an approved private water system.

Policy 5.2.1.12: The County shall work with the EID to support the continued and expanded use of recycled water, including wet-season use and storage, in new subdivisions served by the Deer Creek and El Dorado Hills Wastewater Treatment Plants. To avoid the construction impacts of installing recycled water facilities, the County shall encourage the construction of distribution lines at the same time as other utilities are installed. Facilities to consider are recycled water lines for residential landscaping, parks, schools, and other irrigation needs, and if feasible, wet-irrigation-season storage facilities.

Policy 5.2.1.13: The County shall encourage water purveyors to design water supply and infrastructure projects in a manner that avoids or reduces significant environmental effects to the maximum extent feasible in light of the water supply objectives of a given project.

Policy 5.2.1.14: The County, in cooperation with the Water Agency and water purveyors, shall collect and make available information on water supply and demand.

Policy 5.2.1.15: The County shall support the efforts of the County Water Agency and public water providers to retain existing and acquire new surface water supplies for planned growth and existing and planned agricultural uses within El Dorado County. New surface water supplies may include wastewater that has been reclaimed consistent with state and federal law.

Objective 5.2.2: Community Water Systems Within Rural Centers. Within Rural Centers, allow for development based upon private or community water systems.

Policy 5.2.2.1: Community water systems and/or package water treatment plants may be considered an acceptable alternative to public water service within Rural Centers.

Objective 5.2.3: Groundwater Systems. Demonstrate that water supply is available for proposed groundwater dependent development and protect against degradation of well water supplies for existing residents.

Policy 5.2.3.1: The County Well Ordinance and/or other County requirements regulate the installation of new private wells.

Policy 5.2.3.2: New private wells shall be tested pursuant to the County Well Ordinance and/or other County requirements to ensure a safe and reliable water supply.

Policy 5.2.3.3: The County shall develop and maintain a map and database of private well water production and other appropriate information.

Policy 5.2.3.4: All applications for divisions of land and other discretionary or ministerial land uses which rely on groundwater for domestic use, or any other type of use, shall demonstrate that groundwater is adequate as part of the review and approval process. The County shall not approve any discretionary or ministerial projects unless the County finds, based on evidence provided by the applicant, or other evidence that may be provided, that the groundwater supply for the project in question is adequate to meet the highest demand associated with the approval in question.

Policy 5.2.3.5: The average residential density shall not be greater than one dwelling unit per five acres in proposed groundwater dependent developments except in areas known to have groundwater supply limitations. In those areas, a minimum parcel size of ten acres or larger may be required if it is demonstrated such larger parcels are necessary to limit the impact on groundwater supply in the area.

Policy 5.2.3.6: The County shall assess and analyze the well data gained since the permit process started in 1990. Such data should be used to identify areas of likely groundwater supply limitations. At the completion of this analysis period, the County should determine if the General Plan uses within the areas of water supply limitation are compatible with identifiable supply limitations and modify the General Plan uses, if necessary.

Policy 5.2.3.7: The Environmental Management Department shall compile and make available information regarding typical water demands associated with rural residential development that is dependent upon groundwater. The information shall be posted on the Department's Internet website and available in hard copy format at the Development Services Public Counter.

El Dorado County Policy 800-02 – Water Supplies

Pursuant to County Policy 800-02 adopted October 8, 2003, no building permit shall be issued for the construction of a building having plumbing facilities therein, or the placing of a mobile home, until proof of an adequate water supply is provided by the applicant to the Division of Environmental Health. Water supplies would be approved by the County if a public water supply is available, springs with sufficient water supply, or if there is a groundwater well that is capable of providing to each connection a minimum of five gallons per minute.

Environmental Setting

The El Dorado County General Plan concentrates most future development potential in its Community Regions, Rural Centers, Meyers Community, and Specific Plan Areas. These areas are served by six water districts: EID, GDPUD, Grizzly Flats Community Services District (GFCSD), Kirkwood Meadows, South Tahoe Public Utility District (South Tahoe PUD), and Tahoe City Public Utility District (Tahoe City PUD). Of these districts, the last three service areas are either subject to the development restrictions of the Tahoe Regional Planning Agency or, in the case of Kirkwood Meadows, serve an area that is largely outside of El Dorado County. Accordingly, this discussion focuses on the first three districts in the list above.

The El Dorado County Water Agency (EDCWA) is a long-term water planning organization that leads, assists, and participates in projects such as securing water rights for El Dorado County and promoting water conservation. Although it works in concert with the county water districts, EDCWA does not supply water to individual users, nor does it maintain water storage or transmission facilities. It is not a water supply agency like EID, GDPUD, and GFCSD, nor does it exert any regulatory power over the water supply agencies.

The 2014 *West Slope Update* of EDCWA's *Water Resources Development and Management Plan* reflects the Agency's long-term view of water supply and demand in El Dorado County. It forecasts that, although water supply will meet demand in EID's service area to 2035, after 2035 EID will face substantial supply shortages.

Much of El Dorado County is without public water service, including portions of larger communities such as Pollock Pines and Camino. Those areas rely on private wells that tap the underlying groundwater aquifers. Groundwater aquifers in western El Dorado County are located in fractured rock and vary in depth and capacity. Groundwater supply and reliability similarly varies by location. The limited availability of public water and limited reliability of groundwater tends to limit~~confines~~ more dense residential and other development to those portions of the county that have potable water service.

As noted above, this environmental setting section primarily focuses on EID, BDPUD, and GFCSD; it describes their service areas, water supplies, infrastructure, and conservation measures. Important to note is that the discussion of these districts focuses on surface water supply because they do not rely on groundwater. The county's groundwater resources are discussed separately below.

El Dorado Irrigation District

EID is largest of the districts serving western El Dorado County. EID adopted its UWMP in 2011 and its integrated water resources master plan (IWRMP) in 2013. The IWRMP is not required by state law; it was adopted in conjunction with EID's separate wastewater facilities master plan (WWFMP) to provide a comprehensive road map for the development of future infrastructure and the maintenance of existing water, wastewater, and recycled water facilities to meet EID's projected demand beyond 2030.

Service Area

EID provides water to nearly 110,000 people for municipal, industrial, and irrigation uses, as well as wastewater treatment and recycled water services. Its UWMP describes the EID service area as follows.

> The District contiguous service area encompasses approximately 220 square miles on the western slope of the Sierra Nevada Mountains in El Dorado County. The service area is bounded by Sacramento County to the west and the Pollock Pines/Sly Park area to the east and ranges from 500 to more than 4,000 feet in elevation. The area north of Coloma and Lotus establishes the northern-most part of the service area, while the communities of Pleasant Valley and South Shingle Springs establish the southern boundary. The City of Placerville, located in the central part of the District, receives water from the District as a wholesale customer. The District also operates two satellite water systems in the Strawberry and Outingdale communities (El Dorado Irrigation District 2011).

EID's service area is divided into three water supply areas: the El Dorado Hills Region (including El Dorado Hills and Cameron Park), Western Region (including Shingle Springs and Diamond Springs), and Eastern Region (including Placerville and Pollock Pines). EID's existing sources of municipal water include both surface and recycled water. Raw water is delivered to the system from three principle points of diversion.

- Sly Park Dam (Jenkinson Lake).
- The El Dorado Hydroelectric Federal Energy Regulatory Commission (FERC) Project 184 (Project 184) at Forebay Reservoir (which is supplied by lakes on the Sierra crest).
- Folsom Reservoir via a United States Bureau of Reclamation (USBR) water contract, a Warren Act Contract for rediverted District ditch and Weber Reservoir water supplies, and State water right permit 21112.

There are also two satellite diversions: potable water deliveries to Outingdale from the Middle Fork of the Cosumnes River, and potable water deliveries to Strawberry from the South Fork American River. EID also diverts raw water into the Crawford Ditch from the North Fork of the Cosumnes River to serve canal irrigation customers. Aside from the USBR water contract, EID does not currently purchase water from any wholesale supplier.

In the future, EID plans to purchase 7,500 AFY of water wholesale from EDCWA through a USBR contract under Public Law 101-514 (i.e., "Fazio" water). This water would otherwise be destined for Folsom Lake. The Fazio water is expected to begin delivery in 2015. EID is also pursuing through EDCWA another 30,000 AFY under the "El Dorado–SMUD Cooperation Agreement." This supply would be available to EID beginning in 2025. By 2025, EID would thereby increase its current supply by 37,500 AFY in normal years; this would be reduced to an increase of 10,625 AFY in dry years (El Dorado Irrigation District 2013a).

In Section 5.3.1, Concept 1A, the IWRMP describes the Fazio water as follows.

> EDCWA is pursuing a water supply service contract with the USBR. Public Law 101-514 transferred unallocated CVP supply to local water purveyors, allocating 15,000 AFY to El Dorado County. Under this new contract, up to 15,000 AFY of CVP[1] water could be made available for diversion from Folsom Reservoir, or from an exchange on the American River, upstream from Folsom Reservoir, between Georgetown Divide Public Utility District (GDPUD) and Placer County Water Agency. EDCWA could make this new CVP water available to the District and GDPUD for use within their respective service areas. Public Law 101-514 does not specify how much of the 15,000 AFY could be allocated to each District; however it has been tentatively assumed that the new CVP allocation could be split equally between the District and GDPUD. For the District, water could be diverted at the Folsom Reservoir intake and delivered to the El Dorado Hills and Cameron Park service areas. Although no formal distribution has been made, for planning purposes it has been assumed that a 50/50 distribution will occur (i.e. the District could receive a contract for 7,500 of the 15,000 AFY). This 7,500 AFY allocation would be subject to the USBR Shortage Policy (El Dorado Irrigation District 2013a).

Section 5.3.1, Concept 1B, of the IWRMP describes the El Dorado–SMUD Cooperation Agreement as the "supplemental water rights project," as follows.

> The El Dorado Water and Power Authority (EDWPA) applied for supplemental water supply on behalf of the District, El Dorado County, EDCWA, and GDPUD, and has secured diversion and storage rights in the SMUD UARP[2] facilities. These rights are described in the El Dorado-SMUD Cooperation Agreement. The Agreement enables the El Dorado Parties to avoid the costs of permitting issues associated with the construction of new water diversion and storage facilities by securing use of existing facilities.
>
> As long as the El Dorado Parties secure the legal right to divert water, the Agreement requires SMUD to make deliveries to the El Dorado Parties from the UARP, including deliveries to and from carryover storage, of up to 30,000 AFY and 40,000 AFY after year 2025. This includes the right to carry-over as much as 15,000 ac-ft for drought and other emergencies (El Dorado Irrigation District 2013a).

Infrastructure

EID treats raw water for domestic use at the following water treatment plants (WTPs). The El Dorado Hills WTP, with a rated capacity of 26 million gallons per day (MGD), serves the El Dorado Hills Region. The Reservoir 1 WTP, with a rated capacity of 26 MGD, serves the Western Region. The Reservoir A WTP, with a rated capacity of 64 MGD, serves the Eastern Region.

[1] CVP is the acronym for the Central Valley Project.

[2] UARP is the acronym for the Upper American River Project.

EID also produces recycled water at two of its wastewater treatment plants (WWTPs). Recycled water produced at the El Dorado Hills and Deer Creek WWTPs is available for use in the El Dorado Hills and Cameron Park areas. The two plants are connected, allowing recycled water to be transferred as needed between the two distribution systems for these areas. Uses for recycled water under EID regulations include commercial landscape irrigation, golf course and road median irrigation, residential or multi-family dual-plumbed landscape irrigation, construction water, industrial process water, and recreational lakes and ponds (El Dorado Irrigation District 2011). Annual recycled water production is dependent upon the total wastewater flow to the WWTPs, operational losses, and a minimum discharge of 1 MGD of treated effluent to Deer Creek mandated by the State Water Resources Control Board for habitat maintenance. Between 2008 and 2012, total recycled water production from the two plants averaged approximately 2,615 AFY. Demand for recycled water cannot be fully met by the WWTPs, so supplies are supplemented with potable water. The amount of supplemental potable water needed has ranged from 1.5 to 3 MGD between 2008 and 2013. A new recycled water storage facility would be needed to meet demand solely with recycled water (El Dorado Irrigation District 2013b).

EID expects demand for recycled water to increase over time. EID will likewise expand facilities to increase the available supply of recycled water. EID estimates that by 2035, recycled water production will be approximately 5,600 AFY (El Dorado Irrigation District 2013b).

EID currently does not use groundwater as a supply source. The UWMP notes that this is because groundwater aquifers in the service area occur in fractured hard rock and are unreliable. The District owns two wells in the Swansboro community north of the South Fork American River, but these are physically separate from and do not supply the rest of the system. The UWMP reports that EID is not currently engaged in any water supply transfers outside the district but has water supplies suitable for short-term transfers and an interest in actively pursuing such transfers in the future (El Dorado Irrigation District 2011).

Water Supply

EID's *2013 Water Resources and Service Reliability Report*[3] describes the current water supply availability within EID's service area. To determine the amount of water that will be available in the coming year for new meter sales, EID uses the "firm yield" of the water supply sources minus the total potential demand for all uses. Firm yield is defined as "the annual demand that the integrated supply system can theoretically meet 95% of the time while incurring shortages of no more than 20% annually in the remaining 5% of the time" (El Dorado Irrigation District 2013b).

The water resources and service reliability report divides EID's service area into two parts for purposes of reporting: the El Dorado Hills supply area and the Western/Eastern supply area. The El Dorado Hills supply area includes the community of the same name. The Western/Eastern area includes the communities of Bass Lake, Cameron Park, Shingle Springs, Logtown, El Dorado and Diamond Springs, Pleasant Valley, Sly Park, Pollock Pines, Camino, Placerville, and Lotus/Coloma. The available supply in the El Dorado Hills supply area is currently restricted by the capacity of the El Dorado Hills WTP and conveyance facilities. The Western/Eastern supply area is not restricted, because the WTPs serving the Western/Eastern area have sufficient capacity to meet demand.

[3] EID updates this report yearly to ensure that water meter sales do not exceed water supply and infrastructure capacity.

The report uses "water meter availability" as a convenient way of describing how much water is available in these two key service areas. Water meter availability is the difference between the available water supply and the total potential demand for each respective area. Available water supply is that portion of the firm yield that can be delivered to the service area, based on existing infrastructure. The estimate of total potential demand is based on averaged water use from existing meters, meters purchased but not yet installed, and latent uses. It does not include projections of future demand. Meter availability can be viewed as the number of new homes and service connections that could be installed given existing deliverable supply.

EID's 2013 water resources and service reliability report estimates that its system has a firm yield of about 63,500 AF. The available unallocated water supply as of that time was about 3,609 AF within the El Dorado Hills supply area and 1,045 AF within the Western/Eastern supply area. This translates to being able to ultimately serve the equivalent of about 4,687 new dwelling units in El Dorado Hills and 1,935 new dwelling units in the Western/Eastern area with existing supplies (El Dorado Irrigation District 2013b).

Conservation Measures

EID has adopted demand management measures that conserve water during both normal and dry years. These include measures such as water audits for residential customers, high-efficiency clothes washer rebates, and an Irrigation Management Service that provides irrigation scheduling for commercial agriculture customers. Under its 2008 *Drought Preparedness Plan* and 2012 *Drought Action Plan*, EID has established a four-stage water conservation program for additional savings during water supply shortages. The drought preparedness plan is not invoked when there is a single dry year. Stage 1 is typically declared in the second dry year and sets a voluntary 15% conservation goal. Stage 2 is typically declared in the third dry year and implements water use reduction measures to decrease normal demand by up to 30% through voluntary and mandatory measures. Drought Stage 3 establishes mandatory measures to reduce EID-wide water demand by up to 50%. Stage 4 imposes a mandatory conservation requirement of greater than 50% through mandatory measures such as water rationing (Brown and Caldwell 2008; El Dorado Irrigation District 2012). The Drought Action Plan describes the actions EID will take during each respective stage, including convening a Drought Response Team to coordinate the responses of EID's various departments, reaching out to the community with information about water conservation, undertaking changes in operations to conserve water supplies, and determining when to increase or reduce the stage. The Drought Action Plan process is summarized in Table 3.10-1.

<u>At this writing, EID has imposed Stage 2 conservation measures in response to California's current drought.</u>

Table 3.10-1. Drought Stages Summary

Water Supply Conditions	Drought Stage	Stage Title	Stage Objective	Response Actions
Normal water supply	None	Normal Conditions	Public awareness of water efficiency practices and prohibition of water waste	Public outreach and education for ongoing water efficiency practices and the prohibition of water waste
Slightly restricted water supplies Up to 15% supply reduction	Stage 1 Introductory stage with voluntary reductions in use	Water Alert	Initiate public awareness of predicted water shortage and encourage conservation	Encourage voluntary conservation measures to achieve **up to a 15% demand reduction**
Moderately restricted water supplies Up to 30% supply reduction	Stage 2 Voluntary and mandatory reductions in water use	Water Warning	Increase public awareness of worsening water shortage conditions	Voluntary conservation measures are continued, with the addition of some mandatory measures to achieve **up to a 30% demand reduction**
Severely restricted water supplies Up to 50% supply reduction	Stage 3 Mandatory reductions in water use	Water Crisis	Enforce mandatory measures and/or implement water rationing to decrease demands	Enforce mandatory measures to achieve **up to a 50% demand reduction**
Extremely restricted water supplies Greater than 50% supply reduction	Stage 4 Water rationing for health and safety purposes	Water Emergency	Enforce extensive restrictions on water use and implement water rationing to decrease demands	Enforce mandatory measures to achieve **greater than 50% demand reduction**

Source: El Dorado Irrigation District 2012

Georgetown Divide Public Utility District

Service Area

The GDPUD's service area covers 112 square miles, with approximately 47 square miles currently having some form of water service available. The GDPUD presently serves nearly 4,000 customers. It provides domestic water service to the unincorporated communities of Georgetown, Buckeye, Garden Valley, Kelsey, Spanish Dry Diggins, Greenwood, Cool, and Pilot Hill. Portions of these same communities also receive untreated water for irrigation purposes through separate facilities (Georgetown Divide Public Utility District 2011).

Infrastructure

The Stumpy Meadows Project, which includes Stumpy Meadows Reservoir, diversion structures, and a conveyance system to the GDPUD service area, is the district's primary source of water. The UWMP, which was adopted by GDPUD in 2011, reports that Stumpy Meadows Reservoir is the only existing and planned water source for the GDPUD. The UWMP explains that "local ground water resources are not of adequate quality or quantity to be a viable augmenting resource." The UWMP also notes that transferring water from other purveyors into the GDPUD service area is impractical because the district is geographically separated from its neighboring water purveyors and it has no existing intertie facilities with those agencies to either exchange raw water or transfer treated water.

Water Supply

Total water use within the GDPUD in 2010 was approximately 1,699 AFY. The available water supply (firm yield) is 12,200 AF. The GVPUD defines firm yield as "a deficiency of 10 percent for treated water and 50 percent for untreated water in critically dry years." This includes operational losses and water requirements (Georgetown Divide PUD 2011).

Conservation Measures

The GDPUD has put in place 11 discrete demand management measures that will conserve water during normal and dry years. These include measures such as water audits for residential customers, residential plumbing retrofits, and conservation pricing. The GDPUD has a four-stage water conservation program for additional savings during times of water supply shortages. Stage 1 is voluntary, with a 15% conservation goal. Through each stage, more requirements are imposed and become mandatory; at Stage 4, a mandatory conservation requirement of 36 to 50% is imposed. At this writing, GDPUD has imposed Stage 2 conservation measures in response to California's current drought.

Grizzly Flats Community Services District

Service Area, Infrastructure, and Water Supply

GFCSD serves approximately 611 residential customers in the small community of Grizzly Flats in the southern portion of the county (Grizzly Flats Community Services District 2010). It is a small community water system and no UWMP has been prepared or is required to be prepared by the CSD. Water is supplied by two local creeks, North Canyon and Big Canyon, through a water system constructed in the mid 1960's through the mid 1970's (Grizzly Flats Community Services District 2013a). These creeks are diverted and the water is transported roughly two miles via pipeline to the CSD's recently renovated storage reservoir prior to treatment and distribution. Recent renovations to the reservoir, including compacting and installation of a liner, have reduced water loss and increased storage capacity by approximately 36 acre-feet per year (AFY) (Grizzly Flats Community Services District 2013b). However, the system's reliance on two surface water sources that drain relatively small watersheds and a single reservoir with limited hold-over capacity makes it extremely vulnerable to low flows in the two creeks.

Conservation Measures

Ordinance 11-1 establishes the district's water conservation measures and water shortage response regulations. The ordinance authorizes the General Manager or Board of Directors to call a Water Shortage Emergency when the supply of water is deemed low or if facility malfunctions require the additional conservation of water beyond the district's normal required daily conservation procedures. At this writing, GFCSD has asked all residential water users to reduce their use by 20 percent in response to California's current drought.

Groundwater Supply

The preceding discussions focus on surface water supplies. The 2004 General Plan EIR discusses the groundwater setting within El Dorado County in Chapter 5.5. In summary, the majority of all water produced in El Dorado County wells comes from underground zones of hard crystalline or metamorphic rock within which there are fractures that provide natural storage for groundwater (El

Dorado County Environmental Management Department 2004)~~the county is largely underlain with hard crystalline or metamorphic rock within which there are fractures that hold groundwater~~. The fractures do not form a connected system and vary in size and character. Therefore, with the exception of a small basin at South Lake Tahoe, there is no groundwater basin in El Dorado County. Consequently, groundwater resources can vary by location and reliability depending upon the underlying geology of that site. The discussion of groundwater supplies in Chapter 5.5 of the 2004 General Plan EIR is hereby incorporated by reference.

Despite the lack of groundwater basin, groundwater is used extensively for water supply in El Dorado County. Development on lands not served by existing water districts (e.g., EID, GDPUD, GFCSD) typically will rely on private domestic groundwater wells or small, local water systems that rely on springs and wells (EDAW 2003). According to the 1990 Census data, there are more than 11,650 domestic wells in El Dorado County serving approximately 32,000 persons (SWRCB 2005).

Historical data on groundwater levels is quite limited. The water levels in water wells within the county are not routinely tested, are not reported to the County, and there is no comprehensive database on groundwater levels. However, the California Department of Water Resources (DWR) periodically tests groundwater wells for pollution or contaminants. One of the outputs of this testing includes depth to groundwater. The Center for Economic Development (CED) at Chico State University compiled well depth data in the County with consistent measurements between 1999 and 2010, and corrected for wells not measured in any particular year. Average groundwater depths from 1999 to 2010 are shown in Table 3.10-2 below. Overall, El Dorado County experienced little groundwater change during this 10-year period. Depths fluctuated between 22 and 30 feet deep, with an increasing long-term trend. Between 1999 and 2010, water table depths increased an average of 3.2 percent per year with a net change of approximately 8 feet (California State University, Chico 2011).

Table 3.10-2. Average Water Table Depths in El Dorado County (1999–2010)

Year	Average Depth to Groundwater (feet)
1999	26.39
2000	29.40
2001	33.71
2002	32.48
2003	31.36
2004	31.80
2005	30.58
2006	28.25
2007	30.89
2008	32.30
2009	31.20

Source: California State University, Chico 2011.

