

CEQA Findings of Fact and Statement of Overriding Considerations Folsom South of U.S. Highway 50 Specific Plan Project



SCH #2008092051



CITY OF
FOLSOM
DISTINCTIVE BY NATURE

Prepared by:

AECOM

May 2011

CEQA Findings of Fact and Statement of Overriding Considerations
Folsom South of U.S. Highway 50 Specific Plan Project



Prepared for:
City of Folsom
50 Natoma Street
Folsom, CA 95630

Contact:
David Miller
(916) 355-7222

Prepared by:
AECOM
2020 L Street, Suite 400
Sacramento CA 95811
Contact:
Francine Dunn/Principal
(916) 414-5800



May 2011

TABLE OF CONTENTS

Section	Page
1 INTRODUCTION	1
2 PROJECT DESCRIPTION.....	1
2.1 Project components	1
2.2 Project Location	2
2.3 Project History.....	2
2.4 Project Objectives.....	5
2.5 Proposed Project.....	6
2.6 Alternatives	7
2.7 “Land” Alternatives.....	7
2.8 “Water” Alternatives	27
3 FINDINGS REQUIRED UNDER CEQA	43
3.1 Procedural Findings.....	43
3.2 Record of Proceedings.....	44
3.3 Findings.....	45
3.4 Findings Related to Cumulative Impacts	316
3.5 Findings Related to the Relationship Between Short-term uses of the Environment and Maintenance and Enhancement of Long-term Productivity.....	345
3.6 Findings Related to Project Alternatives.....	346
3.7 Findings Regarding EIR Errata and Recirculation	360
4 STATEMENT OF OVERRIDING CONSIDERATIONS.....	360
4.1 Overriding Considerations	361
5 REFERENCES	363

Tables

2-1 Acres of Proposed Folsom South of U.S. 50 Specific Plan Project Land Uses	12
2-2 Waters of the U.S., Including Wetlands in the SPA.....	15
2-3 Folsom South of U.S. 50 Specific Plan Off-site Infrastructure Improvements	17
2-4 Summary Comparison of Residential Development under the No USACE Permit Alternative and the Proposed Project Alternative	23
2-5 Summary Comparison of Commercial and Industrial Development under the No USACE Permit Alternative and the Proposed Project Alternative	23
2-6 Summary Comparison of Residential Development under the Resource Impact Minimization Alternative and the Proposed Project Alternative	24
2-7 Summary Comparison of Commercial and Industrial Development under the Resource Impact Minimization Alternative and the Proposed Project Alternative.....	24
2-8 Summary Comparison of Residential Development under the Centralized Development Alternative and the Proposed Project Alternative	25
2-9 Summary Comparison of Commercial and Industrial Development under the Centralized Development Alternative and the Proposed Project Alternative.....	25
2-10 Summary Comparison of Residential Development under the Reduced Hillside Development Alternative and the Proposed Project Alternative	27
2-11 Summary Comparison of Commercial and Industrial Development under the Reduced Hillside Development Alternative and the Proposed Project Alternative	27
3-12 Summary of Modeled Long-Term Operational Emissions Under the Proposed Project Alternative.....	69
3-13 Off-site Water Facilities Construction and Operational Emissions.....	84
3-14 Summary of Blue Oak Woodland Impacts and Preservation for Each Project Alternative	122
3-15 Summary of Land Use and Water Demands for the Proposed Project Alternative at Buildout.....	311

3-16	Normal-Year and Dry-Year Comparison of Water Supply and Demand for the Proposed Project Alternative	313
3-17	Wetlands and Other Waters at Specific Projects in the Vicinity of the Folsom South of Highway 50 Specific Plan.....	326
3-18	Special-Status Species Supported By the Habitat Types to Which the Project Would Contribute a Cumulatively Considerable Incremental Loss.....	327

ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
AEP	Exceedance Probability
APN	Assessor's Parcel Number
AQMP	Air Quality Mitigation Plan
ARB	Air Resources Board
ASTM	American Society for Testing and Materials
BMP	Best Management Practice
BO	biological opinion
BRT	Bus Rapid Transit
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CALVENO	California vehicle noise
CAPCOA	California Air Pollution Control Officer's Association
CCR	California Code of Regulations
CDMG	California Division of Mines and Geology
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CO ₂	carbon dioxide
CRAM	California Rapid Assessment Method
CRHR	California Register of Historical Resources
CVPIA	Central Valley Project Improvement Act
DEIR/DEIS	draft environmental impact report/draft environmental impact statement
Delivery Agreement	Agreement for Delivery of Water
Delta	Sacramento-San Joaquin Delta
DFG	Department of Fish and Game
Douglas Tanks	Douglas Treated-Water Storage Tanks
DPM	diesel particulate matter
Du/ac	dwelling units per acre
DWR	Department of Water Resources
EBMUD	East Bay Municipal Utility District
ECORP	ECORP Consulting, Inc.
EDCAQMD	El Dorado County Air Quality Management District
EDCWA	El Dorado County Water Agency
EDUs	equivalent dwelling units

EID	El Dorado Irrigation District
EIR	environmental impact report
EPS	Economic & Planning Systems, Inc.
FCUSD	Folsom Cordova Unified School District
FEIR/FEIS	final environmental impact report/final environmental impact statement
FEMA	Federal Emergency Management Agency
FOIA	Freedom of Information Act
FSC	Folsom South Canal
GET	Groundwater Extraction and Treatment
GHG	greenhouse gas
HDD	horizontal directional drilling
HEPA	High Efficiency Particle Arresting
HMMP	Hazardous Materials Management Plan
HP	horsepower
HR	House Resolution
HRA	Health Risk Assessment
HVAC	heating, ventilation, and air conditioning
I-5	Interstate 5
IRT	Interagency Review Team
ITE	Institution of Transportation Engineers
kV	kilovolts
kW	kilowatts
LAFCo	Local Agency Formation Commission
lb/day	pounds per day
LID	Low Impact Development
LOS	level of service
M&I	municipal and industrial
MCLs	maximum contaminant levels
mgd	million gallons per day
MMP	mitigation and monitoring plan
MOU	Memorandum of Understanding
mph	miles per hour
MRZ	Mineral Resource Zone
MSDS	Materials Safety and Data Sheets
MWh	megawatts hours
NAAQS	National Ambient Air Quality Standards

NCMWC	Natomas Central Mutual Water Company
NEPA	National Environmental Policy Act
NLAA	Not Likely to Adversely Affect
NMFS	National Marine Fisheries Service
NOA	notice of availability
NOC	notice of completion
NOP	notice of preparation
NO _x	oxides of Nitrogen
NPL	National Priorities List
NRHP	National Register of Historic Places
NSA	North Service Area
O&M Plan	operations and management plan
OCAP	Operations Criteria and Plan
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OMP	operations and management plan
OPR	Office of Planning and Research
PG&E	Pacific Gas & Electric
PM	particulate matter
PM ₁₀	particulate matter less than or equal to 10 microns in diameter
PM _{2.5}	fine particulate matter
POCs	points of connection
POD	point of diversion
POU	place of use
PPV	peak particle velocity
PRC	Public Resources Code
Reclamation	U.S. Bureau of Reclamation
RIBITS	Regional Internet Banking Information Tracking System
ROG	reactive organic gasses
RPA	Reasonable and Prudent Alternative
SACOG	Sacramento Area Council of Governments
SCWA	Sacramento County Water Agency
SEL	sound exposure levels
SFP	South Folsom Properties LLC
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMUD	Sacramento Municipal Utility District