Despite relatively mild fluctuations in groundwater well depths between 1999 and 2010, data between 2010 and 2014 indicate that fluctuations can be greater. A recent Public Update by DWR states that the greatest concentration of recently deepened wells is in the fractured bedrock foothill areas of Nevada, Placer, and El Dorado counties (DWR 2014). Between years 2010 and 2014, El

Dorado County has deepened 41 domestic wells in fractured bedrock (DWR 2014) compared to much fewer cases (ranging from 1 to 17) in most other counties. Findings of this analysis support a conclusion that water wells in areas of fractured bedrock are more vulnerable to water shortages than wells in groundwater basins during times of drought (DWR 2014). In addition, fracture width generally decreases with depth (SWRCB 2005), indicating even more limited supplies than porous or alluvial aquifer systems at greater depths due to diminished recharge, movement and storage capacity (EDAW 2003). As such, long-term reliability of groundwater cannot be estimated with the same level of confidence as a porous or alluvial aquifer (EDAW 2003).

In addition to water levels, water quality can affect groundwater supplies. During 2003 and 2004, and as part of a small pilot study in 2001, a Voluntary Domestic Well Assessment Project sampled 398 private domestic wells in El Dorado County. Of the domestic wells sampled, approximately 30 percent (119 wells; some wells detected multiple chemicals) would not pass state primary drinking water standards for public water systems. This statistic demonstrates that private domestic wells are vulnerable to contamination that may affect public health. The most common reasons for primary MCL exceedance were positive detection of coliform (total coliform present in 111 domestic wells and fecal coliform present in 14 domestic wells), followed by arsenic (15 domestic wells) and nitrate (7 domestic wells) (SWRCB 2005). According to the 2004 General Plan EIR, major sources of potential groundwater pollution include septic tanks or septic leach fields, underground fuel tanks, spillage of hazardous materials or commercial waste, and infiltration of agricultural byproducts, including fertilizer and livestock waste (EDAW 2003).

Persistent drought and climate change will continue to impact the reliability of County groundwater supplies. The combination of rising temperatures, a smaller snowpack, and more frequent and potentially longer droughts could reduce the availability of both surface and groundwater supplies, as more water runs off or evaporates and less infiltrates into the ground. Reduced infiltration could reduce the reliability of groundwater wells drilled in fractured rock (El Dorado County Water Agency 2014).

3.10.2 Environmental Impacts

This DEIR examines the potential effects on water supply of development. The basic question is whether the projected future level of demand under the project can be met by future water supplies. The baseline for this analysis is existing conditions at the time of release of the DEIR's notice of preparation in 2012.

For the reader's information, the 2004 General Plan EIR concluded that the General Plan would have a significant and unavoidable impact on water supply, with total water demand from planned development under the General Plan exceeding projected total water supply by 2025. Note that, as discussed in Section 3.8, Population and Housing, the 2004 General Plan's assumptions for future growth in the west slope of the county are essentially the same as those of the TGPA and ZOU, with the exceptions noted below. The present DEIR examines the potential impact in light of the updated UWMPs of EID and GDPUD, progress on securing additional long-term water supplies for EID, and renovations to the GFCSD's storage system.

Impact Mechanisms

This DEIR relies upon the water planning documents described in Section 3.10.1 as the primary source of information on existing and projected supply and demand, including sources of additional

water that will be needed to meet future demand. The following impact analysis is based on future water supply and demand projections as available from the water districts. For example, EID has projections for 2035, and that information is also used below.

The analysis takes into consideration the adopted General Plan policies, described above, that reduce the impact of new development on the water supply.

The project's key differences from the current General Plan that concern water use are as follows.

- Splitting the existing Camino–Pollock Pines Community Region into three Rural Centers.
- Expanding the agricultural district boundaries.
- Increasing maximum residential density for mixed-use and multi-family projects.
- Amending the Public Services and Utilities Element.
- New land uses that may be allowed pursuant to the ZOU that are not currently provided for in the current Zoning Ordinance.

Each of these changes as they potentially relate to water use is described below.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines and the County's own concern, the proposed project would be considered to have a significant effect on water supply if it would result the condition listed below.

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

Impacts and Mitigation Measures

Impact WS-1: Create a need for new or expanded entitlements or resources for sufficient water supply (significant and unavoidable)

Review of Impact Mechanisms

The following analyses examine the key impact mechanisms to determine the extent to which they would result in land use changes that would substantially increase water demand. The county's water districts have based their supply projections on the General Plan's provisions for future growth. One indicator of an impact on water supply would be if the project would introduce new policies that would substantially increase the amount of future growth.

Camino/Pollock Pines Community Region Division

Compared to the existing General Plan, this amendment would reduce the overall intensity of allowable future development within the Camino-Pollock Pines Community Region and split the area into three Rural Centers: Camino, Cedar Grove, and Pollock Pines. The allowable land uses would remain the same and no change is proposed to existing land uses.

In these Rural Centers, development would be allowed to rely on private water systems; in a Community Region, however, development must rely on public water systems. As such, the intensity of allowable development would be expected to be lower in a Rural Center than a Community Region. However, with respect to changes in water supply, this is a distinction without a difference; regardless of whether the water supplier is public or private, there must be an available water supply for development to be approved.

Agriculture District Boundary Expansion

This proposed amendment would expand Agricultural District boundaries in the Garden Valley–Georgetown, Coloma, Camino–Fruitridge, Gold Hill, Oak Hill, Pleasant Valley, and Fair Play–Somerset areas to encompass additional parcels that qualify for inclusion pursuant to General Plan Policy 8.1.1.2. This change would identify additional lands as agricultural in nature for planning purposes, including land that is already in agricultural use. Expansion of the Agricultural District boundaries does not alter the existing land uses, nor does it require any land that is not currently in agricultural use to be put to that use. In addition, a number of parcels now identified as being within Agricultural Districts would be removed from those districts, based on the Policy 8.1.1.2 criteria.

Should landowners choose to initiate or expand agricultural activities as a result of the expansion of the Agricultural District boundaries, a potential increase the demand for irrigation water could result. Irrigation water can be supplied by wells, where groundwater is available; irrigation water can also be supplied by surface water from water districts (in areas within water district boundaries and under contract for delivery). The landowner's decision to obtain surface water from one of the districts would be based on the proximity of available raw water transmission facilities and the cost of water relative to the productivity of the land (which in turn depends on the expected return from the commodity being grown or livestock being raised). The expansion of Agricultural District boundaries would not alter the landowner's decision-making process and thus would not result in a change in water use. In any case, a number of unknown variables related to an expansion of agricultural use exist; determining whether these variables would result in an increase in water demand makes would be speculative.

Mixed Use and Multi-Family Density Increases

Changes related to mixed use and multi-family density increases appear below.

Policy 2.1.1.3: Commercial/Mixed Use (in Community Regions). Increase the maximum density for the residential portion of mixed use projects in Community Regions from 16 dwelling units per acre to 20 dwelling units per acre to be consistent with 2009 amendments to State planning law (Government Code Section 65583.2(c)(B)(3)). The maximum residential density of 20 dwelling units per acre may only be achieved where adequate infrastructure, such as water, sewer and roadway are available or can be provided concurrent with development.

Policy 2.1.2.5: Commercial/Mixed Use (in Rural Centers). Increase the maximum density for the residential portion of mixed use projects in Rural Centers from 4 dwelling units per acre to 10 dwelling units per acre. The maximum residential density of 20 dwelling units per acre may only be achieved where adequate infrastructure, such as water, sewer and roadway are available or can be provided concurrent with development (i.e., in Community Regions, not within Rural Centers or Rural Regions).

Policy 2.2.1.2: Multi-Family Density. The proposal originally included amending the maximum density allowed in the multi-family residential (MFR) designation from 24 units per acre to 30 units per acre to comply with California Government Code 65583.2(c)(iv) and (e). Amend the multi-family land use to encourage a full range of housing types, including small lot single family detached design,

without a requirement for a planned development. The Zoning Ordinance is proposed to be amended similarly. The proposal to increase the MFR density to 30 units per acre was based on the belief that this was necessary in order for the housing element to accommodate the county's fair share of the regional housing need. After adoption of the housing element in late October 2013 and its ratification by the California Department of Housing and Community Development later that year, that density is not needed. Therefore, the increase in density to 30 units per acre will not be pursued.

The relatively limited number of parcels that are available for mixed use development, their small size, and lack of sewer service limit the practical effect of this higher density potential on the projected number of residences. In the past 10 years, for example, the County has considered only 2 or 3 applications for mixed use permits, totaling about 15 dwelling units. The only area projected to see a substantial net increase in dwelling units as a result of the mixed use development is the El Dorado–Diamond Springs Community Region. It is projected to have a net increase in 257 dwellings over the next 20 years as a result of mixed use developments.

Although the maximum density in the multi-family designation and zone is proposed for increase, past trends indicate that this is unlikely to result in a substantial net increase in the number of multi-family dwellings that will be built in the future. Between 2003 and 2013, the average density of multi-family residential projects approved on small parcels (smaller than 2 acres in size) was approximately 10 dwelling units per acre.[4] During that period, the average density per project on large parcels (larger than 2 acres in size) was 11.5–14 dwelling units per acre (El Dorado County 2013).

Public Services and Utilities Element Amendments

Proposed changes to the Public Services and Utilities Element are shown below.

Policy 5.2.1.3: All medium-density residential, high-density residential, multifamily residential, commercial, industrial and research and development projects ~~shall~~ may be required to connect to public water systems if reasonably available when located within Community Regions and to either a public water system or to an approved private water systems in Rural Centers.

Policy 5.3.1.1: High-density and multifamily residential, commercial, and industrial projects ~~shall~~ may be required to connect to public wastewater collection facilities if reasonably available as a condition of approval. ~~except in Rural Centers and areas designated as Platted Lands (-PL).~~ In ~~the Community Region of~~ Camino–Pollock Pines, the long term development of public sewer service shall be encouraged~~; however, development projects will not be required to connect to wastewater collection facilities where such connection is infeasible, based on the scale of the project~~.

The proposed revision to Policy 5.2.1.3 recognizes that public water systems are not available in all Community Regions. Policy 5.2.3.5, which is not proposed for revision, limits the allowable density of projects that are reliant on groundwater. Because groundwater is not a reliable source of water in areas that are not served by a public water system, and because Policy 5.2.3.5 limits allowable density, the revision would have minimal to no effect on development potential.

Policy 5.3.1.1 is concerned with wastewater collection and disposals systems. The proposed revision would not have an effect on water demand. Onsite wastewater disposal systems are subject to the requirements of the Building Code. The land area required of septic systems (and the required space for full replacement area) under that code limits the effect of the proposed revision such that it would not result in a practical change to development density or intensity.

[4] The high end of this average was a project on a site of just under one acre in area that had a density of 19.56 dwelling units per acre; the low end of the average was 6 dwelling units per acre.

New land uses under the ZOU

There are a number of land uses that are included in the ZOU that are not found in the current Zoning Ordinance. As more fully described in Sections 3.1, Aesthetics, 3.2, Agricultural Resources, and 3.6, Land Use, they include uses such as industrial - general, public utility service facilities - intensive, and ski area that can have large water demands. However, because there is no means of knowing how many, if any, of these uses might be built, where they might be built, their actual activities and related water demands, and what, if any, water conservation measures may be employed, the impact of these prospective use categories on water supplies cannot be reasonably ascertained without engaging in pure speculation. For that reason, they will not be analyzed further.

These uses would be allowed only upon prior approval of a discretionary permit. As a result, they will be subject to their own site-specific and project-specific CEQA analyses. Potential water demand and available supply would be considered at that time.

El Dorado Irrigation District

Supply and Demand

With respect to water supply and demand, EID's UWMP and IWRMP describe EID's projections to 2030 and 2035, respectively. The IWRMP, adopted in 2013, contains EID's most current demand projections based on the 2004 General Plan's development potential; reflects EID's accounting of secured and partly secured water supplies; and is being used by EID to identify its future delivery, treatment, and storage system needs. For those reasons, the IWRMP serves as the primary basis for this analysis.

Future demand is based on the 2004 General Plan land use assumptions, using EID's own assumptions for the future rate of growth. The County's most recent study indicates that the growth rate under the General Plan is just over 1%. (BAE Urban Economics 2013) EID uses slightly higher growth rates than does the County for its El Dorado Hills, Western, and Eastern Regions, for three time periods, with those rates increasing in the future. EID has projected supply and demand to the year 2035, based on securing the Fazio water and the El Dorado–SMUD Cooperation Agreement supply (El Dorado Irrigation District 2013b).

EID estimates that the average total available water supply during a year of normal rainfall, based on existing and planned sources, will be about 110,000 AFY in 2035 (this district-wide total includes the Eastern Region that is largely unaffected by the TGPA). In a single dry year (or the first year of multiple dry years), that amount would be expected to drop to about 77,885 AFY. By the third year of multiple dry years, the available supply would further drop to about 72,465 AFY on average (El Dorado Irrigation District 2013c).

EID estimates that, based on whether development follows EID's high- or low-growth scenario, the average total demand will range from 77,315 to 61,262 AFY in 2035 (El Dorado Irrigation District 2013b). EID's high-growth scenario is based on the assumption that the annual growth rate in EID's Western Region will be 1.65% annually from 2016 to 2020 and 3.29% beyond 2020; in EID's El Dorado Hills Region, the annual growth rate is assumed to be 2.38% from 2016 to 2020 and 4.75% beyond 2020. The IWRMP explains that the low-growth scenario "considers the recent economic downturn and the impact on development in the district's service area. This lower growth scenario starts with the 2012 maximum day demand and was developed with the expectation that growth throughout the service area will be slow for 2 to 3 more years while the economy continues to recover. Then growth will ramp up in the El Dorado Hills Region as already planned and approved

developments build out. Following that, the growth rate in the El Dorado Hills Region will decrease as the remaining land may be more difficult to develop (e.g., further away from the urban area and existing infrastructure). Growth in the Western Region is expected to increase in the coming years as new developments are planned, approved and constructed south of the U.S. Highway 50 corridor initially and then throughout the Western Region. Growth in the Eastern Region is expected to remain low throughout the planning period.

EID's high-growth scenario uses annual growth rates that are substantially higher than the County's own forecasts. In 2013, the County commissioned BAE Urban Economics to prepare an updated set of housing and employment growth projections, to assist the County in updating the Travel Demand Model. These projections considered the TGPA, evaluating the changes that may influence the projected growth rates over the next 20–25 years, to develop growth projections for the western slope of El Dorado County for the period between 2010 and 2035. The projected residential annual growth rate of 1.03% was based on trends in historical building permit issuance rates extended to 2035. BAE Urban Economics noted that this rate falls between the California Department of Finance's projected rate of 1.28% and the Sacramento Area Council of Government's projected rate of 0.72%. (BAE Urban Economics 2013) This indicates that EID's high-growth scenario may over-estimate the county's actual growth potential.

EID's low-growth scenario is more reflective of demand related to the TGPA than its high-growth scenario, and El Dorado County will use the low-growth scenario for purposes of determining the sufficiency of EID's water supply to accommodate future development. Table 3.10-3~~2~~ has been compiled from the most recent of EID's demand and supply projections (Megerdigian pers. comm.). The demand estimates are from the IWRMP. The supply estimates are from the SB 610 WSAs for the Central El Dorado Hills Specific Plan, Dixon Ranch Development, Lime Rock Valley Specific Plan, and the Village of Marble Valley Specific Plan projects adopted by the EID Board of Directors on August 26, 2013. The demand estimates prepared for the WSAs are specific to these proposed projects and therefore are unsuitable to represent demand under the TGPA.

As shown in Table 3.10-3~~2~~, EID will have sufficient water supplies within its service area to meet projected demand under multi-year dry hydrologic conditions to 2035 (EID's high-growth demand projections are included in Table 3.10-3~~2~~ for information only) (El Dorado Irrigation District 2013b, 2013c). As discussed above, EID has a four-stage drought preparedness plan. The current drought, now in its second year, has substantially reduced the water supplies held in EID's reservoirs and may result in reduced levels of snow run-off entering the reservoirs in 2014. On February 4, 2014, the EID Board of Directors declared a Stage 2 Water Supply Warning, voluntary phase, effective immediately. It continued consideration of whether to impose a 15% drought surcharge on all water commodity charges and whether to impose Stage 2 drought actions on a mandatory basis, to its March 10, 2014 meeting. There is no reason to believe at this time that, with EID undertaking its contingency plan, the drought will change EID's long-term projections for water supply sufficiency (Megerdigian pers. comm.~~2014~~).

EID's increased water supply avoids the impact identified in the 2004 General Plan EIR. The project's impact on water supply within EID is less than significant.

Table 3.10-3~~2~~. El Dorado Irrigation District Projected Water Demand and Supply to 2035

Year	Total Water Demand (AFY)[5]		Water Supply (AFY)			Recycled Water Supply (AFY)	Total Available Supply (AFY)		
	High Growth Scenario[6]	Low Growth Scenario[7]	Normal Year	Single Dry Year	Third Dry Year		Normal Year	Single Dry Year	Third Dry Year
2015	48,863	43,398	74,690	67,285	61,865	2,400	77,090	69,685	64,265
2020	52,092	45,639	74,690	67,285	61,685	2,600	77,290	69,885	64,465
2025	59,465	50,345	104,690	72,285	66,865	3,200	107,890	75,485	70,065
2030	68,375	55,136	104,690	72,285	66,865	4,100	108,790	76,385	70,965
2035	77,315	61,262	104,690	72,285	66,865	5,600	110,290	77,885	72,465

Source: El Dorado Irrigation District 2013b, 2013c.
AFY = acre-feet per year

Impacts of Supply

EID adopted the IWRMP in March 2013 to provide a "roadmap" for the development of future infrastructure and upgrades to existing infrastructure to meet projected future water demands and avoid the supply shortfalls that would occur if no additional facilities were built. The IWRMP also describes EID's comprehensive program of demand management that will be used to reduce projected levels of future demand (El Dorado Irrigation District 2013b).

The key facilities identified in the IWRMP and recommended for implementation are a new diversion (White Rock Diversion) and associated water treatment plant to be located near Placerville to supply the Western Region (including El Dorado Hills) and a new reservoir on Alder Creek at the upstream end of the system.

The White Rock Diversion would divert 17,000 AFY of water for which EID holds rights under State Water Resources Control Board Permit 21112 from the south fork of the American River at the White Rock Penstock. This would require the Water Board's approval of moving the point of diversion from Folsom Lake, where it is currently, to the White Rock Penstock. As discussed earlier, EID is currently pursuing rights to an additional 30,000 AFY from the American River through the Supplemental Water Rights Project. That water would also be diverted at the White Rock Penstock for a total of 47,000 AFY. The raw water would be conveyed through a new pipeline approximately 6.7 miles to a new water treatment plan, then through new transmissions lines to the Western Region. The new water treatment plant would have a maximum capacity of 58 MGD. If Alder Reservoir is constructed, the plant would only be expanded to an ultimate capacity of 44 MGD. The IWRMP suggests that the new water treatment plant with a capacity of 10 MGD would be online by 2025. Any expansion beyond that time would depend on actual growth in demand and adjusted projections in the future (El Dorado Irrigation District 2013b).

[5] 13% of total demand includes system losses through evaporation and leaks. Demand does not include future conservation savings.

[6] Based on assumptions of annual growth much greater than the County's projections.

[7] Based on assumptions of annual growth closer to those used by the County in projecting an annual growth rate of 1.03%.

The Alder Creek Reservoir is conceptually described as a rock-fill dam approximately 143 feet high with a capacity of 31,700 AF and capture of approximately 23,100 AF of water in an average runoff year from the 18.6 square mile Alder Creek drainage basin. A new penstock and powerhouse would be located near the existing El Dorado Canal, allowing water withdrawn from Alder Reservoir to be used for hydroelectric generation and released into the El Dorado Canal downstream of the Alder Creek inverted siphon. The plan would allow full utilization of the Reservoir A WTP's capacity by adding 11,250 AFY of upstream supply from Alder Reservoir. This additional supply would eliminate the current supply limitation and increase the sustained maximum day production from 42 to 56 MGD. Eliminating this constraint would avoid the need to construct an additional 14 MGD of production capacity at another location (El Dorado Irrigation District 2013b).

EID will also increase its available supply of treated water through reduction in demand and increased use of recycled water, as required by state law. EID's IWRMP proposes the following.

> To achieve compliance with the requirements of SBx7-7, the District has committed to a reduction of its daily per capita water use from 281 gallons per capita per day (gpcd) to 225 gpcd by 2020. Measures the District may use to meet the use target include:
>
> - Continued implementation of the Best Management Practices set out under the CUWCC MOU.
> - Continued use of recycled water.
> - Expanded use of recycled water.
> - Capital improvements in the water system to reduce leakage, such as pipe replacement.
> - Conversion of raw water ditches to piped segments (i.e., piping the Main Ditch).
> - Installation of bulk water fill stations.
> - Water meter change-outs and large meter testing.
> - Conversion of un-metered services to metered services.

Of the above approaches to SBX7-7 compliance, capital improvements and replacing raw water ditches with pipes would have the potential to result in environmental impacts. The other measures generally do not require substantial changes in the existing environment.

EID estimates that the improvements identified in the IWRMP would be made in a series of three phases: Phase 1—2012–2020; Phase 2—2021–2030; and Phase 3—2031–buildout. The phases would be undertaken as demand dictates. The total capital costs for all three phases are estimated to be $475 million. In general, these would have minimal environmental impacts. The exceptions are pipe replacement and conversion of raw water ditches to piped segments, which would result in temporary construction impacts (e.g., temporary road closures or constriction, noise, etc.) and impacts on local hydrology (i.e., piping of an unlined ditch that would stop leakage). The potential impacts of these projects are identified generally in Table 3.10-~~4~~43, below. Because these projects have not been identified beyond a conceptual level, the level of impact avoidance or reduction that might be built into the projects is unknown.

The IWRMP proposes major new infrastructure projects, including a water treatment plant, pump stations, miles of new or renovated raw and treated water pipelines, treated water reservoirs (tanks), and a dam with an associated reservoir. None of these projects has been planned or designed by EID at this point in time. EID will prepare CEQA analyses for each of these future projects. The level of detail necessary to undertake a reasonable analysis of these potential projects is not available. However, it is reasonable to suppose that some of them, (e.g., Alder Creek Reservoir)

by nature of their very size and location in rural areas, would probably result in significant unavoidable impacts.

The following Table 3.10-~~43~~ 43 provides general lists of the types of significant impacts that may be expected to result from these future EID projects, based on the impacts that are typical for these types of projects. The table takes a conservative view of potential impacts. Because the projects have not been designed beyond a conceptual level at most, the level of impact avoidance or reduction that might be built into the projects is unknown. Similarly, the mitigation measures that might be identified in future CEQA documents and their effectiveness is unknown. Therefore, the table does not take into account whether these impacts may be reduced below a level of significance through design or mitigation measures.

Georgetown Divide Public Utilities District

The GDPUD's UWMP relies upon the 2004 General Plan build-out assumptions for its projections of future demand. It also incorporates the District's SBx7-7 water conservation commitments under the CUWCC MOU. The UWMP finds that the system has sufficient supplies to meet demand during single and multiple dry years to the year 2025. The 2030 projection indicates that supply would be approximately 5% less than demand during single and multiple dry years. The UWMP notes that 28% of total demand is for domestic water, 72% of the water demand is agricultural water, and in future dry years, the GDPUD Board would address shortages by restricting the agricultural water use to the amount of water available (Georgetown Divide Public Utilities District 2011).

The water supply mitigation measures identified in the 2004 General Plan EIR have been adopted as policies under General Plan Objective 5.2.1 described above. However, future development under the General Plan will continue to have a significant and unavoidable impact in this district.