SOC	Statement of Overriding Considerations
SPA	Specific Plan Area
SR	State Route
SRCSD	Sacramento Regional County Sanitation District
SRWTP	Sacramento Regional Water Treatment Plant
STC	Sound Transmission Class
STPC	Small Tree Preservation Credit
SVAB	Sacramento Valley Air Basin
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SWTP	Surface WTP
TAC	toxic air contaminant
TMP	Truck Management Plan
TPZ	tree protection zone
U.S. 50	U.S. Highway 50
ug/L	micrograms per liter
VdB	vibration decibels
VMT	vehicle miles traveled
WFA	Water Forum Agreement
WSA	Water Supply Assessment
WTP	Water Treatment Plant
WWTF	wastewater treatment facility
WWTP	Wastewater Treatment Plant

1 INTRODUCTION

This document constitutes the findings of fact (Findings) and associated statement of overriding considerations (SOC) for the Folsom South of U.S. Highway 50 Specific Plan Project (“Folsom Specific Plan”). The Findings have been prepared pursuant to the requirements of Public Resources Code (PRC) section 21081(a) and State California Environmental Quality Act (CEQA) Guidelines (Guidelines) Section 15091, and the SOC has been prepared pursuant to PRC Section 21081(b) and State CEQA Guidelines Section 15093.

A notice of preparation (NOP) of the Draft Environmental Impact Report/Draft Environmental Impact Statement (DEIR/DEIS) was filed with the Office of Planning and Research and each responsible and trustee agency and was circulated for public comments from September 12, 2008 through October 27, 2008.

On June 28, 2010, the City of Folsom (City; the lead agency under CEQA) and the U.S. Army Corps of Engineers (USACE; the lead agency under the National Environmental Policy Act [NEPA]) released the DEIR/DEIS for public review and comment. The comment period closed on September 10, 2010, after being extended by the City. The DEIR/DEIS evaluated the potential environmental impacts of the Proposed Project Alternative and five alternatives: No USACE Permit, Resource Impact Minimization, Centralized Development, Reduced Hillside Development, and a No Project Alternative. A public workshop was held at Folsom City Hall on August 2, 2010, and a public hearing to receive public input on the DEIR/DEIS was held at Folsom City Hall on August 4, 2010. The public hearing was recorded and transcripts were made of public comments received both at the workshop and at the hearing. Written comments were received from Federal, state, and regional and local agencies, and from organizations and individuals; comments were also received during the public hearing. The City and USACE considered the comments received on the DEIR/DEIS.

The Final EIR/EIS (FEIR/FEIS) was published on May 6, 2011, and consists of the DEIR/DEIS (text Volumes I, II, and III and associated appendices) and the comments, responses to comments, and revisions to the DEIR/DEIS. On June 14, 2011, the Folsom City Council held a public meeting to consider certification of the EIR and to decide whether or not to approve the Proposed Project Alternative or another alternative, at which time the public and interested agencies and organizations were invited to comment on the project.

2 PROJECT DESCRIPTION

The following describes the Folsom South of U.S. 50 Specific Plan Project, including the location, history, and objectives of the proposed project and the relationship of the proposed project to related plans and regulations.

2.1 PROJECT COMPONENTS

The project includes two chief components which affect different geographic areas. These components are described in more detail below:

- ▶ The “Land” component addresses proposed land use changes in the City of Folsom’s sphere of influence area. The “Land” component includes two geographical areas:
 - the “Folsom South of U.S. 50 Specific Plan Area” (SPA), which refers to the sphere of influence area where land use decisions would be governed by the proposed Folsom Plan Area Specific Plan, and
 - the “Off-site Improvements,” which refer to various areas outside of the sphere of influence area where utility or roadway improvements would be constructed to support the proposed land use changes.

- ▶ The “Water” component addresses the facilities required to provide and convey a water supply to the proposed development. The “Water” Study Area is used to describe the areas which could be affected by the proposed “Water” components.

2.2 PROJECT LOCATION

The project site includes the Specific Plan Area (SPA), and a Water Facilities Study Area.

The SPA is generally located in eastern Sacramento County, immediately south of the Folsom city limits. The SPA lies south of U.S. Highway 50 (U.S. 50), north of White Rock Road, for the most part east of Prairie City Road (a small area extends west of Prairie City Road at the southwest corner of the SPA), and west of the Sacramento/El Dorado County line.

Access to the SPA would be provided via the existing White Rock Road, Prairie City Road, and Scott Road. Both Prairie City Road and Scott Road provide existing access to the site from U.S. 50. Proposed roadways which would serve the SPA include Oak Avenue and Empire Ranch Road (both of which are proposed to have interchanges with U.S. 50), and the proposed Easton Valley Parkway, which would provide an east-west connection to the SPA.

The Water Facilities Study Area includes the Natomas Central Mutual Water Company (NCMWC) service area, portions of the Sacramento River, and pipeline alignments and water treatment plant (WTP) locations which are located from the community of Freeport through central and eastern Sacramento County to the SPA.

2.3 PROJECT HISTORY

In 2001, the Sacramento Local Agency Formation Commission (LAFCo) designated the undeveloped land south of U.S. 50 between Prairie City Road, White Rock Road, and the El Dorado County line as part of the City’s sphere of influence. The City entered into a Memorandum of Understanding (MOU) with Sacramento County prior to approval of the SPA application by Sacramento LAFCo. The intent of the MOU is to serve as a guide for sound regional long-range planning efforts relative to the potential annexation of the SPA. The MOU outlines a comprehensive planning process for the project site, including public participation with stakeholders and the general public. It also addresses a number of issues including water supply, transportation, air quality, schools, and open space that were later incorporated into language found in City of Folsom Measure W and subsequently the City Charter (described in more detail below). The MOU led to LAFCo Resolution 1196, approving the City’s sphere of influence amendment.

2.3.1 LAFCo RESOLUTION 1196

LAFCo Resolution 1196 requires that the planning process for the project site include the steps outlined below.

- ▶ **City General Plan Revisions.** Revise and update the City’s general plan in accordance with California State law.
- ▶ **City General Plan Housing Element.** Obtain a certification of substantial compliance from the California Department of Housing and Community Development consistent with California Government Code section 65585(d) or (h). The City shall establish in its approved Housing Element that it has or will meet its regional share housing needs for all income levels for the second and third Housing Element revisions, as defined in California Government Code section 65588.
- ▶ **Land Use Designations.** Adopt appropriate land use designations for all property within the adopted Sphere of Influence area.