Grizzly Flats Community Services District

GFSCD is too small to have adopted a UWMP; however, it has estimated future demand and supply in its drought plan. The conclusions of the drought plan are as follows (Grizzly Flats Community Services District 2007:1-8).

> As part of the development of this Drought Plan, the reliability of GFCSD's water system was evaluated. For this analysis, reliability is defined as the volume of water supplied divided by volume demanded during the simulation period (historical or design drought) and expressed as a percentage. The demand volume is reduced from normal levels during dry periods within the simulation period when demand cutbacks of up to 30 percent are made. The analysis is described in detail in Section 2 of [the Drought Plan]. The results are briefly described below.
>
> The analysis results show that GFCSD's system reliability is 93.0 percent in 2004, decreasing to 73.3 percent with 2030 demands; values are based on no drought curtailment and the historical hydrology period of approximately 80 years. The reliability percentage would be less for the specific dry years embedded within the historical record. This analysis is based on the current amount of water supplies.

The analysis included a simulated 3-year drought that mimics the historical 1976-77 drought followed by a third year of 1977 hydrological conditions. The results show that the current system and plan would be 72.2 percent reliable for the three year period with 2004 demands, and 25 percent reliable with 2030 demands.

Table 3.10-4~~3~~. Potential Impacts from Future El Dorado County Irrigation District Water Supply Infrastructure Projects

Type of Project	Aesthetics	Agriculture/Forestry	Air Quality/GHG	Biological Resources	Cultural Resources	Geology	Hazards & Hazardous Materials	Hydrology & Water Quality	Land Use	Mineral Resources	Noise	Pop/Housing	Public Services	Utilities	Recreation	Transportation & Traffic
White Rock Diversion				O				C				O				
Water Treatment Plant	C, O		C, O	C	C				O		C	O				C
New Pipelines & Reservoirs	O		C	C	C	C					C	O				C
Supplemental Water Rights Project				O								O				
Alder Creek Dam & Reservoir	C, O	C	C, O	C	C	C	C	C	C		C	O				C
Pump Stations	O		C	C	C						C, O	O				C
Pipe Replacement			C		C						C					C
Water Ditch Piping			C	C, O	C			O			C					C

O = operational impact; C = construction impact; GHG = greenhouse gas emissions

The projected shortage in water supply in 2030 would be approximately 45 AF in dry years 2 and 3 (Grizzly Flats Community Services District 2010).

The drought plan is based on a pre-renovation effective reservoir capacity of 22.8 AF (Grizzly Flats Community Services District 2007). This is approximately 63% of the current storage capacity of the district's reservoir. The increase in reservoir capacity somewhat lessens the effect of future dry years on the system; however, the limited size of the watershed feeding the system, the system's sensitivity to low flows, and lack of alternative sources of water leads to a conclusion that the GFCSD would be expected to nonetheless suffer severe shortages during dry conditions when accounting for projected 2030 supply and demand.

The water supply mitigation measures identified in the 2004 General Plan EIR have been adopted as policies under General Plan Objective 5.2.1 described above. The project would not substantially add to the projected growth that would occur in this area under the General Plan. However, future development under the General Plan will continue to have a significant and unavoidable impact in this district.

El Dorado County Water Agency

EDCWA's *Water Resources Development and Management Plan, 2014 West Slope Update* (2014 Update) examines the long-term availability of surface water to supply the forecasted future needs of customers in EID, GDPUD, and GFCSD. The 2014 Update includes projections of future water demand for West Slope water purveyors, for the year 2030 and general plan build-out conditions. EDCWA applied its own assumptions in preparing its forecast or low, medium, and high growth rate scenarios and did not use the assumptions utilized by any of the West Slope water purveyors. A nominal 2030 timeframe was used to be consistent with other contemporaneous studies and reports, such as urban water management plans. The 2014 Update assumes that the EID and GDPUD will successfully meet the 20% per capita domestic use reduction mandated by SBx7-7. However, the 2014 Update's forecast goes substantially beyond 2030 to offer an estimate of demand and supply under what it considers to be "build-out conditions, in which the maximum density of land uses permitted under the 2004 General Plan have been achieved."

The TGPA/ZOU EIR concludes that EID will have sufficient water to meet estimated water demands in 2035, based on EID's UWMP and IWRMP. On the surface, that would appear to conflict with the findings of the 2014 Update. As explained below, even though these supply analyses have been prepared for different purposes, they actually reach similar conclusions regarding the availability of adequate supply to 2035.

The 2014 Update is an EDCWA planning document that evaluates "the adequacy of existing and planned future public water supplies of the County, including its West Slope region, to meet projected future demand, based on the land use densities (also known as 'build out' conditions) in the 2004 General Plan" (2014 Update, p. x). The 2014 Update notes that:

> Unlike the long range planning nature of EDCWA's work, EID's water plans are used for a shorter-term 20- to 25-year planning horizon for capital and infrastructure development. These plans are updated regularly and capture changing land use conditions in a timely manner for those purposes. EDCWA's planning for the water supply needed for the County must look beyond the 20- to 25-year planning horizon to the total build-out capacity of the 2004 General Plan that will develop over many decades." (2014 Update, p. 42.)

EDCWA's objective with this planning is to identify, initiate and support water supply planning activities needed by water purveyors such as EID for demands that far exceed those assessed in the shorter-term by EID. EDCWA's role is to plan for water supply acquisitions over the long term; it is not a water purveyor responsible for ensuring there is sufficient supply to meet shorter-term demand.

On the other hand, EID's UWMP and IWRMP, based upon EID's data and projections, determine that there is adequate water available for the proposed Project, along with existing and other planned future uses, over the general plan's 20-year planning horizon.

As a result, many assumptions and characterizations can and do differ between the 2014 Update and EID's plans—with both agencies appropriately developing conclusions based upon those differing conditions and their differing responsibilities.

A key difference that manifests in the 2014 Update conclusions is the representation of "planned supplies." In the IWRMP, the Central Valley Project Fazio water entitlement (PL 101-514 [1990] Fazio) is reflected as one of the water assets EID views as part of their water rights and entitlement portfolio. Also included is the partial assignment detailed in the El Dorado-SMUD Cooperative Agreement. A full description of these water supplies is included in the IWRMP. In contrast, the 2014 Update does not include either supply as part of EID's available supply portfolio. The result is a stated shortfall in the 2014 Update for the EID service area. Though the 2014 Update does discuss these as water supplies EID recognizes and supplies that could be used to offset the stated shortfall (see 2014 Update, p. 109), they are not included in the calculations and resulting tables.

The analysis of EID's supply in the TGPA/ZOU EIR appropriately considers these supplies as part of the total projected water supplies available to EID. In the context of Water Code Section 10910, which describes the analysis that is to be undertaken in a formal water supply assessment, projected water supplies identified in a UWMP are to be considered by the lead agency. Although the TGPA/ZOU project is not subject to Section 10910, that section provides useful guidance in how to analyze the availability of water supplies for a general plan update.

In addition to different future horizons (2035 versus build-out) and different assumptions of available water supply, there is another key assumption that explains the differences in these two documents. The 2014 Update forecasts a substantial net increase (approximately 29,800 acre-feet) in agricultural water use between the baseline year of 2000 and the buildout year beyond 2035. This is based on the assumptions that substantial additional agricultural land will be planted in irrigated crops and that the buildout crop mix will be 50% wine grapes (which use 1.3 acre-feet/acre) and 50% tree crops (which use 2.8 acre-feet/acre). However, this assumption is not substantiated by past experience and likely overestimates the increase in agricultural water demand.

First, the overall amount of land devoted to agriculture in El Dorado County has steadily decreased over the years. The Department of Conservation's Farmland Mapping and Monitoring Program records show that El Dorado County's important farmland[8] decreased by 13,831 acres between 1984 and 2012, and by 4,174 acres between 2000 and 2012. Grazing land decreased by 6,870 acres between 1984 and 2012, and by 10,004 acres between 2000 and 2012 (grazing land actually increased slightly between 1998 and 2000, corresponding to the anomalous 1984-2012 and 2000-2012 numbers). (California Department of Conservation 2013)

[8] "Important farmland" consists of land classified as prime farmland, farmland of statewide importance, unique farmland, and farmland of local importance.

Second, most new irrigated cropland is being devoted to wine grapes, not trees. Table 3.10-5 illustrates the historic changes in crop type dating from 1995. During the period from 1995 to 2013, an additional 1,526 acres went into wine grapes, while the net acreage devoted to tree crops decreased by 532 acres.

This is not to suggest that there will not be growth in agricultural water demand. The steady increase in agricultural production that is discussed in Section 3.2, *Agricultural Resources*, indicates that more land will be brought into irrigated crop production in the future, thereby increasing water demand over the baseline.

Table 3-10.5. Changes in Irrigated Crop Type 2000–2013

Crop	1995 Acreage	2000 Acreage	2013 Acreage	Change from 1995 to 2013 (in acres)
Pears	520	451	105	-415
Apples	810	838	850	+40
Cherries	117	116	50	-67
Peaches	70	110	108	+38
Plums	60	58	55	-5
Walnuts	220	216	111	-109
Wine Grapes	817	1,565	2,343	+1,526
Nursery	50	47	36	-14

Sources: El Dorado County 1996, El Dorado County 2001, El Dorado County 2014

Based on its UWMP and IWRMP, the TGPA/ZOU EIR concludes that EID will have sufficient supplies to meet Project needs to 2035. However, based on the longer term view provided by the 2014 Update, future development on the West Slope under the General Plan will have a significant and unavoidable impact on water supplies in EID after 2035. As discussed above in their respective subsections, GDPUD and GFCSD will similarly be subject to significant and unavoidable impacts due to insufficient supply to meet customer demand.

Impact WS-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted) (significant and unavoidable)

Groundwater

The preceding discussions focus on impacts on surface water. The 2004 General Plan EIR discusses impacts on groundwater in Chapter 5.5 under Alternative 4. The TGPA would not substantially change the density or intensity of planned development in areas without surface water service. In addition, where density may increase, these areas are generally within public water district service areas, which rely on surface water supplies. Therefore, the analysis in the 2004 General Plan EIR would apply to the TGPA as well.

In summary, that analysis found that as development occurs under the General Plan, demand on groundwater resources is expected to increase in areas of the county where surface water service is not available and not planned. The General Plan incorporates as policies Mitigation Measure 5.5-3 from the 2004 General Plan EIR. These policies are described under Objective 5.2.3 in the Regulatory Setting above. These policies restrict the county from approving discretionary and ministerial land use projects in areas reliant upon groundwater for domestic use unless it has evidence that there is a groundwater supply adequate to meet the highest demand of the proposed development. Despite this measure, the 2004 General Plan EIR concluded that development under the General Plan would result in a significant and unavoidable effect. The discussion of groundwater supplies in Chapter 5.5 is hereby incorporated by reference.

The conditional uses in the ZOU may have implications on groundwater supplies. The ZOU update involves rezoning for different types of uses, such as new commercial services in rural areas (e.g., microbrewery; Bed & Breakfast; health resort and retreat center; ski resort including a day lodge, one or more restaurants, maintenance facilities, a retail shop, and parking lot), public utility service facilities (e.g., power, water, sewage disposal, telecommunications, and similar services), agricultural uses (e.g., ranch marketing, local food and farm supply stores), and industrial uses. Although actual water demand will depend on the size and intensity of the use, as well as the number of such uses that may be approved under the ZOU, any of these new activities may have substantial water needs. Depending on the characteristics of the specific use, this may be more than typical rural residential development. El Dorado County estimates that a family of four in a rural residential setting would use about 180 gallons of water per day for interior use, with substantially greater demand for outdoor use depending upon the size of landscaped area (a 10,000 square foot lawn would consume approximately 6,000 gallons per day) and number and type of domestic animals (El Dorado County 2010) A microbrewery, for example, can use from 2.5 to 10 gallons of water to produce a gallon of beer (Full Sail Brewing Company 2014). It would consume additional water if it were coupled with a restaurant. A bed & breakfast or health resort and retreat center would have a rate of water use similar to that of a rural residence, but multiplied by the number of additional visitor rooms and bathrooms. A new ski resort, although likely to be a rare occurrence, could use extraordinary amounts of water for snowmaking and other resort activities. The DEIR prepared in 2011 for the Homewood Ski Resort expansion in Placer County concluded that this relatively small ski area would consume approximate 250 acre-feet of water per year (an acre-foot is 325.900 gallons) (Placer County 2011)

If these activities occur in areas outside of public water district service areas, local groundwater supplies will be needed. These projects will be subject to CEQA analysis as part of the discretionary permit review that would precede any approval. The availability of water supply to meet the demand of the proposed project would be part of that analysis. In the case of large projects that would have a water demand equivalent to 500 or more residential units, a WSA would be required as part of the CEQA review to analyze potential increased demand and the associated supply capacity would have to be available prior to project approval. When required, the WSA would inform decision-makers and the public of the availability of water (or lack thereof) to supply the proposed use. However, neither a CEQA analysis nor a WSA is required to ensure that water would be available to meet project demands (*Habitat and Watershed Caretakers v. City of Santa Cruz* (2013) 213 Cal.App.4th 1277; *Watsonville Pilots Assoc. v. City of Watsonville* (2010) 183 Cal.App.4th 1059). Therefore, it is uncertain if groundwater supplies could be relied upon to meet the demands of proposed projects in all cases.

As previously described, because of the variable nature of the fractured rock groundwater systems, the County does not have a method in accurately estimating the thresholds at which groundwater withdrawals may exceed the ability for sufficient recharge to support existing land uses or planned uses proposed under the provisions of the ZOU. The water levels in water wells within the county are not routinely tested, are not reported to the County, and there is no comprehensive database on groundwater levels. Although El Dorado County Policy 800-02 regulates the installation of wells and limits well permits when sufficient water flow is not available, this does not take into account cumulative demands on a given aquifer. Therefore, no baseline estimates of groundwater supplies in normal and dry years for each of the many aquifers in the county are available.

Developing a baseline estimate of groundwater supplies would require a comprehensive and multi-year effort of collecting private well information and modeling both recharge characteristics and future demand that is beyond the scope of this General Plan. Even with this information, groundwater supplies are expected to vary from place to place, depending upon the underlying geology, size and accessibility of the aquifer, and its source of recharge. Impacts tend to be localized and accurately predicting how groundwater withdrawals within a particular area may affect surrounding areas is difficult if not impossible. Therefore, this impact would be significant and unavoidable due to the increased demands for groundwater supplies associated with the ZOU update, the lack of information regarding groundwater capacity and supply, and the general information indicating that groundwater supplies are not reliable.

There are no feasible mitigation measures that would reduce this impact to a less-than-significant level. The following two potential measures are not feasible for the reasons described below.

Water District Service Area Annexations: The El Dorado County Water Agency has postulated that increased demands for water supplies may increase the need for expanded services from public water purveyors supplies through annexations of lands into public water supplier service areas, extensions of service to areas where well production is declining or where wells have failed and through transport of water by truck to existing residents that cannot economically connect to a public water supply system (El Dorado County Water Agency 2014). However, the GDPUD and GFCSD do not have surplus supplies that could be provided to expanded service areas. As a result, they are not candidates for expanded service areas. EID has additional supplies to serve their existing service area to 2035, as discussed above, but not long-term supplies.

The El Dorado County Local Agency Formation Commission (LAFCO) is responsible for reviewing all proposed annexations to EID and has the exclusive authority under the Cortese-Knox-Herzberg Local Government Reorganization Act of 2000 (Government Code 56000, et seq.) to approve annexations. It is bound by the Act and by its own policies to consider numerous factors in determining whether to approve an annexation (see Government Code Section 56668). These include: ability to serve, level and range of service, time frames, and conditions to receive service; timely availability of adequate water supply; significant negative service impacts; service area boundaries that are logical, contiguous, and not difficult to serve; and effect of the proposal on cost and adequacy of service in area and adjacent areas; among other factors (El Dorado County LAFCO 2014). The LAFCO has considered limited annexations to EID's service area over the years. However, LAFCO is unlikely to approve extensive annexations, such as would be needed to supply rural development, that would exceed EID's forecasted capacity to serve customers within their existing service area and that would result in difficult to serve and/or discontiguous service area boundaries.

Inter-Regional Groundwater Storage Opportunities: The County has chosen not to identify groundwater recharge areas in its general plan, because without a discrete groundwater basin that would benefit from recharge basins and broad floodplains to serve as basins for storm flows, such areas are not effective in providing recharge and storage of stormwater in El Dorado County. However several Integrated Regional Water Management (IRWM) regions in the Sacramento River Valley have significant groundwater storage opportunities. The County could seek inter-regional solutions that reach outside of the existing IRWM planning boundaries to enhance supply reliability in El Dorado County. EDCWA is currently working on a ground water banking concept north of the Lower American River in conjunction with the El Dorado Water and Power Authority's Water Reliability Project that is currently under technical, institutional and environmental review (El Dorado County Water Agency 2014). However, while this option is being explored as a means to augment the surface water supplies of the county's water district's, it would not solve the problem of increased demand on groundwater supplies of uncertain reliability that could result from new, higher demand (in comparison to typical rural uses) developments reliant upon the groundwater available from the aquifer below their project site.

Regional groundwater banking may provide additional supplies to EID and other water districts in the future, but whether a regional groundwater banking scheme is feasible (i.e., achievable in a timely manner considering economic and practical limitations), the extent of the supply that it might provide, which water districts might benefit and to what extent their supplies would be augmented, and whether future annexations would allow these supplies to serve new customers are features that are unknown and cannot be known at this time. Therefore, it would be speculative to conclude that a water reliability project would be an achievable and practical mitigation measure.

3.11 Energy Resources

3.11.1 Introduction

This chapter describes the regulatory setting and environmental setting for energy resources and analyzes potential impacts that could result from the TGPA/ZOU project as described in Chapter 2, *Project Description*.

Study Area

The study area for the EIR is defined as El Dorado County. However, the context for energy use is the State of California and, to a larger extent, the United States of America.

3.11.2 Environmental Setting

This section describes the federal, state, regional, and local regulations and policies that are applicable to the plan updates, and the existing conditions pertaining to energy resources in the study area. The existing conditions constitute the baseline for this analysis.

Regulatory Setting

This section describes the federal, state, and local regulations related to energy resources that would apply to the TGPA/ZOU.

Federal

Energy Policy Act of 2005

The Energy Policy Act of 2005 (EP Act) was intended to establish a comprehensive, long-term energy policy and is implemented by the U.S. Department of Energy (U.S. DOE). The EP Act addresses energy production in the U.S., including oil, gas, coal, and alternative forms of energy and energy efficiency and tax incentives. Energy efficiency and tax incentive programs include credits for the construction of new energy efficient homes, production or purchase of energy efficient appliances, and loan guarantees for entities that develop or use innovative technologies that avoid the production of greenhouse gases (GHG).

State

California Environmental Quality Act, Appendix F Energy Conservation

CEQA requires EIRs to include a discussion of potential energy impacts and energy conservation measures. Appendix F, *Energy Conservation*, of the State CEQA Guidelines outlines energy impact possibilities and potential conservation measures designed to assist in the evaluation of potential energy impacts of proposed projects. Appendix F places "particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy," and further indicates this may result in an unavoidable adverse effect on energy conservation. Moreover, the State CEQA Guidelines state that significant energy impacts should be "considered in an EIR to the extent

relevant and applicable to the project." Mitigation for potential significant energy impacts could include implementing a variety of strategies, including measures to reduce wasteful energy consumption and altering project siting to reduce energy consumption.

California Building Standards Code (Title 24, California Code of Regulations), including Energy Code (Title 24, Part 6) and Green Building Standards Code (Title 24, Part 11)

California first adopted the California Buildings Standards Code in 1979, which constituted the nation's first comprehensive energy conservation requirements for construction. Since this time, the standards have been continually revised and strengthened. In particular, the California Building Standards Commission adopted the mandatory Green Building Standards Code (CALGreen [California Code of Regulations, Title 24, Part 11]) in January 2010. CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure.

The California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code) and associated regulations in CALGreen were revised again in 2013 by the California Energy Commission (CEC). The 2013 Building Energy Efficiency Standards are 25% more efficient than previous standards for residential construction. Part 11 also establishes voluntary standards that became mandatory in the 2010 edition of the code, including planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. The next update to the Title 24 energy efficiency standards will occur in 2016 and take effect in 2017.

Senate Bills 1078/107 and Senate Bill 2—Renewables Portfolio Standard

Senate Bill (SB) 1078 and SB 107, California's Renewables Portfolio Standard (RPS), obligates investor-owned utilities (IOUs), energy service providers (ESPs), and Community Choice Aggregations (CCAs) to procure an additional 1% of retail sales per year from eligible renewable sources until 20% is reached, no later than 2010. The California Public Utilities Commission (CPUC) and CEC are jointly responsible for implementing the program. SB 2 (2011) set forth a longer range target of procuring 33% of retail sales by 2020. Implementation of the RPS will conserve non-renewable fossil fuel resources by generated a greater percentages of statewide electricity from renewable resources, such as wind, solar, and hydropower.

Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006)

Water conservation reduces energy use by reducing the energy cost of moving water from its source to its user. Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006) requires the Department of Water Resources (DWR) to adopt an Updated Model Water Efficient Landscape Ordinance (MWELO) and local agencies to adopt DWR's MWELO or a local water efficient landscape ordinance by January 1, 2010 and notify DWR of their adoption (Government Code Section 65595). The water efficient landscape ordinance would apply to sites that are supplied by public water as well as those supplied by private well. Local adoption and implementation of a water efficient landscape ordinance would reduce per capita water use from new development.

Senate Bill x7-7 (Chapter 4, Statutes of 2009)

SB X7-7 (Chapter 4, Statutes of 2009), the Water Conservation Act of 2009, establishes an overall goal of reducing statewide per capita urban water use by 20% by December 31, 2020 (with an interim goal of at least 10% by December 31, 2015). This statute applies to both El Dorado Irrigation District (EID) and the Georgetown Divide Public Utilities District (GDPUD). EID has incorporated this mandate into its water supply planning, as represented in its *Urban Water Management Plan 2010 Update* (El Dorado Irrigation District 2011). Reducing water use results in a reduction in energy demand that would otherwise be used to transport and treat water before delivery to the consumer.

Assembly Bill 2076, Reducing Dependence on Petroleum

The CEC and Air Resources Board (ARB) are directed by AB 2076 (passed in 2000) to develop and adopt recommendations for reducing dependence on petroleum. A performance-based goal is to reduce petroleum demand to 15% less than 2003 demand by 2020.

Senate Bill 375—Sustainable Communities Strategy

SB 375 was adopted with a goal of reducing fuel consumption and GHG emissions from cars and light trucks. Each metropolitan planning organization (MPO) across California is required to develop a sustainable communities strategy (SCS) as part of their regional transportation plan (RTP) to meet the region's GHG emissions reduction target, as set by the California Air Resources Board. The Sacramento Area Council of Governments (SACOG) is the MPO for the Sacramento region, including the western slope of El Dorado County. SACOG adopted its SB 375-compliant Metropolitan Transportation Plan/Sustainable Communities Strategy 2035 in April 2012.

Assembly Bill 1493—Pavley Rules (2002, Amendments 2009, 2012 rule-making)

AB 1493 required the ARB to adopt vehicle standards that will improve the efficiency of light duty autos and lower GHG emissions to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards (referred to previously as "Pavley II," now referred to as the "Advanced Clean Cars" measure) has been proposed for vehicle model years 2017–2025. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon by 2025. The improved energy efficiency of light duty autos will reduce statewide fuel consumption in the transportation sector.

Local

El Dorado County General Plan

Public Services and Utilities Element

The Public Services and Utilities element of the *El Dorado County General Plan* contains goals, objectives, and policies related to services critical to the County's future growth and development (El Dorado County 2004). The following goal and policies are identified with respect to energy conservation, although the County has other goals and policies that would conserve energy while not being specifically drafted for energy conservation purposes (e.g., Objective 6.7.2, Policy 6.7.2.3).

OBJECTIVE 5.6.2: ENCOURAGE ENERGY-EFFICIENT DEVELOPMENT

Encourage development of energy-efficient buildings, subdivisions, development, and landscape designs.

- Policy 5.6.2.1 Require energy conserving landscaping plans for all projects requiring design review or other discretionary approval.
- Policy 5.6.2.2 All new subdivisions should include design components that take advantage of passive or natural summer cooling and/or winter solar access, or both, when possible.

Existing Conditions

California has a diverse portfolio of energy resources. Excluding offshore areas, the state ranked third in the nation in crude oil production in 2013, producing more than 16,950 barrels (equivalent to 1,143.8 trillion British thermal units [BTU]). The state also ranked fourth in the nation in conventional hydroelectric generation and first in the nation for net electricity generation from renewable resources. Other energy sources in the state include natural gas, nuclear, and biofuels (U.S. Energy Information Administration 2014).

Energy efficiency efforts have dramatically reduced statewide per capita energy consumption relative to historical averages. According to the U.S. Energy Information Administration (2014), California consumed approximately 7,612 trillion BTUs of energy in 2012. Per capita energy consumption (i.e., total energy consumption divided by the population) in California is among the lowest in the country, with 201 million BTU in 2012, which ranked 49th among all states in the country. Natural gas accounted for the majority of energy consumption (32%), followed by motor gasoline (22%), distillate and jet fuel (14%), interstate electricity (11%), nuclear and hydroelectric power (6%), and a variety of other sources (U.S. Energy Information Administration 2014). The transportation sector consumed the highest quantity of energy (38.5%), followed by the industrial and commercial sectors.

Per capita energy consumption, in general, is declining due to improvements in energy efficiency and design. However, despite this reduction in per capita energy use, the state's total overall energy consumption (i.e., non-per capita energy consumption) is expected to increase over the next several decades due to growth in population, jobs, and demand for vehicle travel. Electricity usage is anticipated to grow about 26% over the next two decades, and diesel fuel consumption may increase by 35% to 42% over the same time period. Gasoline usage, however, is expected to decrease by 8.5% to 11.3%. This decrease would largely be a result of high fuel prices, efficiency gains, and competing fuel technologies (U.S. Energy Information Administration 2013).

El Dorado County is served by two utilities: Pacific Gas & Electric (PG&E) and Liberty Utilities. Regionally, PG&E has a diverse power production portfolio, which is comprised of a variety of renewable (such as wind, solar, and hydroelectric) and non-renewable (such as natural gas) sources. Energy production typically varies by season and by year depending on hydrologic conditions. Regional electricity loads also tend to be higher in the summer because the higher summer temperatures drive increased demand for air-conditioning. In contrast, natural gas loads are higher in the winter because the colder temperatures drive increased demand for natural gas heating.

At the local level, El Dorado County consumes a small amount of energy relative to the state. Electricity and natural gas usage is approximately 0.4% and 0.2% of the statewide total, respectively (California Energy Commission 2014). Gasoline is about 0.5% of statewide usage, whereas diesel fuel usage is about 0.3% of the statewide total (California Department of Transportation 2009). For reference, El Dorado County is home to about 0.5% of California residents. Please refer to Chapter 3.6, *Land Use and Planning*, for additional information on El Dorado County.

3.11.3 Impact Analysis

This section discusses the approach and methodology used to assess the impacts of the TGPA/ZOU; discusses the individual impacts relative to the thresholds of significance; discusses mitigation measures to minimize, avoid, rectify, reduce, eliminate, or compensate for significant impacts; and indicates the overall significance of the impact with mitigation incorporated.

Impact Mechanisms

The impact mechanisms for energy resources are generally the same as for air quality and GHGs (see Chapter 3.3). These include the TGPA policies related to increased density in mixed use developments, specific uses that may be authorized under the ZOU by discretionary permit, and adoption of the Landscaping and Irrigation Standards, Outdoor Lighting Standards, and Parking and Loading Standards.

The Camino/Pollock Pines Community Region boundary split does not change any land uses, other than to reduce overall development potential, which would affect energy resources. Similarly, the TGPA changes to the Agricultural District boundaries and adoption of the Mobile Home Park and Research and Development Design Standards will not result in land use changes that would have the potential to affect energy resources. The rezoning of individual parcels to make the classifications on each property consistent with the property's General Plan designation generally adopts the least intensive of those zones. Accordingly, the rezoning would not change the development potential or effects on energy resources associated with implementation of the General Plan and Zoning Ordinance.

Methods of Analysis

Impacts on energy resources are examined at a general and programmatic level. The analysis considers all potential energy uses associated with the project, including fossil fuel consumption during future construction, new building electricity and natural gas usage, and gasoline and diesel consumption from changes in vehicle traffic. The assessment focuses only on those impact mechanisms (see above) with the potential to result in wasteful, inefficient, and unnecessary energy consumption.

Thresholds of Significance

Appendix F to the State CEQA Guidelines identifies the following potential environmental impacts related to energy that may be included in an EIR.

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
3. The effects of the project on peak- and base-period demands for electricity and other forms of energy.
4. The degree to which the project complies with existing energy standards.
5. The effects of the project on energy resources.

6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

The State CEQA Guidelines recommend that the discussion of applicable energy impacts focus on whether the project would result in the wasteful, inefficient, or unnecessary consumption of energy, as this may constitute an unavoidable adverse effect on energy resources. Efficiency projects that incorporate conservation measures to avoid wasteful energy usage facilitate long-term energy planning and avoid the need for unplanned or additional energy capacity. Accordingly, based on the criteria outlined in the CEQA Guidelines Appendix F, the proposed project would cause significant impacts related to energy if it would result lead to a wasteful, inefficient, and unnecessary usage of direct or indirect energy.

As discussed in Section 3.11.1, under *Regulatory Setting*, energy legislation, policies, and standards adopted by California and local governments were enacted and promulgated for the purpose of reducing energy consumption and improving efficiency (i.e., reducing wasteful and inefficient use of energy). Therefore, for the purposes of this analysis, *wasteful* and *inefficient* are defined as circumstances in which the project would conflict with applicable state or local energy legislation, policies, and standards. Accordingly, if the project conflicts with legislation, policies, or standards designed to avoid wasteful and inefficient energy usage, it would result in a significant impact related to energy resources and conservation.

Impacts and Mitigation Measures

Impact NRG-1: Result in the wasteful, inefficient, and unnecessary consumption of energy.

Construction

Future construction of development projects consistent with the TGPA/ZOU would consume gasoline and diesel fuel through operation of heavy-duty construction equipment and vehicles. Materials manufacturing would also consume energy, although information on the intensity and quantity of fuel used during manufacturing is currently unknown and beyond the scope of program-level environmental analyses. An analysis of energy associated with materials manufacturing is considered speculative and is not presented in this EIR. This analysis focuses on energy typically associated with physical construction of development projects (i.e., fuel consumed by heavy-duty equipment and vehicles).

As indicated in Chapter 2, *Project Description*, and described above, the project would not fundamentally change the projected level of development expected to occur under the current General Plan. New development that requires physical construction (e.g., grading, building erection) would likely utilize heavy-duty construction equipment and vehicles, which would consume diesel and gasoline fuel. While construction would consume energy, these activities would be subject to the measures described in Mitigation Measure AQ-1, *Implement measures to reduce construction-related exhaust emissions*. This measure will restrict equipment idling times and prevent the unnecessary fuel consumption. The measure would also ensure equipment is maintained and property tuned in accordance with manufacturer's specifications, which will improve engine efficiency and conserve fuel.

Energy Use by Future Development

Future development as envisioned in the General Plan, TGPA, and ZOU would result in the consumption of electricity and natural gas for power, water conveyance, heating, and cooking. All future development will conform to building code and other state energy conservation measures described in the Regulatory Setting. In general, future new development will be more energy efficient than existing development. Therefore, it will not result in the inefficient or wasteful consumption of energy. As noted above, the TGPA/ZOU does not propose adding substantially more development than allowed under the current General Plan. Accordingly, implementation of the project is not anticipated to substantially increase building electricity, water, or natural gas consumption over currently projected levels.

Two components of the project will result in energy savings that would not occur under existing County regulations. The proposed Landscaping and Irrigation Standards would reduce electricity required to transport water by adopting a water efficient landscape ordinance, which would conserve outdoor water usage. These Standards are based on DWR's MWELO. Within EID's service area, the savings will be compounded by overall reductions in water use mandated by SB X7-7. The Outdoor Lighting Standards may also reduce outdoor electricity consumption in new development by establishing limits on the intensity and duration of exterior lighting.

Several TGPA policies would increase the density of mixed use developments, which will affect transportation patterns and associated vehicle fuel consumption. For example, Policy 2.1.1.3 would increase the maximum density for the residential portion of mixed-use projects in Community Regions from 16 dwelling units per acre to 20 dwelling units per acre. Higher density mixed-use developments typically have fewer per capita vehicle trips, compared to development configured with typical densities (Victoria Transport Policy Institute 2014). Accordingly, increasing the density of development may marginally reduce vehicle usage and associated fuel consumption. Similarly, the Parking and Loading Standards would support additional mass transit facilities, and encourage carpooling and bicycling by providing space for carpool and bicycle parking. These policies and standards will marginally reduce single-occupancy vehicle usage, resulting in corresponding reductions in onroad gasoline and diesel fuel consumption.

Chapter 3.3, *Air Quality and Greenhouse Gases*, estimates long-term impacts from changes in vehicle activity based on traffic data provided by the project traffic engineers, Kimley-Horn and Associates. The analysis indicates that that implementation of the project would decrease carbon dioxide (CO_2) emissions under existing (2010) and full build-out (2035) conditions. Since transportation-related CO_2 emissions directly correlate with the volume of diesel and gasoline combusted,[1] reducing onroad CO_2 emissions by a certain percentage would roughly reduce fuel consumption by similar proportions. While a slight increase in CO_2 emissions, and therefore onroad fuel consumption, is expected under interim (2015) conditions, the increase would be offset by long-term reductions achieved by full build-out.

The above analysis demonstrates that the combined effect of the project would improve energy efficiency in the study area. Amendments to the zoning code to address air quality impacts will ensure construction equipment operates at maximum efficiency and avoid unnecessary fuel consumption during idle. The proposed Landscaping and Irrigation Standards and Outdoor Lighting Standards that will apply to new development will reduce water and electricity consumption,

[1] GHG emissions are directly related to vehicle fuel consumption, where 19.4 pounds of CO_2 are emitted per gallon of combusted gasoline and 22.2 pounds of CO_2 are emitted per gallon of combusted diesel (Climate Registry 2014).

respectively, compared to existing zoning regulations. These provisions are consistent with statewide legislation, including Title 24, AB 1881, and SB X7-7.

With respect to onroad vehicles, the policy amendments would marginally reduce fuel consumption compared to the existing land use designations, which would configure future development with typical densities. This is consistent with the federal EP Act and state AB 2076, both of which strive to reduce dependency on petroleum demand. The increase in mixed-use density and associated marginal vehicle trip reductions would also be consistent with as SACOG's MTP/SCS and may assist SACOG in meeting their GHG reduction goals established by the California Air Resources Board.

Because the project is consistent with state and local energy policies, the project would not result in a wasteful, inefficient, and unnecessary usage of energy. This impact would be less than significant. No mitigation is required.

Significance without Mitigation: Less than significant

3.12 Community Design Standards and ZOU Additions

3.12.1 Introduction

The Project consists of targeted General Plan Amendments (TGPA) and a comprehensive update of the El Dorado County Zoning Ordinance (ZOU). The County is separately drafting a Design and Improvement Standards Manual (DISM)/Land Development Manual (LDM), or successor document that will set out development standards to augment those found in the Zoning and Subdivision Ordinances.

Since circulation of the DEIR in March 2014, the County has decided to consider adopting specific standards on the following subjects in conjunction with the separate Zoning Ordinance Update. These standards would be adopted by resolution at the same time as adoption of the new Zoning Ordinance and would carry the weight of County regulations, as opposed to "guidelines" or suggestions, and are described below. A full copy of the proposed community design standards is available on the County's website: <http://www.edcgov.us/Government/LongRangePlanning/LandUse/TGPA-ZOU_Main.aspx>, and at the County offices whose address is on the front of the Partial Recirculated Draft EIR.

This chapter presents the potential impacts of the following Community Design Standards and changes to the parking and loading standards of the ZOU. These are described in Chapter 2, *Project Description*, of this Partial Recirculated Draft EIR. These are proposed development standards, not new or revised zoning classifications. By themselves, they do not authorize particular land uses or activities the way that a zoning classification (e.g., Planned Agricultural [PA]), Commercial Professional Office [CPO], or Industrial, Low [IL]) does. Instead, they establish standards for allowable development within the zoning classifications.

- Landscaping and Irrigation Standards– requirements for landscaping and landscape plans, consistent with the State's Model Water Efficient Landscape Ordinance
- Mobile Home Park Design Standards– standards for development of a mobile/manufactured home park, including such things as street width, parking requirements, storage, utilities, signs, drainage, and fences.
- Parking and Loading Standards– requirements for parking spaces, loading areas, and how such areas are laid out.
- Outdoor Lighting Standards– standards for lighting of outdoor spaces
- Research and Development Design Standards– standards for development within the research and development (R&D) zone

Because these proposed standards do not authorize any particular type of land use or activity, this EIR examines them in a more generalized manner than the land uses authorized under the zoning classifications in the ZOU.

3.12.2 Environmental Setting

This section describes the state and local regulations and policies that are applicable to the plan updates, and the existing conditions pertaining to noise in the study area. The environmental setting constitutes the baseline for this analysis. The environmental setting for the additional standards is described in Chapters 3.1 through 3.10 of the TGPA/ZOU EIR.

3.12.3 Impact Analysis

This section discusses the potential impacts of the proposed Community Design Standards and additions to the ZOU. These impacts are those that would be **in addition to** the impacts of the TGPA/ZOU as presented in the DEIR. In each analysis section, the impact conclusion reached in the DEIR is stated in parentheses. The impact analysis of the proposed Community Design Standards and additions to the ZOU then determines whether the proposed changes to the project would result in a new or more severe impact relative to the DEIR's conclusion.

Because the Community Design Standards and additions to the ZOU are development standards that will regulate how development will occur, but do not describe the types, intensity, or density of land uses, their impacts will be limited by their own application to regulate land uses.

Approach and Methodology

This chapter's approach differs from the rest of the TGPA/ZOU EIR. With one exception, the potential environmental impacts of each of the Community Design Standards and additions to the ZOU are examined in this chapter, rather than in individual impact chapters (i.e., aesthetics, water supply, etc.). The exception is the analysis of transportation and traffic impacts. That analysis is found in recirculated Chapter 3.9, *Transportation and Traffic*.

The following discussion identifies the impact mechanisms for the proposed Community Design Standards and additions to the ZOU and whether adoption of the standards could result in an environmental impact. The areas of potential impact are identified, and discussed further in the following section.

Landscaping and Irrigation Standards

The Landscaping and Irrigation Standards will affect the types and amounts of landscaping required, including requiring the use of drought-tolerant species and water efficient landscaping. *Areas of potential impacts: aesthetics, water supply.*

Mobile Home Park Design Standards

The proposed Mobile Home Park Design Standards are identical to the provisions of the existing Zoning Ordinance, and therefore would not represent a substantial change in regulations currently found in the zoning ordinance. The Mobile Home Park Design Standards address the site design for mobile home parks, and not their location. Existing zoning designations allowing mobile or manufactured home park development would not be changed as a result of adoption of the design standards.

Therefore, the Mobile Home Park Design Standards would not result in an environmental impact. No further discussion is required.

Parking and Loading Standards

The proposed Parking and Loading Standards modify the requirements for parking design, and allow some parking requirements to be met with on-street parking. Changes in parking standards could slightly affect the amount of parking provided for new development. Traffic impacts are addressed in revised Chapter 3.9.

No other physical changes would occur as a result of the adoption of the proposed Parking and Loading Standards.

Therefore, the proposed Parking and Loading Standards would not result in an environmental impact. These standards are discussed further in Chapter 3.9, Transportation and Traffic.

Outdoor Lighting Standards

The Outdoor Lighting Standards will regulate outdoor lighting, limiting the amount of light resulting from outdoor lighting. While an increase in outdoor lighting can result in a significant impact, as assessed in Impact AES-4 in the DEIR, the Outdoor Lighting Standards will reduce lighting impacts through regulation and standards for lighting design and shielding. *Areas of potential impacts: aesthetics.*

Research and Development Design Standards

The Research and Development Design Standards would establish the landscaping and screening requirements for parking and loading areas in R&D zones. They are similar to the standards that are found in the current R&D zone and that have been excluded from the R&D zone proposed under the ZOU. The differences between current R&D design standards and the proposed standards could result in changes in aesthetic impacts. *Areas of potential impacts: aesthetics.*

Thresholds of Significance

The thresholds of significance for this analysis are the same as those described in the TGPA/ZOU DEIR.

Impacts and Mitigation Measures

Aesthetics

The following analysis presents the impacts of the proposed Landscaping and Irrigation Standards, Outdoor Lighting Standards, and Research and Development Design Standards.

Impact AES-1: Result in a substantial adverse effect on a scenic vista (overall DEIR finding: significant and unavoidable).

Landscaping and Irrigation Standards

The proposed Landscaping and Irrigation Standards would generally improve the aesthetics of development projects by aiding in reducing the visual scale of projects, providing for visual buffers and screening for buildings and parking lots, improving site aesthetics, and ensuring the health and vigor of planted landscapes. When seen in vista views, landscaping would help to reduce the apparent scale of, soften the visual appearance of, and filter visible nighttime lighting and glare

associated with proposed development projects. The Landscaping and Irrigation Standards also contain measures that provide for evergreen species that help to provide year-round screening. Generally, the Landscaping and Irrigation Standards would improve visual conditions slightly by improving development site aesthetics. Therefore, adoption of the proposed landscaping and irrigation design standards would reduce identified impacts on scenic vistas.

Parking and Loading Standards

As described in Chapter 2, *Project Description*, the proposed Parking and Loading Standards are very similar to those in the existing zoning ordinance and parking and loading areas must be provided for most land uses under the zoning ordinance. Chapter 2, *Project Description*, notes that the ZOU would contain certain of the Parking and Loading Standards, additional standards proposed to be adopted separately at this time, and to be incorporated in the future into the DISM. The proposed Parking and Loading Standards provide for landscaped buffers between parking areas and the street, which would be seen as a beneficial element of new development. The proposed Parking and Loading Standards would also affect parking space allotments and ratios, but parking lots would still be implemented as a part of development and be seen, regardless, as a parking lot. Loading areas would not substantially differ from the existing zoning ordinance and would, therefore, appear much the same as current development standards. Therefore, the proposed Parking and Loading Standards would not substantially increase or have any additional environmental impacts on scenic vistas beyond those described in the DEIR.

Research and Development Design Standards

The Research and Development Design Standards would change the landscaping and screening requirements for parking and loading areas in R&D zones, which could result in aesthetic impacts. However, the parking and loading space setback and screening requirements would effectively result in as much screening as under the current zoning ordinance, due to no longer allowing chainlink fences for buffers, and due to the proposed landscaping requirements. Additional screening may also act to improve visual conditions by buffering parking and loading areas associated with R&D zones. The proposed design standards for R&D zones provisions go beyond the provisions in the ZOU. Therefore, the proposed Research and Development Design Standards would not substantially increase or have any additional environmental impacts on scenic vistas beyond those described in the DEIR.

Impact AES-2: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a scenic highway (overall DEIR finding: significant and unavoidable)

Impacts to scenic resources along scenic highways resulting from the proposed Landscaping and Irrigation Standards, Parking and Loading Standards, and Research and Development Design Standards would be the same as described under Impact AES-1. Therefore, the Community Design Standards and additions to the ZOU would not substantially increase or have any additional environmental impacts on scenic resources beyond those described in the DEIR.

Impact AES-3: Substantially degrade the existing visual character or quality of the site and its surroundings (overall DEIR finding: significant and unavoidable)

Impacts to the existing visual character resulting from the proposed Landscaping and Irrigation Standards, Parking and Loading Standards, and Research and Development Design Standards would

be the same as described under Impact AES-1. Therefore, the Community Design Standards and additions to the ZOU would not substantially increase or have any additional environmental impacts on existing visual character beyond that described in the DEIR.

Impact AES-4: Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area (overall DEIR finding: significant and unavoidable)

The proposed Landscaping and Irrigation Standards would ensure that healthy vegetation is established that would help to filter visible nighttime lighting and limit glare by buffering reflective surfaces from view. The proposed Parking and Loading Standards and Research and Development Design Standards would not result in a substantial increase or have any other additional environmental impacts on light and glare than those described in the DEIR.

The proposed Outdoor Lighting Standards would generally help to decrease the overall impacts of light and glare coming from development projects by aiding in reducing ambient light glow, light spill, and light pollution, in general, when seen in vista views, from scenic highways, and from regular vantage points. While the proposed Outdoor Lighting Standards would help to decrease the overall impacts of light and glare coming from development, light and glare impacts would still be significant and unavoidable as described in the DEIR.

Water Supply

Impact WS-1: Create a need for new or expanded entitlements or resources for sufficient water supply (overall DEIR finding: significant and unavoidable)

The Landscaping and Irrigation Standards will affect the types and amounts of landscaping required, including requiring the use of drought-tolerant species and water efficient landscaping. The Landscaping and Irrigation Standards are based on the Model Water Efficient Landscape Ordinance promulgated by the Department of Water Resources for the express purpose of reducing landscaping water use in California (Department of Water Resources 2010). Therefore, the adoption of the proposed Landscaping and Irrigation Standards will reduce water demand related to landscape maintenance. This will not reduce overall water use to a less than significant level. Water supply impacts would still be significant and unavoidable as described in the DEIR.

Transportation/Traffic

This impact is analyzed in Chapter 3.9, *Transportation and Traffic*, of this Partial Recirculated Draft EIR. Please see that chapter.

4.5 Range of Alternatives for Analysis

Following is a qualitative analysis of three alternatives to the project. In some cases, the significance conclusion of an impact may be the same under each scenario when compared to the Thresholds of Significance. However, the actual degree of the impact may be slightly different.

The impacts of the alternatives are summarized at the end of this section in Table 4.3.

4.5.1 Alternative 1—No-Project Alternative

According to State CEQA Guidelines Section 15126.6e (3), for a project that is a revision of an existing land use plan or policy it is required that the "no project" alternative "will be the continuation of the existing plan, policy or operation into the future." Therefore, for the TGPA/ZOU DEIR, the No-Project Alternative will consist of the continuation of the existing adopted General Plan and Zoning Ordinance, without changes. Under this alternative, the County would continue to operate under the adopted 2004 General Plan policies and the existing zoning regulations.

The No-Project Alternative would have the same impacts identified in the 2004 General Plan EIR. The No-Project Alternative would have fewer impacts than the project because it does not include amendments to the Zoning Ordinance that would adversely affect aesthetics, agricultural resources, biological resources, and land use. The TGPA component of the project would not have substantially greater impacts than the No-Project Alternative.