- ▶ **Pre-zoning.** Pre-zone the property consistent with California Government Code Section 56375 and the Folsom General Plan.
- ▶ **Comprehensive Planning.** Develop comprehensive planning of the project site that demonstrates well planned, orderly development that avoids the premature conversion of open space.
- ▶ **Master Service Agreement.** In any application to annex the property, the City is to submit a Master Services Element that identifies a program for implementation and financing for major infrastructure and services components needed to support the proposed distribution, location, extent, and intensity of proposed land uses. The Master Services Element must identify a water supply source and the process for securing sufficient water supplies to serve the annexed area.
- ▶ **Local Roadway Improvements.** Prepare a plan for necessary improvements to each jurisdiction's roadway network to accommodate increased traffic from the project site in cooperation with Sacramento and El Dorado Counties. This plan must include a list of improvements, responsible jurisdiction, phasing plan, and clearly defined financing mechanism. Implementation of this plan must result in service levels on local roadways consistent with each jurisdiction's general plan.
- ▶ **Regional Roadway Improvements.** The City, in cooperation with Caltrans, Sacramento County, El Dorado County, the El Dorado County Transportation Commission, and the Sacramento Area Council of Governments (SACOG), must identify traffic and transportation measures that are needed to mitigate potential impacts on regional transportation facilities from proposed development within the project site. The City must also identify a funding mechanism to construct the traffic and transportation measures necessary to fully mitigate impacts from the project site, and a timeline for the construction of improvements. As soon as reasonably possible, these improvements should be programmed into the Metropolitan Transportation Plan and Metropolitan Transportation Improvement Program.
- ▶ **Transit Master Plan.** Prepare a Transit Master Plan consistent with the City's General Plan. The master plan must identify bus transit routes, bus turnouts, pedestrian shelters, bus transfer stations, alignments for rail service, and the location of rail service stations.
- ▶ **Bikeway Master Plan.** Prepare a Bikeway Master Plan consistent with the City's General Plan. The master plan must identify bikeway and pedestrian facilities on the project site consistent with the goals and policies of the City's general plan and incorporate bikeway designs for Prairie City Road and White Rock Road to be equivalent, or better, than those in the Sacramento City/County Bikeway Master Plan.
- ▶ **Drainage Master Plan.** Conduct hydraulic and hydrologic modeling of that portion of Alder Creek which transverses the project site. A Drainage Master Plan must be prepared and address flood hazards, identify flood protection measures, and document no net increase in downstream floodwater surface elevations.
- ▶ **Habitat Mitigation Strategy.** Document of the City's multi-species habitat mitigation strategy (Habitat Conservation Plan [HCP]) for the project site. The strategy must address mitigation of impacts on habitat and biological resources that meets Federal and State regulatory requirements. The City may fulfill these requirements through participation in South Sacramento County HCP process.
- ▶ **Surface and Groundwater Contamination.** Document that on-site surface contamination has been remediated to Federal and State regulatory standards, and that groundwater contamination has been remediated or is being remediated effectively prior to annexation of any property owned by Aerojet General Corporation.
- ▶ **Water Supply.** Demonstrate that the City has a sufficient water supply to serve existing customers, future customers within the existing service area, and all proposed uses within the project site in compliance with the

terms and conditions of the Water Forum Agreement. This demonstration must be sufficient for LAFCo to determine water availability per California Government Code section 56668(k).

- ▶ **Wastewater Facilities.** Demonstrate the timely availability of wastewater transmission and treatment capacity to serve existing customers, future customers within the existing service area, and all proposed uses within the project site.
- ▶ **Special Districts.** Meet and confer with the El Dorado Irrigation District (EID), the Sacramento Metropolitan Fire District, and any other special districts regarding impacts on these districts, including fiscal and operational impacts and loss of property tax revenue. With respect to EID, the City must not request any detachment from the EID service area.
- ▶ **School Mitigation.** Incorporate feasible school mitigation requirements into development agreements.
- ▶ **Mitigation Monitoring.** Comply with the mitigation measures identified in environmental review for expansion of sphere of influence boundary and adopted pursuant to CEQA by LAFCo Resolution LAFC 1193, including:
 - Establish necessary roadway improvements and financing mechanisms;
 - Implement requirements to reduce air quality emissions by 35%;
 - Prepare an Air Quality Plan;
 - Complete tree surveys and implement tree protection measures;
 - Complete biological surveys and adopt avoidance and mitigation policies;
 - Minimize incompatibility impacts on historic landscapes;
 - Implement hazardous materials plans;
 - Investigate and remediate railroad right-of-way, mining, and radio/transfer sites;
 - Define the Alder Creek 100-year floodplain; and
 - Identify secure sufficient water supplies.

2.3.2 MEASURE W

In November 2004, following a series of visioning workshops, the City’s Measure W—City of Folsom Local Control of Land South of Highway 50 City Charter Amendment (City Ordinance No. 1022)—passed with support from 69% of the City voters. With the passage of Measure W, the City Charter was amended to require the Folsom City Council to take certain actions prior to LAFCo approval of annexation. These required actions are related to each of the issue areas described below:

- ▶ **Water Supply.** Identify and secure the sources of water supply to serve the SPA without reducing the existing water supply currently serving users to the north of U.S. 50, and at no cost to existing City residents.
- ▶ **Transportation.** Adopt an Infrastructure Funding and Phasing Plan for the construction of roadways and transportation improvements that are necessary to reduce traffic impacts resulting from development of the SPA. The timing of the construction of the transportation improvements shall be tied to the anticipated rate of growth and associated traffic impacts. Existing City residents shall not be required to pay fees for the construction of any new transportation improvements required to serve the SPA.
- ▶ **Open Space.** Maintain 30% of the SPA as natural open space to preserve oak woodlands and sensitive habitat areas. Natural open space cannot include active park sites, residential yard areas, golf courses, parking lots, or their associated landscaping.
- ▶ **Schools.** Submit a plan to the Folsom Cordova Unified School District for the funding and construction of all necessary school facilities for the SPA so that City residents north of U.S. 50 are not required to pay for the

construction of new school facilities serving the SPA and existing schools are not overcrowded by development of the SPA.

- ▶ **Development Plan.** Adopt a General Plan Amendment to serve as the blueprint for development within the SPA. The General Plan Amendment will only be adopted after the completion and certification of an environmental impact report.
- ▶ **Public Notice.** Every registered voter in the City must be mailed a notice of time, place, and date of the public meetings and hearings before the Planning Commission and City Council. The notice must include a summary of the SPA proposal with the full proposal and associated environmental review available for public review at the City Clerk's office, at all Folsom public libraries, and on the City's Web site.
- ▶ **Implementation.** All existing City plans, policies, ordinances, and other legislative acts must be amended as necessary, as soon as possible, and in the time and manner required by state law, including CEQA, to ensure consistency between the Charter Amendment and those plans, policies, and other provisions.

2.3.3 CITY VISIONING PROCESS

In 2004, the City launched a visioning process to seek community input about the future plans for the City's sphere of influence area. Approximately 200 residents of the City and nearby El Dorado County attended a series of meetings facilitated by a professional planning consultant. At those meetings, the participants addressed a range of issues including land use, open space, transportation, and financing. Their recommendations resulted in a series of five possible development scenarios, which were reviewed by the Folsom City Council at its January 25, 2005 meeting. Since that time, the land use plan for the SPA has continued to undergo refinements, and has evolved into the Proposed Project Alternative shown in Exhibit 2-3 in Chapter 2, "Alternatives" of the DEIR/DEIS. The Proposed Project Alternative, along with four alternative land use development plans and a No Project Alternative (development under the existing Sacramento County land use and zoning designations), are evaluated at a similar level of detail, as required under NEPA in this EIR/EIS.

As described in Section 3.1.2 of the DEIR/DEIS, because the off-site water facilities are different from development of the SPA and would occur in locations that are further removed spatially and temporally from the SPA, and due to the complexity and number of alternatives available for conveying water to the SPA, the DEIR/DEIS evaluates two components of the project: the "Land" component and the "Water" component. Throughout Chapter 3 of the DEIR/DEIS, the impacts and pages dealing with the "Land" portion are indicated with an "A." while those dealing with the "Water" portion are indicated with a "B." DEIR/DEIS Chapter 4, "Other Statutory Requirements" incorporates both the "Land" and "Water" discussions under each topic heading (see DEIR/DEIS page 4-1). However, the "project" as a whole consists of both development of the SPA and off-site facilities necessary to provide water in support of SPA development. Thus, when considering impacts of the "project" as a whole, it is necessary to consider both the 3A and 3B impacts taken together.

2.4 PROJECT OBJECTIVES

The Proposed Project Alternative has been formulated to achieve the objectives summarized below. The State CEQA Guidelines Section 15124(b) requires that the project description contain a clear statement of the project objectives, including the underlying purpose of the project. The statement of objectives is important under CEQA in helping the City (state lead agency under CEQA) to develop a reasonable range of alternatives to the Proposed Project Alternative for evaluation in the EIR/EIS.

2.4.1 PROJECT OBJECTIVES

Section 15124 of the Guidelines requires that an EIR include a statement of project objectives. The following objectives were presented on pages 1-7 and 1-8 of the DEIR/DEIS.