4.5.2 Alternative 2—Transit Connection Alternative

Description

Alternative 2 would include policies intended to facilitate CEQA streamlining for higher-density residential or mixed use projects in locations that are consistent with both the current General Plan and the Sacramento Area Council of Governments' (SACOG's) adopted Metropolitan Transportation Plan/Sustainable Communities Strategy 2035 (MTP/SCS 2035). Otherwise, Alternative 2 would include the same proposed General Plan amendments as the TGPA and would include the ZOU. Alternative 2 would not increase densities over those in the General Plan and TGPA.

~~This alternative~~By encouraging development in areas that can be served with transit, Alternative 2 would provide residents of any qualifying development project with alternatives to automobile use and thereby reduce the annual vehicle miles travelled that would have otherwise been generated by that development project. This would be expected to also reduce greenhouse gas (GHG) emissions. The TGPA/ZOU project would result in a significant effect on traffic; this alternative is considered as a means to reduce traffic generated under the current General Plan and would therefore reduce the impacts of the project.

Pursuant to statute and guidelines adopted in conjunction with Senate Bill (SB) 226 (Chapter 469, Statutes of 2011), CEQA authorizes the County to limit the scope of environmental analysis that is

required for certain projects that are consistent with an adopted regional SCS. SACOG adopted the MTP/SCS 2035 in April 2012 as required by ~~Senate Bill (~~SB~~)~~ 375 (Chapter 728, Statutes of 2008), the Sustainable Communities and Climate Protection Act of 2008. The MTP/SCS 2035 is a plan for reducing GHG emissions from automobiles and light trucks through regional land use and transportation policies that (1) identifies areas suitable for higher intensities of development because they are or can be well served by transit, and (2) provides for increased spending on transit service.

The County is not obligated to bring its General Plan or Zoning Ordinance into conformance with the MTP/SCS 2035. However, it may independently choose to adopt policies that would be consistent with the MTP/SCS 2035 in order to qualify for CEQA streamlining opportunities provided by Assembly Bill (AB) 226 (Chapter 469, Statutes of 2011) for projects that are consistent with MTP/SCS 2035. Under Alternative 2, the County would choose to adopt pertinent MTP/SCS 2035 policies.

~~AB~~SB 226 establishes a formula by which certain residential or commercial/retail/office infill projects may avoid a full CEQA review process. This applies where a plan level EIR has previously been prepared, the project is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in the MTP/SCS 2035, any project-specific impacts can be avoided either by the mitigation measures from the EIR or through applicable County performance standards (e.g., noise ordinance, policy TC-Xa and related policies, TIM fee, etc.), and the project meets specific statewide standards. An infill project is defined as a project located in an urban area on a previously developed site or a vacant site where at least 75% of the perimeter adjoins or is across a public road from developed urban parcels that any one or more of the following uses: residential, retail or commercial where not more than half the site is used for parking, a transit station, a school, or a public office building. “Urban area” includes urbanized, unincorporated areas in addition to cities.

The MTP/SCS 2035 identifies lands in the El Dorado Hills area on both sides of the U.S. Highway 50 corridor as “developing communities,” as illustrated in Figure 4.1. Where consistent with the General Plan and adjacent to urban development, these would be the candidate areas for streamlining.

For residential and commercial projects, the statewide standards include being located in a “low vehicle travel area,” as defined in Appendix M of the State CEQA Guidelines. For residential projects, this means a traffic analysis zone with below average existing vehicle miles traveled per capita. In El Dorado County, the same metric would apply to commercial/retail and office projects. Commercial/retail projects would be limited to having no single-building floor-plate greater than 50,000 square feet

The following policies would be adopted to encourage the use of the CEQA streamlining procedures established under ~~AB~~SB 226.

Policy TC – 8b: The County shall review the El Dorado County Transportation Commission (EDCTC) Regional Transportation Plan and SACOG’s MTP/SCS 2035 each time it reviews and updates the General Plan, community plans, specific plans or other County policies and regulations to ensure overall consistency among all of these plans and strategies to allow for CEQA streamlining and to ensure eligibility for state transportation and housing funding.

Policy TC – 8c: CEQA streamlining may be applied to residential, commercial/retail, or office projects where the proposed development is consistent with the General Plan and meets all applicable requirements of State CEQA Guidelines section 15183.3 and the associated Appendix M of

the State CEQA Guidelines. Streamlining will not be applied to projects that require a general plan amendment.

Policy TC – 8d: The County, working with SACOG, shall identify below average regional per capita VMT areas designated for residential and mixed use projects under the General Plan that are also consistent with land use designations, densities, building intensities, and all other applicable policies of the MTP/SCS 2035.

Under Alternative 2, the CEQA streamlining provisions would encourage development within the identified low vehicle travel areas. CEQA streamlining encourages development by reducing the time needed to prepare CEQA documents, or even avoiding the need for CEQA documents where the development project can meet all of the above requirements and would have no new project-specific impacts that are not avoided by the local or state performance standards. This saves a prospective developer time and money.

This alternative would not increase the total amount of development under the General Plan and the TGPA, but could result in development occurring more quickly in the qualifying areas than elsewhere. In addition, at such future time as transit is more readily available along the U.S. Highway 50 corridor, the alternative would offer residents and workers the option of travelling by transit and avoid traffic.

Although a specific project design is needed in order to quantify the difference in traffic generation, there is evidence from a recent comprehensive study of mixed use development projects prepared for the American Planning Association Planning Advisory Service that the conventional traffic generation projections based on the Institute of Transportation Engineers (ITE) *Trip Generation Handbook* are overestimated by an average of 35% (Planning Advisory Service 2013). Further, the *Getting Trip Generation Right* study found that on average, land uses generate 49% more traffic if they are distributed among single-use sites in suburban settings than if they are in a dense, mixed use development (Planning Advisory Service 2013).

Therefore, a well-designed mixed use project can reasonably be assumed to result in a lower level of traffic generation than if a similar level of overall development were to occur on individual sites. The level of air quality and greenhouse gas emissions attributable to traffic would similarly be reduced in comparison to single-use sites.

Impact Analysis

If implemented, the general plan policies that are a part of Alternative 2 would be included in the project as additional new policies along with those already included in the TGPA. This analysis assumes that Alternative 2 would be subject to the same mitigation measures as the project. The analysis is limited to those areas of the western County identified as “developing communities” on Figure 4.1 (Sacramento Area Council of Governments 2012, Figure 3.2).

Aesthetics

The areas identified in the MTP/SCS 2035 as developing communities include undeveloped lands that currently provide scenic relief along the U.S. Highway 50 corridor. This would include the area between El Dorado Hills and Cameron Park. Alternative 2 would have a significant and unavoidable impact on aesthetics through the conversion of those lands to urban uses. The proposed Outdoor Lighting Standards would limit the amount of light spill from new development. However, this

would not be sufficient to eliminate the change in views that will result from new development. The impact would be the same as for the project.

Agricultural and Forestry Resources

The areas identified in the MTP/SCS 2035 as developing communities do not include any areas of timberland. The only agricultural lands in and adjacent to the areas identified in the MTP/SCS 2035 as developing communities are identified as "grazing land" and "other land" on the FMMP Important Farmland Map for El Dorado County (Figure 3.2-1) (Department of Conservation 2011). Conversion of small areas of grazing lands would not result in a significant impact related to farmland. The impact of Alternative 2 would be less than significant, similar to the project.

Air Quality and Greenhouse Gases

Alternative 2 would have the same impact as the project (less than significant) because it proposes the same land uses. However, because it would encourage mixed use development, it may reduce emissions related to vehicle use as found for this type of development by the *Getting Trip Generation Right* study. This alternative would result in a slightly lesser impact than the project.

Biological Resources

Alternative 2 would result in the development of land that is currently undeveloped. This grassland and oak woodland habitat may support special status species. The loss and fragmentation of habitat would be a significant and unavoidable impact. The proposed Outdoor Lighting Standards would limit the amount of light spill from new development. However, this would not be sufficient to avoid habitat impacts that will result from new development. The project similarly would have a significant and unavoidable impact on biological resources.

Cultural Resources

The areas identified in the MTP/SCS 2035 as developing communities include drainages and other potential habitation areas that may contain archaeological resources. As with the project, Alternative 2 would have a significant and unavoidable impact.

Energy Use

Alternative 2 would result in non-vehicular energy use levels similar to those of the project. New development would be subject to the energy conservation requirements of state law and building codes, thereby ensuring that it is not wasteful, inefficient, or unnecessary. Alternative 2 would reduce vehicle use in comparison to the project and would therefore have a marginally smaller energy footprint from vehicle fuel use than the project. As with the project, Alternative 2 would have a less than significant impact.

Land Use and Planning

Alternative 2 would not divide an established community and would be required to be consistent with applicable plans. Converting undeveloped land to urban and suburban uses would substantially alter the existing land use character, as discussed under Aesthetics. As with the project, this would be a significant and unavoidable impact.

Noise

Alternative 2 would not substantially differ from the project in its potential for noise and the exposure of new residents to increased noise levels. As with the project, the alternative's impact would be significant and unavoidable.

Population and Housing

Alternative 2 would not displace persons or housing. It will not induce population growth to any greater extent than the existing General Plan provides. At the same time, it may encourage a small shift away from low-density residential development to higher-density mixed use development by reducing the time and cost of CEQA compliance for the qualifying mixed use projects. This may influence the timing of growth, but would not otherwise induce growth. This impact is less than significant.

Transportation and Traffic

The alternative has the potential, to the extent that it encourages mixed use development in commercial areas, to reduce trip generation rates in comparison to standard commercial development. The *Getting Trip Generation Right* study's comparison of conventional and mixed use projects found that land uses generate 49% more traffic if they are distributed among single-use sites in suburban settings than if they are in a dense, mixed-use development (Planning Advisory Service 2013). Although this does not mean that the alternative would result in such a dramatic reduction, it may generate less traffic than single-use development. The alternative would have a significant impact, but that impact would be expected to be somewhat less than the project's.

Water Supply

The alternative would not alter anticipated water demand because it would be consistent with the General Plan and EID's demand estimates are based on the General Plan. Similar to the project, it would have a less-than-significant impact on water supply within EID's service area up to 2035. It would have a significant and unavoidable impact on water supply within the GDPUD and GFCSD service areas. It would also have a significant and unavoidable impact within EID's service area after 2035.

Cumulative Impacts

The alternative would generally make the same contributions to cumulative impacts as the project and would have the same level of impact as described in Table ES-1. Differences would be limited to the alternative's somewhat lesser contributions to air quality, greenhouse gases, and traffic. The alternative's contribution to traffic would be considerable, as is the project's.

4.5.3 Alternative 3—Selective Approval of TGPA/ZOU Components

The project consists of a variety of individual amendments to the General Plan, as well as changes to the provisions of the Zoning Ordinance. As discussed in Chapter 3, some of the amendments and zoning changes have the potential to result in significant effects on the environment. The County Board of Supervisors is not required to approve all of the policy and ordinance changes that make

up the project. They can choose not to include any or all of those components of the project that would result in significant environmental impacts and thereby reduce the project's overall impacts.

This alternative, because it can be implemented in a number of different combinations, actually represents multiple alternatives for consideration by the Board of Supervisors.

Table 4.2 illustrates those project components that have been identified as resulting in significant impacts. This table includes those components for which the DEIR proposes mitigation measures that reduce the impacts. The impact mechanisms and mitigation measures are described in more detail in Section 3.1, *Aesthetics*; Section 3.2, *Agricultural and Forestry Resources*; Section 3.4, *Biological Resources*; ~~and~~ Section 3.6, *Land Use and Planning*, and Section 3.9, *Transportation and Traffic*. Many of the components listed in Table 4.2 below are subject to approval of a conditional use permit. However, it is reasonable to assume that, even with the adoption of site-specific CEQA mitigation measures identified in the CEQA process for the specific project, large examples of such uses would result in localized significant, unavoidable impacts. These components include certain ranch marketing activities (Ordinance section 17.40.260); intensive home occupations (Ordinance section 17.40.160.F); agricultural and timber lodging activities (Ordinance section 17.40.170); public utility service facilities, intensive, in some zones; industrial, general, in some zones; recreational facilities (Chapter 17.25); and ski area.

Table 4.2. Project Components with Significant Impacts

Project Component	Significant Impact Area	Mitigation Measure, if any, and Significance After Mitigation[a]
Development on slopes of 30% or more (Policy 7.1.2.1, Ordinance section 17.30.060)	Aesthetics	BIO-1a: Limit the relaxation of hillside development standards SU
	Biological Resources	BIO-1a: Limit the relaxation of hillside development standards SU
	Land Use	BIO-1a: Limit the relaxation of hillside development standards SU
Infill development (Policy 2.4.1.5)	Biological Resources	NONE SU
Certain ranch marketing activities (Ordinance section 17.40.260)[b]	Aesthetics	AES-4: Revise proposed Zoning Ordinance Chapter 17.34 and Section 17.40.170 (light shielding) LTS
	Agricultural Resources	AG-1a: Amend the ZOU to limit the size of proposed Health Resort and Retreat Centers LTS
	Biological Resources	BIO-1c: Limit music festivals and concerts Mitigation Measure BIO-2: Return Event Site to Pre-Event Condition SU
	Land Use	LU-5b: Revise Section 17.40.260, Ranch Marketing, prior to adoption LTS
Home Occupations (Ordinance section 17.40.160.F)[c]	Land Use	TRA-2: Reduce the Proposed Number of Employees Allowed by Right at Home Occupations SU
	Traffic	TRA-2: Reduce the Proposed Number of Employees Allowed by Right at Home Occupations SU
Agricultural and timber lodging activities (Ordinance section 17.40.170)	Aesthetics	AES-4: Revise proposed Zoning Ordinance Chapter 17.34 and Section 17.40.170 (light shielding) SU
	Agricultural Resources	AG-1a: Amend the ZOU to limit the size of proposed Health Resort and Retreat Centers LTS
	Biological Resources	AG-1a: Amend the ZOU to limit the size of proposed Health Resort and Retreat Centers SU
	Land Use	None LTS
Public utility service facilities, intensive, in some zones	Agricultural Resources	AG-1b: Amend the ZOU to limit Public Utility Service Facilities to minor facilities in the PA, AG, and RL zones LTS
	Biological Resources	None SU
	Land Use	None SU

Project Component	Significant Impact Area	Mitigation Measure, if any, and Significance After Mitigation[a]
Industrial, general, in some zones	Aesthetics	AG-4: Amend proposed Table 17.21.020 to restrict incompatible uses from being located in the TPZ zone SU
	Agricultural Resources	AG-4: Amend proposed Table 17.21.020 to restrict incompatible uses from being located in the TPZ zone LTS
	Land Use	None SU
Recreational facilities (Chapter 17.25)	Aesthetics	None SU
	Land Use	None SU
Ski area	Agricultural Resources	AG-4: Amend proposed Table 17.21.020 to restrict incompatible uses from being located in the TPZ zone LTS
	Land Use	None SU

Note: LTS = less than significant with mitigation; SU = significant and unavoidable

[a] The significance level reflects the greatest significance for the given impact area.

[b] ~~In order for this alternative to meet the project objectives, these~~These activities would be those requiring a CUP or that are of large scale such as special events and music festivals.

c. These activities would be those requiring a CUP.

Under Alternative 3, any or all of these project components would be removed from the project prior to approval. The elimination of a particular component or components would substantially reduce the project's impacts. Otherwise, this alternative would have the same impacts as the project.

4.5.4 Summary of Impacts

Table 4.3 below summarizes the impacts of the three alternatives and compares them to the impacts of the project. Note that the project's significance levels represent its highest impact level in each impact category.

Table 4.3. Impacts of Project Alternatives

	Impact Category and Significance[1]										
	Aesthetics	Agricultural and Forestry Resources	Air Quality and Greenhouse Gases[2]	Biological Resources	Cultural Resources	Land Use and Planning	Noise	Population and Housing	Transportation and Traffic	Water Supply	Cumulative
Project	SU	SU	SU	SU	SU	SU	SU	SU	SU	SU	SU
Alternative											
1. No-Project	SU	SU	SU	SU	LTS	SU	SU	—	SU	SU	SU
2. Transit Connection	SU	LTS	SU	SU	SU	SU	SU	LTS	SU[2]	SU	SU
3. Selective Approval of TGPA/ZOU Components	SU	LTS	SU	SU	LTS	SU	SU	LTS	SU	SU	SU

[1] SU = significant and unavoidable; LTS = less than significant; — = not applicable

[2] Alternative 2 will reduce this impact below the level of the project, but not to a less-than-significant level.

Chapter 5
Other CEQA Considerations

This chapter contains discussions of additional topics required by CEQA, including cumulative impacts, growth inducing impacts, significant and unavoidable impacts, and significant irreversible environmental changes.

5.1 Cumulative Impacts

Cumulative impacts result from individually minor, but collectively significant, impacts occurring over a period of time. The purpose of the cumulative impact analysis is to place the project's contribution to significant environmental impacts that are caused by multiple projects (not simply the project alone) into a larger context. A project impact that is less than significant when the project is viewed by itself can nonetheless be considered "cumulatively considerable" if it would make a substantial contribution to the overall impact. There is often no clear line determining whether a project's contribution is substantial. Where the cumulative impact is particularly severe, even a small contribution may be considered substantial.

The term "cumulative impact" does not mean the impact of all resources areas (i.e., aesthetics, biological resources, etc.) together. Rather, it refers to a significant effect in any of the individual resource areas that results from the contributions of many activities.

State CEQA Guidelines Section 15130 requires that an EIR include a discussion of the potential cumulative impacts of a proposed project. *Cumulative impacts* are defined as two or more individual effects that, when considered together, are significant. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to other closely related past, present, and reasonably foreseeable or probable future developments.

As defined in State CEQA Guidelines Section 15355:

> …a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

An adequate discussion of significant cumulative impacts can utilize either of the following means.

- A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document, which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

The cumulative impact analysis in this DEIR relies upon the summary of projections approach, revised to account for the following major general plan amendments and development. This hybrid approach relies primarily on the El Dorado County General Plan for projections, with the following exceptions:

- Air quality employs the air basin plans for the cumulative effects of criteria pollutants, as discussed in Chapter 3.3, *Air Quality and Greenhouse Gas*.
- Transportation uses updated transportation modelling, as explained in Chapter 3.9, *Transportation*.
- Water supply relies on information prepared by EID in its water supply analyses for four of the cumulative projects, as described below.

The County is currently considering applications for the approval of five large residential developments proposed in the western portion of the county (i.e., Central El Dorado Hills Specific Plan, Dixon Ranch, Lime Rock Valley Specific Plan, San Stino, and Village of Marble Valley Specific Plan). These are not part of the project but are being considered in this cumulative impact analysis pursuant to CEQA case law's interpretation of the phrase "probable future projects" (*Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98). Inclusion in this analysis does not imply that these general plan amendments will be approved by the County. This cumulative impact analysis ~~assumes approval~~takes these projects impacts into consideration solely in order to meet the intent of State CEQA Guidelines Section 15130 for a worst case scenario perspective. This analysis also assumes buildout of the grazing land south of U.S. Highway 50 and north of White Rock Road that was annexed to the City of Folsom in 2012 and is slated for suburban development. Together, these major areas of proposed development are hereafter referred to in this DEIR as the *Cumulative Projects*. Their relative locations are shown in Figure 5-1.

The six projects and their impacts are evaluated at a qualitative level. They are large projects with clear impacts. A qualitative analysis is sufficient to gauge their contribution to existing and future planned conditions. The proposed development potential of these projects is summarized in Table 5-1.

Table 5-1. Cumulative Projects

Project Name	Approximate Location	Approximate Size (in acres)	Residential Units	Commercial/ Office Area (in acres)	Area of Other Uses, incl. roads, open space, schools, etc. (in acres)
Central El Dorado Hills Specific Plan	El Dorado Hills—north of U.S. Hwy 50; along El Dorado Hills Blvd.	257	1,028	11	69
Dixon Ranch	El Dorado Hills—south of Green Valley Road; north of U.S. Hwy 50	280	605	–	84
Lime Rock Valley Specific Plan	South of Cameron Park—centered along Marble Valley Road and Amber Fields Drive	740	800	–	363
San Stino	Shingle Springs—south of Mother Lode Drive; east of French Creek Road	645	1,041	–	270
Village of Marble Valley Specific Plan	El Dorado Hills—about 1,000 feet southeast of the U.S. Hwy 50 and Bass Lake Road interchange	2,341	3,236	60	1,484
Folsom South of U.S. Highway 50	City of Folsom—West of El Dorado County line, south of U.S. Hwy 50, north of White Rock Road	3,585	11,340 – 14, 630	305	1,480

Unless so stated, this DEIR considers the potential for cumulative contributions at the horizon year of the General Plan in 2035.

The determination of a project's cumulative effects involves identifying the following.

- Significant impacts that are the result of the cumulative contributions of past, present, and reasonably probable future. Cumulative effects that are less than significant are not required to be analyzed.
- Whether the present project would contribute to any of those cumulative impacts. The EIR is not required to analyze a cumulative impact to which the project would not contribute.
- Whether, in the context of the cumulative impact, the present project's contribution would be cumulatively considerable. An impact that is less than significant when viewed as a project impact may nonetheless be cumulatively considerable contribution to a cumulative impact.

5.1.1 Aesthetics

2004 General Plan EIR Conclusions

The 2004 General Plan EIR stated that urbanization of the H~~i~~ighway 50 corridor through Sacramento County and into western El Dorado County would have a significant cumulative effect on the visual resources of that region, as the landscape would be changing from a more rural, pastoral character to one of urban and suburban development. The 2004 General Plan EIR stated that conversion of the rural landscape to a suburban appearance would result in the reduction of the natural aesthetic qualities of the corridor. The 2004 General Plan EIR determined that the General Plan included policies that would reduce these impacts; in addition, the 2004 General Plan EIR itself included mitigation measures that would also reduce these impacts. However, the impacts could not feasibly be avoided or reduced to a less-than-significant level. The 2004 General Plan EIR, therefore, determined that cumulative reduction in the natural aesthetic qualities of the Highway 50 corridor would be considered a significant and unavoidable impact.

Project Impacts

In comparison to the potential under the current General Plan, the Camino/Pollock Pines proposal under the project would reduce the development potential within certain areas because the ability to build at maximum allowable intensity or density would become dependent on the availability of services. This would not increase the General Plan's contribution to the cumulative aesthetic impact.

New Policy 2.5.2.1 would result in an increase in allowable development intensity, causing a likely overall minor increase in the potential for visual impact in comparison to the current General Plan. In addition, the ZOU includes new provisions that could allow ranch marketing, agricultural and timber resource lodging, and health resort and retreat centers in agricultural and forestry zones—types of development located on rural agricultural and forestry lands of the county that can have adverse effects on the character of the surrounding area. Implementation of the project would allow residential development on slopes of 30% or more, which has the potential to increase visual impacts because it would allow development on slopes that are unavailable for development under the current General Plan. <u>Although the Outdoor Lighting Standards will restrain light spillage from new development, the extent of development anticipated under the TGPA/ZOU would make this a</u>

significant impact. Cumulative visual impacts would, therefore, be more intense under the project than the 2004 General Plan.

The Cumulative Projects would significantly increase development intensity within the U.S. Highway 50 corridor, including large areas with rural visual characteristics and those with suburban and urban visual characteristics. The Lime Rock Specific Plan and San Stino projects are located away from the highway corridor, but would substantially change the visual character of sites that are currently undeveloped. Considered together with the Cumulative Projects, the project would increase the significant cumulative impacts on visual resources in the county. The Project's contribution to cumulative impacts on visual resources would be substantial and cumulatively considerable.