LAND

Outlined below are the main objectives defined by the project applicant(s) for the Proposed Project presented on pages 1-7 and 1-8 of the DEIR/DEIS. These objectives are specific to the “Land” portion of the project, and are important for the selection and consideration of CEQA alternatives.

- ▶ Be consistent with the City of Folsom’s General Plan and implement SACOG Smart Growth Principles.
- ▶ Expand the City’s boundaries based on the ultimate boundaries of development that the City can reasonably control and service, and do so in a manner that would foster orderly urban development and discourage leapfrog development and urban sprawl.
- ▶ Annex those parcels of land adjacent to the City limit and within the City’s Sphere of Influence whose development could have significant visual, traffic, public service, and environmental impacts on the City so that the City may influence the ultimate development of those parcels.
- ▶ Provide a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50.
- ▶ Develop several distinct neighborhoods within the project site, connected by a substantial open space area and recreational trail network.
- ▶ Provide neighborhood- and regional-serving retail areas within the project site.
- ▶ Provide a mix of housing types within the project site to diversify the City’s housing stock.
- ▶ Provide a combined high school/middle school and the appropriate elementary schools on-site sufficient to meet the needs of the project.
- ▶ Provide the appropriate number and size of on-site community and neighborhood parks sufficient to meet the needs of the project.
- ▶ Generate positive fiscal impacts for the City through development within the project site.

WATER

The project objectives for the “Water” portion of the project consist of the following:

1. Secure a sufficient and reliable water supply consistent with the requirements of Measure W and objectives of the Water Forum Agreement to support planned development within the SPA, which the City estimates to be 5,600 acre-feet per year; and
2. Construct the necessary water supply delivery and treatment infrastructure to ensure the safe and reliable delivery of up to 5,600 acre-feet per year to the SPA.

2.5 PROPOSED PROJECT

The South Folsom Property Owners Group, the project applicant(s), are seeking adoption by the City of the proposed *Folsom Plan Area Specific Plan*, hereinafter referred to as the “Folsom South of U.S. 50 Specific Plan Project” and associated entitlements discussed in greater detail below. The project would be a mixed-use development on approximately 3,510 acres in the Folsom sphere of influence, immediately south of the Folsom city limits. The total area that would be annexed into the City would be 3,584 acres, and also includes portions of the U.S. 50 right-of-way. The area to be annexed into the City is referred to throughout the EIR/EIS as the SPA.

The project applicant(s) are also seeking authorization and permit(s) from USACE to place dredged or fill material into waters of the U.S.

2.6 ALTERNATIVES

CEQA requires that an EIR describe and analyze the relative environmental impacts of alternatives to the proposed project and evaluate their comparative impacts and merits (see State CEQA Guidelines Section 15126.6 [a-c]). The EIR must consider a range of reasonable alternatives that can feasibly attain most of the basic project objectives and avoid or substantially lessen one or more significant impacts. Alternatives that would impede to some degree the attainment of the project objectives or would be more costly may also be considered. The environmentally superior alternative must be identified among the alternatives considered.

The alternatives analysis must identify the potential alternatives, and include sufficient information about each to allow meaningful evaluation, analysis, and comparison with the proposed project. The discussion must focus on potentially feasible alternatives that can avoid or substantially reduce the significant impacts of the proposed project.

Qualitative and quantitative measures of alternative feasibility may include site suitability, economic viability, availability of infrastructure, general plan consistency, consistency or conflict with other plans or regulatory limitations, jurisdictional boundaries, and whether the project applicant can reasonably acquire, control, or otherwise have access to an alternative site. Similarly, if an alternative would cause one or more significant impacts, in addition to those that would be caused by the project, the significant impacts of the alternative must be discussed, but in less detail than the project analysis.

As required by CEQA, the alternatives analysis must include evaluation of the “no project” alternative. “No project” is defined as what would occur within the project site if the project were not to be approved. The “no project” alternative “would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.” CEQA also requires that an EIR identify an “environmentally superior alternative” from among the range of reasonable alternatives that are evaluated.