5.1.2 Agricultural and Forestry Resources

2004 General Plan EIR Conclusions

The 2004 General Plan EIR stated that California, and in particular the four-county region of which El Dorado County is a part (which also includes Amador, Placer, and Sacramento Counties), was experiencing an ongoing loss of agricultural land as productive farmland and ranchlands are converted to urban and suburban uses or subdivided into rural ranchettes. This remains true. While the 2004 General Plan includes policies intended to protect the productive agricultural and grazing lands in El Dorado County, the 2004 General Plan EIR determined that incremental development in the rural regions and urban fringe would add to the cumulative conversion of agricultural lands in the region and that cumulative loss of agricultural lands over time in the region would be significant. Similarly, the 2004 General Plan EIR found that while the General Plan included a range of protection of productive timberlands in the county, continued growth in the Sierra Nevada and foothills would put pressure on forestlands for uses other than timber production and protection of forest resources. This would increase obstacles allowing for the ability to harvest and process timber, causing a significant effect. Overall, the 2004 General Plan EIR found that even with mitigation measures designed to alleviate this pressure, cumulative impacts of agricultural land conversion and obstacles to timber production would be considered significant and unavoidable.

Project Impacts

As stated in this DEIR, the small amount of agricultural land that is converted in El Dorado County each year as a result of suburbanization or land being removed from production is not a result of the project. In addition, the project does not propose General Plan amendments that would result in additional conversions of agricultural lands. Potential impacts on farmland and/or timberland due to the construction of food and farm supply stores, agricultural and timber lodging, health resort and retreat centers, industrial uses, intensive public utility service facilities, recreational structures, and/or the holding of special marketing events made possible by implementation of the project would be reduced to less-than-significant levels with those mitigation measures detailed in this DEIR. The project alone could cause a marginal increase in the significance of impacts to agricultural and timber resources as compared to impacts associated with buildout of the 2004 General Plan but would not alter the overall level of significant of these impacts, which were deemed significant and unavoidable in the 2004 General Plan EIR.

The Cumulative Projects would convert substantial portions of the western County to residential, commercial, recreational, and public utility–oriented uses. Approval of the Cumulative Projects

would directly convert substantial areas of existing grazing land to suburban uses, and would significantly contribute to ongoing loss of agricultural land occurring in the County and the surrounding region. In particular, the Folsom South of Highway 50 development area is practically all grazing land. The loss of this area (totaling approximately 3,585 acres) makes this cumulative impact particularly serious.

Considered together with the Cumulative Projects, the project would increase cumulative impacts on agricultural and timber resources in the County, and the project would contribute to that increase. However, the contribution of the ZOU would be marginal in that, as mitigated, uses allowed in the agricultural areas would be required to be compatible with agricultural use and would not be substantial in relation to other drivers of agricultural conversion. Overall, the contribution of the TGPA and ZOU would be substantial in light of the seriousness of the cumulative impact.

5.1.3 Air Quality and Greenhouse Gases

2004 General Plan EIR Conclusions

The 2004 General Plan EIR summarized the cumulative air quality impact as follows.

> Air quality is a regional environmental issue, with the majority of air pollutant emissions being created by motor vehicle use within the county's air basins and other air basins in the region. El Dorado County has two air basins, the Mountain Counties Air Basin (MCAB) and Lake Tahoe Air Basin (see Lake Tahoe discussion further below). The designated growth areas of the county are on the west slope, which is in the MCAB. The MCAB is designated as nonattainment for the state and national ozone standards and the state particulate (PM_{10}) standard. Ozone pollution is the primary air quality impact of cumulative concern, because precursor emissions of ozone can occur throughout the region and combine to exacerbate attainment of air quality standards in El Dorado County. Pollutants transported from the San Francisco Bay area also contribute to regional air quality impacts.
>
> The County Air Quality Management District (AQMD) participated with other AQMDs in the Sacramento area to prepare the 1991 Air Quality Attainment Plan, which includes strategies for achieving the state and national air quality standards. The equal-weight alternatives include policies and mitigation measures to support reduction of air emissions and help attain the standards, in keeping with the attainment plan. Section 5.11, Air Quality, evaluates potential air pollutant emissions related to stationary and mobile sources resulting from implementation of the equal-weight alternatives and determines that significant impacts on regional air quality cannot not be avoided, despite the inclusion of all feasible mitigation measures. The significant air quality impact in El Dorado County would contribute to a cumulative significant air quality in the region, which also could not be avoided. Therefore, for all equal-weight alternatives, planned development leading to increases in motor vehicle travel, wood fire stoves/fireplaces, and other sources would contribute cumulatively to the significant impact on air quality in the region. The source of the highest level of emissions and the largest contributor to cumulative air quality impacts would be the 1996 General Plan Alternative, followed by the Environmentally Constrained, Roadway Constrained 6-Lane "Plus," and No Project alternatives. Although all feasible policies and mitigation measures are included, as described in Section 5.11, this cumulative impact is considered significant and unavoidable.

Project Impacts

The project does not include any specific developments that would generate construction emissions. However, construction emissions could remain in excess of EDCAQMD thresholds if a given development undertaken under the ZOU is large (e.g., Industrial, General). Although large projects are generally made subject to a CUP in the ZOU, and CEQA review would be required, that process

does not guarantee that a large project would not result in significant and unavoidable air quality impacts from construction emissions.

As discussed in Impact AQ-2 in Section 3.3 under the topic of mobile source emissions, all study scenarios would result in either decreases in all pollutants or minor increases below applicable EDCAQMD threshold levels. However, the potential conflict with the air quality attainment plan remains. Therefore, this impact is significant and unavoidable.

The Cumulative Projects would significantly increase development intensity within the U.S. Highway 50 corridor and areas south of U.S. Highway 50, adding substantial vehicle emissions to the air basin. In addition, given their size, the Cumulative Projects are likely to result in significant construction emissions. Considered together with the Cumulative Projects, the project would increase impacts on air quality in the County. The project's contribution to cumulative impacts on air quality would be substantial.

5.1.4 Biological Resources

2004 General Plan EIR Conclusions

The 2004 General Plan EIR stated that habitats within El Dorado County, including foothill woodland, chaparral, and riparian habitats, were experiencing pressures from urban and suburban development in surrounding counties, as well as in El Dorado County itself. As a result, the 2004 General Plan EIR stated that cumulative loss and fragmentation of natural habitats, as well as the associated impacts on the populations of special-status species that occupy these habitats (such as rare plant communities and the California red-legged frog) were occurring. While the General Plan contained policies to protect habitats and special-status species, the 2004 General Plan EIR determined that buildout of the General Plan would contribute to the cumulatively significant impact of the loss and fragmentation of woodland and chaparral habitats, riparian corridors, and other important biological resources of the Sierra Nevada foothills and impacts on special-status species. While mitigation measures in the 2004 General Plan EIR reduced the impacts of habitat loss and fragmentation to the extent feasible, the cumulative impact of the 2004 General Plan on biological resources was considered significant and unavoidable.

Project Impacts

Many of the project's impacts contributing to the loss, removal, and fragmentation of wildlife habitat and associated impacts on special-status species and wildlife movement, including impacts associated with the allowance of hillside development, infill development, and agricultural and timber lodging, could be reduced to a less-than-significant level by mitigation measures proposed in this DEIR. However, other uses, including potential ski areas, public utility service facilities and amusement areas would result in significant and unavoidable impacts on biological resources. The project would increase the General Plan's and Zoning Ordinance's prospective impact on biological resources compared to the current General Plan and Zoning Ordinance.

The Cumulative Projects would convert substantial portions of the County and of the City of Folsom that are currently undeveloped and available as wildlife habitat to residential, commercial, recreational, and public utility-oriented uses. Although the Outdoor Lighting Standards will restrain light spillage from new development, the extent of development anticipated under the TGPA/ZOU would make this a significant impact. Approval of the Cumulative Projects would directly convert

land with Open Space zoning designation and General Plan designation to a different use and would significantly contribute to ongoing loss, fragmentation, and/or removal of wildlife habitat occurring in the county and the surrounding region.

Considered together with the Cumulative Projects, the project would add to the cumulative impacts on biological resources in the County. The project's contribution to cumulative impacts on biological resources would be considerable because of the relative fragility of these resources.

5.1.5 Cultural Resources

2004 General Plan EIR Conclusions

The 2004 General Plan EIR stated that while there was potential for the cumulative loss of cultural resources throughout the region associated with implementation of the General Plan, policies contained in the General Plan and mitigation identified in the 2004 General Plan EIR would adequately protect those resources in El Dorado County. Therefore, the 2004 General Plan EIR did not identify any cumulative impacts on cultural resources.

Project Impacts

Overall, the project would have significant impacts on cultural resources. In some cases, the project proposes zoning changes that are similar to and more protective of historical resources than the existing Zoning Ordinance provisions, and in all cases would not reduce the existing protections for historical resources. However, the potential for currently unknown or unevaluated historic resources to be adversely affected by the project, and the limitations on developing effective mitigation absent a development project with a defined site-specific impact, means that the project's impact is significant and unavoidable.

The Cumulative Projects could potentially affect cultural resources within El Dorado County and the City of Folsom. When considered together with other development pursued under the General Plan, the Cumulative Projects could result in a significant and unavoidable impact. Despite the implementation of mitigation required by state law and the historic protections contained within the current and proposed General Plan and Zoning Ordinance, it can reasonably be assumed, based on the size of these projects and the largely undisturbed nature of their sites, that these impacts would be significant. Considered together with the Cumulative Projects, the project would make a considerable contribution to cumulative impacts on cultural resources.

5.1.6 Energy Use

The project impact analyzed in Chapter 3.11, *Energy Use*, is examined at a broadly cumulative level in that analysis. Clearly, the project and Cumulative Projects will increase demand for energy in the El Dorado County region. For CEQA purposes, the concern is not over increased demand, but whether that increase will be inefficient, wasteful, and unnecessary. For the reasons described in Chapter 3.11, projects that conform to California's energy efficiency statutes and regulations are not inefficient, wasteful, or unnecessary users of energy. Therefore, the TGPA/ZOU project will not contribute to such use.

5.1.7 Land Use

2004 General Plan EIR Conclusions

The 2004 General Plan EIR stated that the potential existed for the Highway 50 corridor to continue a trend of urbanization, and that as this occurred, the separation between El Dorado County and the city of Folsom would become less distinct. This trend could come to the point where the county and the city merge together. This possibility remains, particularly considering the Folsom's recent successful extension of its sphere of influence south of Highway 50. The 2004 General Plan EIR stated that this merging could alter the community identity and character of El Dorado County and the city of Folsom and that, due to development allowed close to the border, the cumulative land use impact would be potentially significant and unavoidable. However, the 2004 General Plan EIR concluded that an impact would be speculative due to the lack of specific plans for the area south of Highway 50. Since the publication of the 2004 General Plan EIR, the city has adopted a specific plan for this area south of Highway 50. It can now be assumed that implementation of the 2004 General Plan, together with development trends at the time of implementation, would result in significant and unavoidable cumulative impacts on land use.

Project Impacts

The project is not proposing development in the usual sense and would not result in a direct physical change in the environment. The TGPA and ZOU would not result in physical divisions of communities. In addition, the project includes both an internally consistent set of General Plan policy amendments and a comprehensive update to the Zoning Ordinance to ensure that it will be consistent with the General Plan, and would, therefore, be consistent with state law. It is reasonable to assume that buildout of the General Plan, in conjunction with the project, would result in a substantial increase in the level of development found throughout the county. This would inevitably degrade the rural character of some areas. However, the project's contribution to this effect would be largely in those areas where an intensive conditional use might be approved under the zoning changes proposed by the ZOU.

Similarly, the Cumulative Projects—with the exception of the Central El Dorado Hills project, which is surrounded by existing development—considered together with the General Plan, would convert substantial portions of the county and the City of Folsom from undeveloped uses in rural areas to developed uses, creating suburban and urban areas that may conflict with more rural land uses. The project would contribute to the cumulative loss of rural character. If intensive conditional uses are approved, this would be a substantial contribution to a cumulative impact on land use.

5.1.8 Noise

2004 General Plan EIR Conclusions

The 2004 General Plan EIR stated that the two potential cumulative noise impacts associated with buildout of the General Plan were traffic noise on Highway 50 and aircraft noise from Mather Field in Sacramento County.

The 2004 General Plan EIR found that increases in traffic noise on Highway 50 resulting from growth under the 2004 General Plan in combination with other regional growth would increase noise levels adjacent to Highway 50 in both El Dorado and Sacramento Counties. While the General

Plan includes policies to mitigate noise increases associated with new transportation projects, the 2004 General Plan EIR acknowledges that impacts associated with traffic may not be able to be fully reduced and concludes the impact would be significant and unavoidable.

The 2004 General Plan EIR stated that noise from continued aircraft operations at Mather Field in Sacramento County would add to the noise impact on El Dorado County residents through exposure to aircraft overflights. The 2004 General Plan EIR determined that as residential development increases south of Highway 50 near the Sacramento County line, more residences would be under one or more of the common aircraft approach paths to this airfield. However, while a greater number of El Dorado County residents would be exposed to aircraft noise because of the location of residential development, the 2004 General Plan EIR determined this would be a direct General Plan-related effect rather than a contribution to a regional, cumulative impact. The growth resulting from the implementation of the 2004 General Plan was therefore viewed as not a factor influencing the level of aircraft activity at Mather Field and not a factor encouraging development outside the county that would be subject to Mather Field aircraft noise. Consequently, the 2004 GPEIR stated that there would be no contributions to cumulative Mather Field aircraft noise levels or to the number of non-county residents exposed to aircraft as a result of approval of the 2004 General Plan.

Project Impacts

No specific development projects are being proposed as part of the project. However, the TGPA will encourage higher density development within high-density residential and mixed use developments in community regions and rural communities, as well as infill locations. In addition, the project would expand the allowable uses in Agricultural, Rural Lands, and Resource Zones to include health resort and retreat centers, agricultural and timber resource lodging, and ranch marketing that could include outdoor entertainment and concerts. The project would also allow expanded uses in Recreational Zones including large amusement complexes and outdoor entertainment.

Considered together with the Cumulative Projects, it is possible that there would be a cumulatively considerable increase in noise on U.S. Highway 50, White Rock Road, and other roads serving the Cumulative Projects. While the General Plan includes policies to mitigate noise increases associated with new transportation projects, it remains true that impacts associated with traffic may not be able to be fully reduced. Therefore, the cumulative impact of noise associated with new transportation projects that would be needed to serve the Cumulative Projects remains significant and unavoidable and the project's contribution will be substantial.

Regarding exposure to aircraft noise, while the project could increase the density of residential development in some areas and increase the number of residences that could be exposed to aircraft noise if those areas are in the vicinity of airports or airport flight paths, policies are in place that would not permit new development in those areas unless noise can be mitigated to a less-than-significant level[1]. Therefore, implementation of the project would not substantially contribute to any significant cumulative aircraft noise impacts from Mather Field air traffic.

[1] This includes General Plan Policy 6.5.1.8, which provides: "New development of noise sensitive land uses will not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources which exceed the levels specified in Table 6-1 unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in Table 6-1 [of the General Plan]." See also Policy 6.5.1.10 requiring consistency between residential projects and the airport land use compatibility plan.

5.1.9 Population and Housing

2004 General Plan EIR Conclusions

The 2004 General Plan EIR addressed cumulative impacts associated with population and housing as part of its discussion of cumulative impacts on land use. As stated in 2004 General Plan EIR Section 5.2.6, Land Use, buildout of the General Plan was deemed to have a potentially significant cumulative impact. Development since certification of the 2004 General Plan EIR make it a reasonable assumption that buildout of the 2004 General Plan would have significant and unavoidable impacts associated with population and housing in the county and region and induced growth along the Highway 50 corridor in particular.

Project Impacts

The project would not displace any housing or populations in the county or region. The project would have a marginal impact on where developers choose to accommodate demand for residential and non-residential development within different sub-areas of the county over the projection period. Overall, the project would result in a less-than-significant impact related to housing.

The Cumulative Projects would cause a substantial increase in population in the area. If these projects are approved, the General Plan and zoning designations that do not currently allow commercial and residential uses would be changed to allow for these uses. The approved Folsom South of Highway 50 project includes from 11,340 to 14, 630 new residential units and 305 acres of commercial/office development in an area that is currently undeveloped. This will substantially increase the population of the City of Folsom and extend existing infrastructure to serve a new area. Infrastructure that would induce population growth, including recreational facilities, roads, and public utilities, would be constructed as part of the Cumulative Projects.

The project would not substantially change the population projections under the existing General Plan. Since the 2004 General Plan EIR found that the General Plan would indirectly induce population growth and that impacts would be significant, with no mitigation identified to reduce the impacts to a less-than-significant level, the project's impacts related to population would be the same as assessed in the 2004 General Plan EIR. Consequently, the project's contribution to the cumulative impact on population and housing would be significant and unavoidable.

5.1.10 Transportation and Traffic

2004 General Plan EIR Conclusions

The 2004 General Plan EIR states that regional growth patterns affected traffic and circulation in El Dorado County and that planned growth in the county resulting from buildout of the General Plan would affect the regional road network, including the Highway 50 corridor. Jobs created in El Dorado County would result in employees commuting from Sacramento and Placer Counties. Similarly, housing opportunities in western El Dorado County resulting from General Plan implementation would increase peak-hour trips into Sacramento, Rancho Cordova, Folsom, and other areas of Sacramento County where jobs are concentrated. The 2004 General Plan EIR determined that General Plan impacts would cause a considerable contribution to significant regional traffic impacts and that much of the cumulative traffic impact outside of El Dorado County would occur in Sacramento County as a result of the increased commute traffic along the Highway

50 corridor. While mitigation measures in the 2004 General Plan EIR minimized El Dorado County's contribution to cumulative traffic impacts, the measures could not reduce the impacts to less-than-significant levels. Consequently, cumulative regional traffic impacts associated with the 2004 General Plan were considered significant and unavoidable.

Project Impacts

The project would neither substantially change the land use patterns set out in the current General Plan, nor does it propose any site-specific development projects that would generate traffic. As a result, the project impacts are not clearly distinguishable from the overall impacts of future development pursuant to the current 2004 General Plan. Impacts from individual projects resulting from future proposals for ranch marketing, home occupations, and similar expanded uses under the ZOU would be localized and not likely to have an individual effect on overall traffic levels on the County and state road systems. Therefore, impacts associated with the project are almost fully the result of future development that could occur under the current General Plan. However, the project would result in ~~an~~a cumulatively considerable incremental increase in traffic generation due to the TGPA's increase in density for mixed use projects and the expanded range of uses that can be considered under the ZOU.

The Cumulative Projects represent a major increase in the level of development west of Placerville that would generate traffic on U.S. Highway 50, White Rock Road, and other roads serving the Cumulative Projects. Although the County is under no obligation to approve any of these projects, particularly if it finds that they would result in unmitigated LOS F conditions on U.S. Highway 50, for purposes of this analysis they are assumed to be built, and this analysis assumes their presence in the future[2]. This will result in a substantial increase in traffic on U.S. Highway 50 and on connecting roads. New residential, commercial, recreation, and public-utility oriented uses would lead to new trips from a variety of areas, including regional trips from workers in Sacramento commuting to new homes in western El Dorado County and local trips of new residents commuting to nearby services within El Dorado County. The Folsom South of Highway 50 project would be expected to generate even greater volumes of traffic, increasing current traffic levels on U.S. Highway 50 and White Rock Road. The future Southeast Connector project, expanding White Rock Road to link Elk Grove and El Dorado Hills with an expressway and the associated Latrobe Road connector, will take some of this project's traffic off of U.S. Highway 50 when it is completed, as will the Easton Valley Parkway, which will provide east-west circulation within this project.

Nonetheless, the Cumulative Projects are projected to result in significant cumulative impacts on U.S. Highway 50 and several major county roads. Together, the Cumulative Projects would cause a cumulatively significant impact on several segments of U.S. Highway 50 between its Ponderosa Road interchange and the Sacramento County line. In addition, traffic volumes are projected to be cumulatively significant on segments of Cameron Park Drive, El Dorado Hills Boulevard, Green Valley Road, Missouri Flat Road, Pleasant Valley Road, and South Shingle Road. The roadway segments exceeding the thresholds of significance under cumulative conditions are shown in Table 5-2.

[2] As mentioned earlier, this is in keeping with CEQA's approach to cumulative impact analysis and does not presuppose the County's approval of any of the Cumulative Projects located within the County.

Table 5-2. Cumulative Significant Impacts on El Dorado County Roadway Segments

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
5	US50 – EB GP	W of Bass Lake	2FA	3,090	5,860	C	F	3,090	5,850	C	F
9	US50 – EB GP	W of Cameron Park	2FA	2,920	4,650	C	E	2,910	4,640	C	E
10	US50 – WB GP	W of Cameron Park	2F	3,920	3,800	E	E	3,920	3,780	E	E
14	US50 – WB GP	W of Ponderosa	2F	3,660	3,750	E	E	3,670	3,740	E	E
32	Cameron Park Dr	200 ft N of Oxford Rd	2A	1,600	2,070	E	F	1,590	2,060	E	F
38	El Dorado Hills Blvd	300 ft S of Francisco Dr	2A	1,250	1,610	D	E	1,250	1,610	D	E
47	Missouri Flat Rd	100 ft S of China Garden Rd	2A	1,160	1,640	D	E	1,150	1,630	D	E
49	Missouri Flat Rd	400 yds N of Forni Rd	4AD	2,970	4,010	D	F	2,980	3,990	D	F
55	South Shingle Rd	100 ft S of Mother Lode Dr	2A	1,240	1,870	D	F	1,260	1,870	D	F
57	Cameron Park Dr	100 ft N of Coach Ln	4AD	2,410	3,780	D	F	2,420	3,760	D	F
58	Cameron Park Dr	200 yds N of Mira Loma Dr	2A	1,240	1,640	D	E	1,230	1,640	D	E
154	Green Valley Rd	300 ft W of Cameron Park Dr	2A	1,400	1,570	D	E	1,400	1,570	D	E
196	Pleasant Valley Rd	200 yds E of SR 49 (E)	2A	1,270	1,620	D	E	1,280	1,620	D	E

The severity of the cumulative impacts on U.S. Highway 50 and the county roads are ~~is~~ sufficient that even small projects would result in cumulatively considerable contributions. The project would contribute to this cumulatively significant impact. Similar to the conclusion reached in the 2004 General Plan EIR analysis, while mitigation measures would ~~minimize~~reduce El Dorado County's contribution to cumulative traffic impacts, the project's contribution would be considerable and cumulative regional traffic impacts would remain significant and unavoidable.

Traffic impacts for U.S. Highway 50 and major county roads under cumulative conditions are summarized in Table 5-3 (this includes the roads listed in Table 5-2). The incremental difference between cumulative TGPA/ZOU ("Super Cumulative Plus Project) traffic is not distinguishable from the cumulative impact without approval of the TGPA/ZOU ("Super Cumulative No Project"). Nonetheless, future development under the General Plan as amended by the TGPA and implemented by the ZOU will make a considerable contribution to the cumulative significant impact on traffic.

Table 5-3. Cumulative Traffic Impacts

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	US50 – EB GP	w/o latrobe	2FA	2,780	4,440	C	D	2,790	4,450	C	D
2	US50 – WB GP	w/o latrobe	3FA	3,260	2,790	B	B	3,250	2,760	B	B
3	US50 – EB HOV	w/o latrobe		800	1,240	–	–	790	1,260	–	–
4	US50 – WB HOV	w/o latrobe		1,320	1,260	–	–	1,290	1,270	–	–
	US50 – EB GP	W of Silva Valley Pkwy	3FA	2,780	4,850	B	C	2,780	4,810	B	C
	US50 – WB GP	W of Silva Valley Pkwy	3FA	3,610	3,200	B	B	3,600	3,190	B	B
	US50 – EB HOV (future)	W of Silva Valley Pkwy		430	1,020	–	–	430	1,030	–	–
	US50 – WB HOV (future)	W of Silva Valley Pkwy		990	750	–	–	970	750	–	–
5	US50 – EB GP	W of Bass Lake	2FA	3,090	5,860	C	F	3,090	5,850	C	F
6	US50 – WB GP	W of Bass Lake	2FA	3,320	3,050	C	C	3,370	3,020	C	C
7	US50 – EB HOV (future)	W of Bass Lake		520	1,060	–	–	510	1,070	–	–
8	US50 – WB HOV (future)	W of Bass Lake		760	780	–	–	750	780	–	–
	US50 – EB GP	W of Cambridge Rd	2FA	1,860	3,520	B	C	1,870	3,510	B	C
	US50 – WB GP	W of Cambridge Rd	2FA	2,090	2,410	B	B	2,110	2,390	B	B
	US50 – EB HOV (future)	W of Cambridge Rd		370	840	–	–	360	850	–	–
	US50 – WB HOV (future)	W of Cambridge Rd		470	610	–	–	470	610	–	–
9	US50 – EB GP	W of Cameron Park	2FA	2,920	4,650	C	E	2,910	4,640	C	E
10	US50 – WB GP	W of Cameron Park	2F	3,920	3,800	E	E	3,920	3,780	E	E
11	US50 – EB HOV (future)	W of Cameron Park		490	820	–	–	480	830	–	–
12	US50 – WB HOV (future)	W of Cameron Park		640	750	–	–	630	750	–	–
13	US50 – EB GP	W of Ponderosa	2FA	2,760	3,750	C	D	2,760	3,740	C	D

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
14	US50 – WB GP	W of Ponderosa	2F	3,660	3,750	E	E	3,670	3,740	E	E
15	US50 – EB HOV (future)	W of Ponderosa	-	470	660	–	–	460	670	–	–
16	US50 – WB HOV (future)	W of Ponderosa	-	570	710	–	–	560	710	–	–
17	US50 – EB GP	W of Shingle Springs	2F	2,200	3,310	C	D	2,200	3,310	C	D
18	US50 – WB GP	W of Shingle Springs	2F	2,600	2,780	C	C	2,630	2,770	C	C
19	US50 – EB HOV (future)	W of Shingle Springs	-	320	510	–	–	310	510	–	–
20	US50 – WB HOV (future)	W of Shingle Springs	-	380	470	–	–	370	470	–	–
21	US50 – EB GP	W of Greenstone	2F	2,000	2,780	B	C	2,000	2,780	B	C
22	US50 – WB GP	W of Greenstone	2F	2,300	2,480	C	C	2,320	2,480	C	C
23	US50 – EB HOV (future)	W of Greenstone	-	280	450	–	–	280	450	–	–
24	US50 – WB HOV (future)	W of Greenstone	-	340	410	–	–	340	410	–	–
25	US50 – EB GP	Greenstone	2F	2,370	3,180	C	D	2,360	3,180	C	D
26	US50 – WB GP	Greenstone	2F	2,440	2,780	C	C	2,450	2,770	C	C
27	US50 – EB GP	Missouri Flat	2F	2,170	2,840	C	C	2,160	2,840	C	C
28	US50 – WB GP	Missouri Flat	2F	2,290	2,590	C	C	2,300	2,590	C	C
29	US50 – EB GP	W of Placerville	2F	1,660	2,540	B	C	1,660	2,520	B	C
30	US50 – WB GP	W of Placerville	2F	1,790	2,050	B	B	1,790	2,040	B	B
31	Cameron Park Dr	300 yds S of Hacienda Dr	4AD	1,650	2,120	C	D	1,650	2,110	C	D
32	Cameron Park Dr	200 ft N of Oxford Rd	2A	1,600	2,070	E	F	1,590	2,060	E	F
33	El Dorado Hills Blvd	200 ft S of Saratoga Way	6AD	2,620	3,370	C	D	2,670	3,340	C	D
34	El Dorado Hills Blvd	100 ft S of Wilson Blvd	4AD	2,970	2,950	D	D	2,970	2,950	D	D

ID	Roadway	Segment	Class – Super Cumulative	Super Cumulative No Project Volume AM Peak Hour	Super Cumulative No Project Volume PM Peak Hour	Super Cumulative No Project 2010 Method LOS AM Peak Hour	Super Cumulative No Project 2010 Method LOS PM Peak Hour	Super Cumulative Plus Project Volume AM Peak Hour	Super Cumulative Plus Project Volume PM Peak Hour	Super Cumulative Plus Project 2010 Method LOS AM Peak Hour	Super Cumulative Plus Project 2010 Method LOS PM Peak Hour
35	El Dorado Hills Blvd	100 ft S of Olson Ln	4AD	2,680	2,600	D	D	2,680	2,600	D	D
36	El Dorado Hills Blvd	10 ft N of Olson Ln	4AD	2,360	2,120	D	D	2,350	2,120	D	D
37	El Dorado Hills Blvd	100 ft N of Harvard Way	4AD	1,550	2,060	C	D	1,540	2,060	C	D
38	El Dorado Hills Blvd	300 ft S of Francisco Dr	2A	1,250	1,610	D	E	1,250	1,610	D	E
39	El Dorado Hills Blvd	100 ft S of Green Valley Rd	2A	610	620	C	C	610	620	C	C
40	Francisco Dr	200 ft S of Green Valley Rd	2A	1,100	1,460	D	D	1,100	1,470	D	D
41	Green Valley Rd	200 ft W of Mormon Island Dr	4AD	1,890	2,870	D	D	1,890	2,870	D	D
42	Green Valley Rd	200 ft E of Mormon Island Dr	4AD	1,880	2,840	D	D	1,880	2,840	D	D
43	Green Valley Rd	200 ft E of Francisco Dr	4AD	1,550	2,500	C	D	1,550	2,500	C	D
44	Green Valley Rd	100 ft W of El Dorado Hills Blvd	4AU	1,550	2,500	C	D	1,550	2,500	C	D
45	Latrobe Rd	300 ft N of White Rock Rd	6AD	3,320	3,250	D	D	3,260	3,240	D	D
46	Missouri Flat Rd	100 ft N of SR 49	2A	770	1,020	C	D	760	1,010	C	D
47	Missouri Flat Rd	100 ft S of China Garden Rd	2A	1,160	1,640	D	E	1,150	1,630	D	E
48	Missouri Flat Rd	S of Forni Rd	4AD	2,030	2,690	D	D	2,040	2,690	D	D
49	Missouri Flat Rd	400 yds N of Forni Rd	4AD	2,970	4,010	D	F	2,980	3,990	D	F

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
50	Missouri Flat Rd	100 ft S of Plaza Dr	4AD	1,790	2,590	C	D	1,790	2,580	C	D
51	Missouri Flat Rd	100 ft N of Plaza Dr	4AD	1,030	1,310	C	C	1,030	1,300	C	C
52	Missouri Flat Rd	300 ft S of El Dorado Rd	2A	820	1,090	C	D	820	1,090	C	D
53	North Shingle Rd	400 yds E of Ponderosa Rd	2A	900	1,190	D	D	890	1,190	D	D
54	North Shingle Rd	100 ft S of Green Valley Rd	W22	620	820	C	D	620	830	C	D
55	South Shingle Rd	100 ft S of Mother Lode Dr	2A	1,240	1,870	D	F	1,260	1,870	D	F
56	Cameron Park Dr	100 ft N of Robin Ln	2A	640	870	C	D	650	870	C	D
57	Cameron Park Dr	100 ft N of Coach Ln	4AD	2,410	3,780	D	F	2,420	3,760	D	F
58	Cameron Park Dr	200 yds N of Mira Loma Dr	2A	1,240	1,640	D	E	1,230	1,640	D	E
59	Cameron Park Dr	200 yds S of Green Valley Rd	2A	900	1,080	D	D	890	1,080	D	D
60	Country Club Dr	0.1 mi E of Merrychase Dr	2A	600	570	C	C	630	560	C	C
61	Durock Rd	50 ft S of Robin Ln	2A	840	1,130	C	D	840	1,130	C	D
[redacted]	Latrobe Rd Connection	South of White Rock Road	4AD	1,830	1,900	C	D	1,850	1,900	C	D
62	Palmer Dr	100 ft E of Cameron Park Dr	2A	860	1,300	D	D	860	1,300	D	D
[redacted]	Saratoga Way	West of El Dorado Hills Blvd	4AD	1,410	1,790	C	C	1,430	1,790	C	C
63	Serrano Pkwy	450 ft E of Silva Valley Pkwy	4AD	1,390	1,310	C	C	1,400	1,290	C	C
64	Silva Valley Pkwy	100 ft S of Serrano Pkwy	4AD	2,090	2,060	D	D	2,110	2,050	D	D

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
65	Silva Valley Pkwy	100 ft N of Serrano Pkwy	4AD	2,340	2,250	D	D	2,350	2,260	D	D
66	Silva Valley Pkwy	100 ft S of Harvard Way	4AD	1,830	1,900	C	D	1,840	1,910	C	D
67	Silva Valley Pkwy	100 ft N of Harvard Way	2A	1,520	1,450	D	D	1,520	1,450	D	D
68	Silva Valley Pkwy	100 ft S of Green Valley Rd	2A	900	1,070	D	D	900	1,060	D	D
69	Sophia Pkwy	200 ft S of Green Valley Rd	2A	430	740	C	C	440	730	C	C
70	White Rock Rd	100 ft E of Latrobe Rd	6AD	1,250	2,420	C	C	1,330	2,420	C	C
71	Barkley Rd	50 ft N of Carson Rd	2A	90	130	C	C	90	130	C	C
72	Bedford Av	At City Limits	2A	50	60	C	C	50	60	C	C
73	Big Cut Rd	100 ft N of Pleasant Valley Rd	W18	230	310	B	B	230	310	B	B
74	Bucks Bar Rd	50 ft S of Pleasant Valley Rd	W20	480	530	C	C	480	530	C	C
75	Bucks Bar Rd	300 ft N of Mt Aukum Rd	W18	400	430	C	C	400	430	C	C
76	China Garden Rd	150 ft N of SR 49	2A	120	150	C	C	120	150	C	C
77	China Garden Rd	200 yds E of Missouri Flat Rd	2A	90	250	C	C	110	290	C	C
78	El Dorado Rd	200 yds N of Pleasant Valley Rd	W22	370	440	B	C	380	450	C	C
79	Enterprise Dr	100 ft E of Forni Rd	2A	260	370	C	C	260	370	C	C
80	Fairplay Rd	100 ft S of Mt Aukum Rd	W20	190	230	B	B	190	230	B	B
81	Forebay Rd	100 ft N of Pony Express Tr	2A	150	220	C	C	150	220	C	C
82	Forni Rd	200 ft N of SR 49	2A	580	690	C	C	580	690	C	C
83	Forni Rd	300 ft W of Missouri Flat Rd	2A	530	910	C	D	520	910	C	D

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
84	Forni Rd	30 ft W of Arroyo Vista Way	2A	120	200	C	C	130	200	C	C
85	Forni Rd	W of P–ville Dr @ City Limits	W20	250	260	B	B	250	260	B	B
86	French Creek Rd	300 ft S of Mother Lode Dr	2A	230	230	C	C	220	230	C	C
87	Garden Valley Rd	300 ft N of SR 193	W20	60	60	B	B	60	60	B	B
88	Garden Valley Rd	0.45 mi S of Marshall Rd	W20	150	130	B	B	150	130	B	B
89	Greenwood Rd	100 ft W of Marshall Rd	2A	130	180	C	C	130	180	C	C
90	Greenwood Rd	0.03 mi S of SR 193	2A	60	90	C	C	60	90	C	C
91	Harvard Way	0.15 mi E of El Dorado Hills Blvd	4AU	1,240	1,230	C	C	1,240	1,220	C	C
92	Harvard Way	200 ft W of Silva Valley Pkwy	4AU	1,250	1,100	C	C	1,250	1,100	C	C
93	Icehouse Rd	300 ft N of US 50	2A	80	130	C	C	80	130	C	C
94	Lime Kiln Rd	100 ft E of China Garden Rd	2A	30	140	C	C	40	170	C	C
95	Meder Rd	300 ft E of Cameron Park Dr	W22	940	1,140	D	D	940	1,140	D	D
96	Meder Rd	200 yds W of Ponderosa Rd	W22	610	690	C	C	610	690	C	C
97	Mosquito Rd	300 ft S of Union Ridge Rd	2A	340	390	C	C	340	390	C	C
98	Mosquito Rd	At American River Br	W18	150	170	B	B	150	170	B	B
99	Newtown Rd	200 yds N of Pleasant Valley Rd	2A	290	340	C	C	290	340	C	C
100	Oak Hill Rd	300 ft S of Pleasant Valley Rd	2A	150	190	C	C	150	190	C	C
101	Patterson Dr	200 ft S of Pleasant Valley Rd	2A	460	630	C	C	480	650	C	C

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
102	Ponderosa Rd	100 ft N of Meder Rd	W20	150	150	B	B	140	150	B	B
103	Ponderosa Rd	100 ft S of Green Valley Rd	W20	110	110	B	B	110	110	B	B
104	Rock Creek Rd	100 ft E of SR 193	2A	20	20	C	C	20	20	C	C
105	Sand Ridge Rd	100 ft W of Bucks Bar Rd	2A	120	130	C	C	120	130	C	C
106	Serrano Pkwy	250 ft W of Silva Valley Pkwy	4AD	520	410	C	C	520	420	C	C
107	Sliger Mine Rd	50 ft N of SR 193	2A	60	90	C	C	60	90	C	C
108	Snows Rd	400 ft N of Newtown Rd	2A	100	120	C	C	100	120	C	C
109	Snows Rd	200 ft S of Carson Rd	2A	330	310	C	C	330	310	C	C
110	South Shingle Rd	0.5 mi E of Latrobe Rd	W18	200	210	B	B	200	200	B	B
111	South Shingle Rd	100 ft N of Barnett Ranch Rd	W20	270	350	B	B	270	350	B	B
112	Starbuck Rd	110 ft N of Green Valley Rd	2A	160	220	C	C	150	210	C	C
113	Union Ridge Rd	100 ft W of Hassler Rd	2A	80	90	C	C	80	90	C	C
114	Wentworth Springs Rd	100 ft W of Quintette Rd	2A	50	70	C	C	50	70	C	C
115	White Rock Rd	100 ft S of Silva Valley Pkwy	6AD	1,900	2,460	C	C	1,960	2,460	C	C
116	Bass Lake Rd	400 yd N of Country Club Dr	4AD	2,020	2,350	D	D	2,020	2,350	D	D
117	Bass Lake Rd	100 yd S of Green Valley Rd	2A	710	720	C	C	720	710	C	C
118	Bassi Rd	200 ft W of Lotus Rd	2A	90	120	C	C	90	120	C	C
119	Broadway	At City Limits	2A	380	460	C	C	380	460	C	C
120	Cambridge Rd	At US 50 OC	4AD	1,780	2,270	C	D	1,790	2,270	C	D
121	Cambridge Rd	300 ft S of Country Club Dr.	2A	640	990	C	D	620	990	C	D

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
122	Cambridge Rd	100 ft N of Country Club Dr	2A	890	1,270	D	D	900	1,260	D	D
123	Cambridge Rd	300 yds N of Oxford Rd	2A	530	820	C	C	540	830	C	C
124	Cambridge Rd	300 ft S of Green Valley Rd	2A	720	930	C	D	730	930	C	D
125	Carson Rd	0.6 Mi E of City Limits	2A	200	290	C	C	210	300	C	C
126	Carson Rd	300 yds E of Gatlin Rd	2A	110	170	C	C	110	170	C	C
127	Carson Rd	At Carson Ct	2A	110	210	C	C	110	210	C	C
128	Carson Rd	100 ft W of Barkley Rd	2A	310	440	C	C	310	440	C	C
129	Carson Rd	100 ft E of Ponderosa Way	2A	180	230	C	C	180	230	C	C
130	Cedar Ravine Rd	0.1 Mi N of Pleasant Valley Rd	2A	340	400	C	C	340	400	C	C
131	Cedar Ravine Rd	0.25 Mi S of Country Club Dr	2A	360	400	C	C	360	400	C	C
132	Cold Springs Rd	At City Limits	2A	410	510	C	C	410	510	C	C
133	Cold Springs Rd	300 yds S of Gold Hill Rd	2A	250	380	C	C	250	370	C	C
134	Cold Springs Rd	100 ft S of SR 153	2A	180	270	C	C	180	260	C	C
[redacted]	Country Club Dr	West of Bass Lake Road	2A	970	980	D	D	950	970	D	D
135	Country Club Dr	0.4 mi E of Bass Lake Rd	2A	890	950	D	D	900	940	D	D
136	Country Club Dr	0.15 mi W of Knollwood Dr	2A	970	820	D	C	1,010	810	D	C
137	Country Club Dr	300 yds E of Cambridge Rd	2A	210	290	C	C	220	280	C	C
138	Country Club Dr	0.2 mi W of Cameron Park Dr	2A	210	390	C	C	220	380	C	C
139	Durock Rd	50 ft W of S Shingle Rd	2A	810	1,100	C	D	810	1,100	C	D
140	El Dorado Rd	0.2 mi S of US 50	2A	640	810	C	C	640	820	C	C

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
141	El Dorado Rd	0.11 N of US 50	2A	420	630	C	C	420	630	C	C
142	El Dorado Rd	50 ft N of Missouri Flat Rd	2A	250	430	C	C	250	440	C	C
143	Francisco Dr	200 ft N of Green Valley Rd	4AD	1,160	1,670	C	C	1,170	1,680	C	C
144	Francisco Dr	100 ft S of Sheffield Dr	2A	190	230	C	C	190	230	C	C
145	Francisco Dr	300 yds N of Sheffield Dr	2A	90	110	C	C	90	110	C	C
146	Gold Hill Rd	100 ft E of Lotus Rd	2A	280	210	C	C	280	210	C	C
147	Gold Hill Rd	200 ft W of Cold Springs Rd	2A	270	210	C	C	270	210	C	C
148	Gold Hill Rd	100 yds E of Cold Springs Rd	2A	70	70	C	C	80	70	C	C
149	Green Valley Rd	200 ft W of Sophia Pkwy	4AU	1,710	2,200	C	D	1,710	2,200	C	D
150	Green Valley Rd	200 ft E of Sophia Pkwy	4AU	1,740	2,750	C	D	1,750	2,750	C	D
151	Green Valley Rd	200 ft E of County Line	4AU	1,710	2,200	C	D	1,710	2,200	C	D
152	Green Valley Rd	300 ft W of Silva Valley Pkwy	4AU	1,750	2,100	C	D	1,750	2,070	C	D
153	Green Valley Rd	200 ft W of Bass Lake Rd	2A	1,420	1,320	D	D	1,410	1,320	D	D
154	Green Valley Rd	300 ft W of Cameron Park Dr	2A	1,400	1,570	D	E	1,400	1,570	D	E
155	Green Valley Rd	300 ft E of La Crescenta Dr	2A	870	960	D	D	870	960	D	D
156	Green Valley Rd	500 ft E of Deer Valley Rd (E)	2A	440	560	C	C	450	550	C	C
157	Green Valley Rd	300 ft W of Lotus Rd	2A	930	1,160	D	D	930	1,160	D	D
158	Green Valley Rd	100 ft W of Greenstone Rd	2A	500	660	C	C	500	660	C	C

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
159	Green Valley Rd	400 ft W of Campus Dr	2A	520	710	C	C	520	710	C	C
160	Green Valley Rd	200 ft W of Missouri Flat Rd	2A	870	1,050	D	D	870	1,050	D	D
161	Green Valley Rd	100 ft W of Weber Creek Br	2A	270	470	C	C	270	480	C	C
162	Greenstone Rd	300 ft N of Mother Lode Dr	2A	160	210	C	C	160	210	C	C
163	Greenstone Rd	0.20 mi N of US 50	2A	400	540	C	C	390	540	C	C
164	Grizzly Flat Rd	200 yds E of Mt Aukum Rd	2A	210	260	C	C	210	260	C	C
165	Lake Hills Dr	100 ft N of Salmon Falls Rd	2A	290	310	C	C	280	320	C	C
166	Latrobe Rd	250 ft N of County Line	2A	730	820	C	C	730	820	C	C
167	Latrobe Rd	1.5 mi N of S Shingle Rd	2A	740	830	C	C	740	830	C	C
168	Latrobe Rd	At Deer Creek Bridge	2A	820	910	C	D	820	910	C	D
169	Latrobe Rd	100 ft S of Investment Blvd	2A	920	1,000	D	D	920	1,000	D	D
170	Latrobe Rd	100 ft N of Investment Blvd	4AD	1,190	1,250	C	C	1,170	1,310	C	C
171	Latrobe Rd	100 ft N of Golden Foothill Pw	6AD	2,470	2,550	C	C	2,440	2,530	C	C
172	Lotus Rd	300 ft N of Green Valley Rd	2A	1,000	1,300	D	D	1,000	1,300	D	D
173	Lotus Rd	300 ft S of Thompson Hill Rd	2A	500	710	C	C	500	710	C	C
174	Lotus Rd	0.25 mi S of SR 49	2A	450	730	C	C	450	730	C	C
175	Luneman Rd	100 ft W of Lotus Rd	2A	300	240	C	C	300	240	C	C
176	Marshall Rd	200 yds E of SR 49	2A	350	430	C	C	350	430	C	C
177	Marshall Rd	300 ft E of Garden Valley Rd	2A	540	520	C	C	540	520	C	C

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
178	Marshall Rd	300 yds S of Lower Main St	2A	90	120	C	C	90	120	C	C
179	Missouri Flat Rd	300 ft N of El Dorado Rd	2A	830	870	C	D	830	870	C	D
180	Mormon Emigrant Tr	100 ft E of Sly Park Rd	2A	130	190	C	C	130	190	C	C
181	Mosquito Rd	At City Limits	2A	520	650	C	C	520	650	C	C
182	Mother Lode Dr	200 ft W of Sunset Ln	2A	1,280	1,460	D	D	1,260	1,450	D	D
183	Mother Lode Dr	400 yds W of Pleasant Valley Rd	2A	1,050	1,380	D	D	1,060	1,390	D	D
184	Mother Lode Dr	0.43 mi E of Pleasant Valley Rd	2A	360	500	C	C	360	500	C	C
185	Mt Aukum Rd	0.25 mi N of County Line	2A	130	170	C	C	130	170	C	C
186	Mt Aukum Rd	300 ft S of Bucks Bar Rd	2A	390	430	C	C	390	430	C	C
187	Mt Aukum Rd	300 ft S of Pleasant Valley Rd	2A	270	380	C	C	270	380	C	C
188	Mt Murphy Rd	50 ft S of Marshall Rd	2A	130	160	C	C	130	160	C	C
189	Mt Murphy Rd	200 yds N of SR 49	2A	80	120	C	C	80	120	C	C
190	Newtown Rd	200 yds N of Pioneer Hill Rd	2A	220	280	C	C	220	280	C	C
191	Newtown Rd	100 ft E of Broadway	2A	310	390	C	C	310	390	C	C
192	Old Frenchtown Rd	400 yds S of Mother Lode Dr	2A	190	230	C	C	190	230	C	C
193	Omo Ranch Rd	100 ft E of Mt Aukum Rd	2A	70	90	C	C	70	90	C	C
194	Oxford Rd	50 ft E of Salida Way	2A	820	1,150	C	D	820	1,150	C	D
195	Pleasant Valley Rd	200 yds E of Mother Lode Dr	2A	790	1,030	C	D	800	1,040	C	D
196	Pleasant Valley Rd	200 yds E of SR 49 (E)	2A	1,270	1,620	D	E	1,280	1,620	D	E

				Super Cumulative No Project				Super Cumulative Plus Project			
				Volume		2010 Method LOS		Volume		2010 Method LOS	
ID	Roadway	Segment	Class – Super Cumulative	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
197	Pleasant Valley Rd	300 ft W of Oak Hill Rd	2A	970	1,150	D	D	970	1,150	D	D
198	Pleasant Valley Rd	100 ft E of Cedar Ravine Rd	2A	1,080	1,180	D	D	1,080	1,180	D	D
199	Pleasant Valley Rd	0.10 mi E of Bucks Bar Rd	2A	710	660	C	C	710	660	C	C
200	Pleasant Valley Rd	0.40 mi E of Newtown Rd	2A	510	600	C	C	510	600	C	C
201	Ponderosa Rd	300 ft N of Wild Chaparral Dr	2A	920	870	D	D	920	870	D	D
202	Pony Express Tr	200 yds E of Carson Rd	2A	200	310	C	C	200	310	C	C
203	Pony Express Tr	300 ft E of Gilmore Rd	2A	340	530	C	C	340	530	C	C
204	Pony Express Tr	300 ft W of Forebay Rd	2A	380	570	C	C	380	570	C	C
205	Salmon Falls Rd	50 ft S of Malcolm–Dixon Rd	2A	660	700	C	C	660	700	C	C
206	Salmon Falls Rd	At New York Creek Bridge	2A	340	390	C	C	340	390	C	C
207	Salmon Falls Rd	400 yds S of Pedro Hill Rd	2A	220	290	C	C	220	290	C	C
208	Salmon Falls Rd	200 yds S of Rattlesnake Bar Rd	2A	140	170	C	C	140	170	C	C
209	Sand Ridge Rd	300 ft E of SR 49	2A	110	110	C	C	110	110	C	C
210	Serrano Pkwy	300 ft W of Bass Lake Rd	4AD	950	910	C	C	960	900	C	C
211	Shingle Springs Dr	0.20 mi S of US 50	2A	910	1,170	D	D	910	1,170	D	D
212	Sly Park Rd	0.35 mi E of Mt Aukum Rd	2A	300	370	C	C	300	370	C	C
213	Sly Park Rd	1.62 mi W of Mormon Emigrant Tr	W18	200	260	B	B	200	260	B	B

ID	Roadway	Segment	Class – Super Cumulative	Super Cumulative No Project Volume AM Peak Hour	Super Cumulative No Project Volume PM Peak Hour	Super Cumulative No Project 2010 Method LOS AM Peak Hour	Super Cumulative No Project 2010 Method LOS PM Peak Hour	Super Cumulative Plus Project Volume AM Peak Hour	Super Cumulative Plus Project Volume PM Peak Hour	Super Cumulative Plus Project 2010 Method LOS AM Peak Hour	Super Cumulative Plus Project 2010 Method LOS PM Peak Hour
214	Sly Park Rd	0.35 mi E of Mormon Emigrant Tr	2A	370	480	C	C	370	480	C	C
215	Sly Park Rd	100 ft S of Gold Ridge Tr (N)	2A	440	500	C	C	440	500	C	C
216	Sly Park Rd	100 ft S of Pony Express Tr	2A	650	820	C	C	650	820	C	C
217	South Shingle Rd	100 ft S of Sunset Ln	W20	650	900	C	D	660	900	C	D
218	SR49	North of China Hill	2A	630	780	C	C	630	780	C	C
219	SR49	West of Missouri Flat Rd	2A	950	1,030	D	D	960	1,040	D	D
220	SR49	West of Hastings Creed Rd	2A	390	510	C	C	390	510	C	C
221	SR49	At the Placer County Line	2A	860	1,070	D	D	860	1,070	D	D
222	SR 193	West of American River Road	2A	570	740	C	C	570	740	C	C
223	SR 193	North of SR 49 in Placerville	2A	210	230	C	C	210	230	C	C
224	Union Mine Rd	200 yds S of SR 49	2A	320	190	C	C	320	190	C	C
225	Wentworth Springs Rd	0.7 mi E of Main St	2A	190	260	C	C	190	260	C	C
226	White Rock Rd	At County Line	4AD	1,410	2,570	C	D	1,460	2,580	C	D
227	White Rock Rd	100 ft W of Latrobe Rd	4AD	1,490	2,480	C	D	1,530	2,500	C	D

5.1.11 Water Supply

Surface Water

The availability of domestic water to serve future development has been a concern in El Dorado County for decades. Most of this concern has been focused on the fastest growing areas of the County, particularly those served by EID. These are the areas in which the lands with most of the potential for future development under the General Plan are located. The 2004 General Plan EIR identified water supply impacts as a significant, unavoidable impact of future development pursuant to the General Plan. That continues to be the case within the Georgetown Divide PUD (GDPUD) and Grizzly Flats CSD (GFCSD). However, that is no longer the case within EID during the 2035 planning horizon of the General Plan, based on the demand created by future development under the existing General Plan.

California is ~~entering into the second~~in its third year of drought. As discussed in Chapter 3.10, *Water Supply*, the county's water supply districts have adopted contingency plans for dry years, which result in substantial reductions in water use and extend available supplies.

The EID Board of Directors approved Water Supply Assessments (WSAs) for Central El Dorado Hills Specific Plan, Dixon Ranch Development, Lime Rock Valley Specific Plan, and Village of Marble Valley Specific Plan on August 26, 2013. Consistent with the requirements of SB 610 (California Water Code Section 10910), the WSAs examine the water agency's capacity to supply these developments with water in normal and dry years, considering foreseeable future development, over a 20-year period. The period covers anticipated water demands through 2035. These WSAs constitute a cumulative impact analysis of EID's water supply taking into account both the development proposed under the General Plan and estimated demand of these four large-scale proposed projects. As of this writing, no WSA has been prepared for the San Stino project, so, although that project would contribute to cumulative water supply impacts, that impact has not been quantified. The Folsom South of Highway 50 area is not dependent upon water from El Dorado County and therefore is not a contributor to cumulative impacts on water supply.

The WSA ~~assessment~~ also serves as the cumulative impact analysis of the water supply on which the project (i.e., TGPA and ZOU) proposal will depend. As noted elsewhere, the project does not include substantial changes in the land use intensity or extent described in the 2004 General Plan. Therefore, its contribution to total water demand is essentially the same as that projected in the 2004 General Plan. EID based its total water demand calculations in the WSAs on development planned under the 2004 General Plan, projected growth rate (estimated to be somewhat higher than the county's accepted rate), and the specific demands of the four proposed projects. The projections of the proposed sites' water demands under the existing 2004 General Plan designations were subtracted from the total cumulative water demand to avoid double-counting the water demand from the four proposed sites.

Table 5-~~4~~2 summarizes the total water cumulative demand and supply within EID to the year 2035, taken from EID's WSAs. EID has calculated demand based on its most recent baseline for annual customer use, considering water conservation efforts (assumed to reduce existing customer demand 2% by 2020 and an additional 1% by 2035), and with an additional 13% demand added to account for estimated system losses. This methodology and base data is somewhat different than what EID

has used for overall demand and supply estimates in its UWMP and IWRMP. As a result, the supply estimate in Table 5-42 differs somewhat from that in Table 3.10-2 in the preceding water chapter.

The total water supply projection has been based on EID's secured water assets and planned water assets. There are two planned water supplies that will be available from the El Dorado County Water Agency: 30,000 AFY under the El Dorado-SMUD Cooperation agreement and 7,500 AFY of water from Folsom Reservoir under PL-101-514 ("Fazio water"). The former supply is expected in 2025, the latter supply will be available in 2015. The total water supply also includes recycled water from EID's treatment plants. Recycling will provide 2,400 AFY in 2015 and is expected to provide 5,600 AFY by 2035 (El Dorado Irrigation District 2013a).

Table 5-42. El Dorado Irrigation District Total Water Demand and Supply Projections to 2035, with Cumulative Projects except San Stino

Year	Total Water Demand (AFY)[1]	Water Year Type	Total Water Supply (AFY)	Projected Surplus/(Shortfall) (AFY)
2015	39,500	Normal	77,090	37,590
	41,475	Single Dry	69,685	28,210
	35,254	Third Dry	64,265	29,011
2020	42,937	Normal	77,290	34,353
	45,084	Single Dry	69,885	24,801
	38,321	Third Dry	64,465	26,144
2025	49,561	Normal	107,890	58,329
	52,039	Single Dry	75,485	23,446
	44,233	Third Dry	70,065	25,832
2030	57,874	Normal	108,790	50,916
	60,768	Single Dry	76,385	15,617
	51,652	Third Dry	70,965	19,313
2035	67,295	Normal	110,290	42,995
	70,660	Single Dry	77,885	7,225
	60,061	Third Dry	72,465	12,404

Source: El Dorado Irrigation District 2013c

[1] The first dry year total assumes that EID has not employed its staged drought response. The third dry year assumes that EID has implemented the necessary drought stage of water demand reduction.

AFY = acre-feet per year

As discussed in the staff report for Action Item No. 8 at the EID Board's August 26, 2013 meeting, EID anticipates that it will have sufficient water to support anticipated growth, including four of the five proposed projects, through 2035, including during multiple dry years. The estimated water demand of each of these four cumulative projects is described in Table 5-53. The annual water demand estimates for the cumulative projects are based on the anticipated demands of their component parts and their estimated rate of buildout. Table 5-1 illustrates that these projects vary in size, mix of residential densities, and types of other uses.

The WSAs' conclusion that there will not be a significant cumulative impact on water supply does not include the demand for the San Stino project and no WSA has been prepared for that cumulative

project. However, the San Stino project, consisting of 1,041 residential units, would be expected to have a water demand similar to that of Dixon Ranch (proposing 605 residential units and two parks) at 482 AFY in 2035; Central El Dorado Hills Specific Plan (proposing 1,028 residential units and 11 acres of commercial development) at 450 AFY in 2035; and Lime Rock Valley Specific Plan (800 residential units and a park) at 472 AFY in 2035. Using a conservative estimate of 500 AFY for San Stino, the cumulative impacts of these five projects would not result in a supply shortfall even in a third dry-year scenario. Therefore, because sufficient water is expected to be available to meet future demand within EID's service area to the year 2035, the project (i.e., the TGPA/ZOU) will not make a considerable contribution to the cumulative effect on water supply during that time frame.

However, as discussed in Chapter 3.10, *Water Supply*, EDCWA's *Water Resource Development and Management Plan 2014 Update* indicates that there will be insufficient water supplies to serve anticipated demand within EID, GDPUD, and GFCSD after 2035. ~~within EID's service area.~~

Table 5-5~~3~~. Water Demand for Four of the Cumulative Projects

	Annual Water Demand (AF)				
Project	2015	2020	2025	2030	2035
Central El Dorado Hills SP	14	160	400	466	450
Dixon Ranch	152	518	517	499	482
Lime Rock Valley SP	18	109	272	472	573
Village of Marble Valley SP	141	721	1,285	1,860	2,177

Source: El Dorado Irrigation District 2013c
AF = acre-feet

The contribution of the project to impacts on surface water supply is considerable outside of the EID service area before 2035, where future water supply availability is more tenuous and dry-year shortages are predicted. The contribution is considerable within all West Slope water districts, including EID, after 2035 when future water supply availability is expected to fall short of demand.

Groundwater

Future development under the TGPA/ZOU will place greater demands on groundwater supplies in those parts of the West Slope that are not served by public water agencies. As discussed in Chapter 3.10, *Water Supply*, El Dorado County's West Slope lacks cohesive groundwater basins and is instead underlain by fractured rock that supports aquifers of varying size, depth, and dependability.

It is reasonably foreseeable that there will be an adverse impact on groundwater supplies from an expansion of agricultural plantings and of development under the General Plan. This will be compounded by components of the ZOU such as ranch marketing, rural industrial, and home occupations that can intensify very localized water demands in rural areas where groundwater is the sole source of water. Although the County's General Plan policies, individual project review through the conditional use permit process, and water well ordinance all act to reduce the potential to approve development that will generate demand in excess of groundwater supplies, these policies and regulations would allow incremental increases in the number of wells and water demand on the county's fractured aquifers without accounting for total available water supply in the affected aquifers and their ability to meet cumulative demands in dry and multiple dry years. The TGPA/ZOU will make a considerable contribution to this significant impact.

5.2 Growth-Inducing Impacts

CEQA requires a discussion of the ways in which the project would be growth-inducing. State CEQA Guidelines Section 15126.2(d) identifies a project as growth-inducing if it fosters economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. The project would not directly induce growth because it would not directly authorize new development. The project could, however, indirectly induce growth by removing barriers to growth, by creating a condition that attracts additional population or new economic activity, or by providing a catalyst for future growth in the area. ~~Nonetheless, while the project may have a potential to induce growth, it does not automatically result in growth. Growth can happen only through capital investment in new economic opportunities by the public or private sectors.~~

By law, El Dorado County is required to adopt "a comprehensive, long-term general plan for the physical development of the county" (Government Code Section 65300). According to Government Code Section 65583, the General Plan's Housing Element is required to include:

> An identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing. The housing element shall identify adequate sites for housing, including rental housing, factory-built housing, mobile homes, and emergency shelters, and shall make adequate provision for the existing and projected needs of all economic segments of the community.

On a regular basis (now every 8 years), the Sacramento Area Council of Governments (SACOG) prepares the Regional Housing Needs Allocation and adopts the associated Regional Housing Needs Plan (RHNP) that establishes the share of projected future housing growth that El Dorado County must accommodate in its General Plan. Unincorporated El Dorado County's regional housing share under the 2013–2021 RHNP is 3,948 dwelling units. The housing element was adopted on October 29, 2013 to account for the new allocations. Note that SACOG's Metropolitan Transportation Plan 2035 neither regulates local land use authority nor precludes a local jurisdiction from planning and approving growth that is different in terms of total units or geographic extent (Sacramento Area Council of Governments 2012).

Typically, the growth-inducing potential of a project is considered significant if it fosters growth or a concentration of population in excess of the existing setting or baseline. Growth may be induced through the provision of infrastructure or service capacity that would accommodate new development. Based on CEQA's definition of growth inducement, a general plan is inherently growth-inducing because it must accommodate at least projected housing demand. The current General Plan and the ~~project will~~ TGPA/ZOU provide the framework to guide public officials in making decisions relative to development in El Dorado County over the next 20 years. As discussed in Chapter 3.8, *Population and Housing*, projected growth under the General Plan includes an estimated 17,500 additional dwelling units (the actual number will depend on market conditions, the application of Measure Y traffic mitigation policies and related requirements, and the availability of the public water and sewer facilities necessary to maximize residential density, among other factors, such as avoidance of special-status species habitat). This future growth will occur in the locations identified in the General Plan's land use map. The project is, therefore, growth inducing.

5.3 Significant and Unavoidable Impacts

According to Section 15126.2(a) (b) of the State CEQA Guidelines, an EIR shall identify and focus on the significant environmental effects of the proposed project, including effects that cannot be avoided if the proposed project were implemented. Each of the resource sections in this EIR has identified those significant impacts that cannot be reduced below a level of significance. The significant and unavoidable impacts are summarized in Table 5-64 at the end of this chapter.

For a more detailed discussion of each of these significant and unavoidable impacts, please refer to the relevant resource sections in Chapter 3 of this DEIR.

5.4 Significant Irreversible Environmental Changes

State CEQA Guidelines Section 15126.2 requires that the EIR for a general plan amendment must address any significant irreversible environmental change that would result from implementation of that amendment. Specifically, per the Guidelines (Section 15126.2[c]), such an impact would occur if:

- the project would involve a large commitment of nonrenewable resources;
- irreversible damage can result from environmental accidents associated with the project; and
- the proposed consumption of resources is not justified.

Approval and implementation of project-related activities would be typical of these sorts of land use planning and regulatory actions. They would result in an irretrievable commitment of nonrenewable resources such as fossil fuel-based energy supplies and construction-related materials. The energy resource demands would be used for construction, heating and cooling of buildings, transportation of people and goods, heating and refrigeration, lighting, and other associated energy needs.

Implementing the project would result in environmental changes because the physical environment would be altered through continued commitments of land and construction materials to urban and rural development. There would be an irretrievable commitment of labor, capital, and materials used in construction and a permanent loss of open space over time. Nonrenewable resources would be committed primarily in the form of fossil fuels and would include oil, natural gas, and gasoline used to support the additional development associated with implementation of the current General Plan.

Implementing the TGPA would also result in the consumption of other nonrenewable or slowly renewable resources including lumber and other forest products, sand and gravel, asphalt, steel, copper, and water. Although alternative energy sources such as solar, geothermal, or wind energy are in use in the county, the proportion of energy generated by these sources is so much smaller than the proportion generated by fossil fuel sources that it is unlikely that real savings in nonrenewable energy supplies (e.g., oil and gas) could be realized in the immediate future.

Development in unincorporated El Dorado County as envisioned by the TGPA and current General Plan would result in the construction of structures, facilities, or infrastructure on lands that are currently undeveloped. Development of lands generally would result in their future and permanent commitment to urban, suburban, or rural uses.

Table 5-64. Significant and Unavoidable Impacts

Impact	Level of Significance[a]	Mitigation Measures[b]	Level of Significance after Mitigation[a]
3.1 Aesthetics			
AES-1: Result in a substantial adverse effect on a scenic vista	S	BIO-1a: Limit the relaxation of hillside development standards	SU
AES-2: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a scenic highway	S	AG-1a: Amend the ZOU to limit the size of proposed Health Resort and Retreat Centers	SU
AES-3: Substantially degrade the existing visual character or quality of the site and its surroundings	S	BIO-1a: Limit the relaxation of hillside development standards	SU
AES-4: Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area	S	AES-4: Revise proposed Zoning Ordinance Chapter 17.34 and Section 17.40.170	SU
3.2 Agricultural and Forestry Resources			
AG-1: Convert Important Farmland, grazing land, land currently in agricultural production, or cause land use conflict that results in cancellation of a Williamson Act contract	S	AG-1a: Amend the ZOU to limit the size of proposed Health Resort and Retreat Centers AG-1b: Amend the ZOU to limit Public Utility Service Facilities to minor facilities in the PA, AG, and RL zones	SU
3.3 Air Quality and Greenhouse Gases			
AQ-1: Generate construction-related emissions in excess of EDCAQMD thresholds	S	AQ-1: Implement measures to reduce construction-related exhaust emissions	SU
AQ-2: Generate on-road mobile source criteria pollutant emissions in excess of EDCAQMD thresholds	S	None	SU
AQ-5: Expose sensitive receptors to substantial pollutant concentrations	S	None	SU
AQ-6: Expose sensitive receptors to substantial odors	S	None	SU
3.4 Biological Resources			
BIO-1: Result in the loss and fragmentation of wildlife habitat	S	BIO-1a: Limit the relaxation of hillside development standards BIO-1b: Limit the approval of Private Recreation Areas BIO-1c: Limit music festivals and concerts AG-1a: Amend the ZOU to limit the size of proposed Health Resort and Retreat Centers	SU
BIO-2: Have a substantial adverse effect on special-status species	S	BIO-1a: Limit the relaxation of hillside development standards BIO-1b: Limit the approval of Private Recreation Areas BIO-1c: Limit music festivals and concerts BIO-2: Return event site to pre-	SU

Impact	Level of Significance[a]	Mitigation Measures[b]	Level of Significance after Mitigation[a]
		event condition	
BIO-3: Have a substantial adverse effect on wildlife movement	S	BIO-1c: Limit music festivals and concerts BIO-2: Return event site to pre-event condition	SU
BIO-4: Result in the removal, degradation, and fragmentation of sensitive habitats	S	BIO-1a: Limit the relaxation of hillside development standards BIO-1c: Limit music festivals and concerts BIO-2: Return event site to pre-event condition	SU
3.5 Cultural Resources			
CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5	S	None	SU
CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5	S	None	SU
3.6 Land Use and Planning			
LU-4: Substantially alter or degrade the existing land use character of the County	S	AG-1a: Amend the ZOU to limit the size of proposed Health Resort and Retreat Centers AG-1b: Amend the ZOU to limit Public Utility Service Facilities to minor facilities in the PA, AG, and RL zones AG-4: Amend proposed Table 17.21.020 to restrict incompatible uses from being located in the TPZ zone BIO-1a: Limit the relaxation of hillside development standards LU-4a: Revise Policy 2.1.2.5, Commercial/Mixed Use (in Rural Centers) LU-4b: Require proposed Ranch Marketing uses to be reviewed for compatibility with adjoining agricultural uses	SU
LU-5: Create substantial incompatibilities between land uses.	S	AG-1a: Amend the ZOU to limit the size of proposed Health Resort and Retreat Centers AG-1b: Amend the ZOU to limit Public Utility Service Facilities to minor facilities in the PA, AG, and RL zones AG-4: Amend proposed Table 17.21.020 to restrict incompatible uses from being located in the TPZ zone LU-4b: Revise Section 17.40.260,	SU

Impact	Level of Significance[a]	Mitigation Measures[b]	Level of Significance after Mitigation[a]
		Ranch Marketing, prior to adoption	
3.7 Noise			
NOI-1: Exposure of noise-sensitive land uses to short-term (construction) noise	S	None	SU
NOI-2: Exposure to ground transportation noise sources as a result of the TGPA	S	None	SU
NOI-3: Exposure to ground transportation noise sources as a result of the ZOU	S	None	SU
NOI-4: Exposure of noise-sensitive land uses to fixed or non-transportation noise sources	S	None	SU
NOI-5: Exposure to aircraft noise	S	None	SU
3.8 Population and Housing			
Impact PH-1: Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)	S	None	SU
3.9 Transportation and Traffic			
TRA-1: Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways	S	TRA-1: Extend timeframe of General Plan Transportation and Circulation Element Policy TC-Xa	SU
3.10 Water Supply			
WS-1: Create a need for new or expanded entitlements or resources for sufficient water supply	S	None	SU
<u>WS-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)</u>	<u>S</u>	<u>None</u>	<u>SU</u>
5.2 Cumulative Impacts[c]			
Aesthetics	S		SU
Air Quality and Greenhouse Gases	S		SU
Biological Resources	S		SU
Cultural Resources	S		SU
Land Use and Planning	S		SU

Impact	Level of Significance[a]	Mitigation Measures[b]	Level of Significance after Mitigation[a]
Noise	S		SU
Transportation and Traffic	S		SU
Water Supply	S		SU

[a] S = significant; SU = significant and unavoidable; LTS = less than significant; NI = no impact

[b] The full texts of the mitigation measures are found in the respective impact sections under Chapters 3 and 4.

[c] Mitigation measures identified for impacts of the project would reduce the project's contribution to cumulative impacts, but not to a less than considerable level.

Chapter 7
References Cited

7.1 Printed References

7.1.1 Chapter 1, Introduction and Scope

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7.1.4 Section 3.2, Agricultural and Forestry Resources

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