Chapter 2, “Alternatives,” of the DEIR/DEIS, provides a comparative analysis between the Proposed Project Alternative and four “Land” alternatives, as well as comparative analysis of ten “Water” alternatives. The “Land” alternatives describe a range of alternative land use plans for the SPA, and the “Water” alternatives describe a range of potential water facility options which could be used to convey the necessary water supply to the SPA.

The City finds that that a good faith effort was made to evaluate all feasible alternatives in the EIR/EIS that are reasonable alternatives to the project and could feasibly obtain the basic objectives of the project, even when the alternatives might impede the attainment of the project objectives or might be more costly. The City also finds that all reasonable alternatives were reviewed, analyzed, and discussed in the review process of the EIR/EIS and the ultimate decision on the project.

2.7 “LAND” ALTERNATIVES

2.7.1 “LAND” ALTERNATIVES CONSIDERED AND ELIMINATED FROM FURTHER ANALYSIS

Alternatives which were considered and eliminated from further detailed analysis in the EIR/EIS include alternatives discussed and rejected as part of the alternatives evaluated pursuant to Section 404(b)(1) of the Federal Clean Water Act (attached to the DEIR/DEIS in Appendix L) and an off-site alternative.

There are six additional Section 404(b)(1) on-site alternatives. These alternatives are all based on the Proposed Project Alternative, with each of the six alternatives addressing additional avoidance of waters of the U.S., including wetlands. The Additional Avoidance Alternative includes all of the proposed additional avoidance areas; the remaining alternatives each include a smaller portion of the proposed additional avoidance areas from the Additional Avoidance Alternative. Section 404(b)(1) alternatives that were considered but not carried forward for further analysis in the EIR/EIS are described in greater detail below.

ADDITIONAL AVOIDANCE ALTERNATIVE

The Additional Avoidance Alternative would include the following additional areas where waters of the U.S., including wetlands, would be avoided:

- ▶ an intermittent drainage and seasonal swale on the north-central portion of the SPA, in regional commercial, general commercial, and single family high density areas on both sides of Scott Road at Easton Valley Parkway; and
- ▶ an artificially-constructed ditch on the western portion of the SPA, in a Single Family area south of Easton Valley Parkway and west of the electrical transmission line easement.

Implementation of the Additional Avoidance Alternative would reduce the acreage of affected waters of the U.S., including wetlands, by 3.19 acres. However, this alternative would also remove the frontage for the Regional Commercial parcel along both Scott Road and Easton Valley Parkway. The loss of street frontage and the changes to the shape of the parcel would render the primary retail component of the project infeasible. Without a feasible regional commercial project component, this alternative would not meet Objective 7 (provide neighborhood- and regional-serving retail areas within the SPA) and potentially would not meet Objective 11 (generate positive fiscal impacts for the City through development within the SPA).

Because development of this alternative would not be reasonable or practicable due to costs and logistics, this alternative was rejected from consideration under NEPA (please refer to Appendix L of the DEIR/DEIS, which contains the Section 404[b][1] Alternatives Analysis, for a more detailed description of the practicality of this alternative).

CARPENTER RANCH AVOIDANCE ALTERNATIVE

The Carpenter Ranch Avoidance Alternative would include the following additional area where wetlands would be avoided:

- ▶ an intermittent drainage and seasonal swale on the north-central portion of the SPA, in regional commercial, general commercial, and single family high density areas on both sides of Scott Road at Easton Valley Parkway.

Implementation of the Carpenter Ranch Avoidance Alternative would reduce the acreage of affected wetlands and waters by 2.88 acres. In addition, implementation of this alternative would result in similar cost and logistic constraints as the Additional Avoidance Alternative, as described above. Without a feasible regional commercial project component, this alternative would not meet Objective 7 (provide neighborhood- and regional-serving retail areas within the SPA) and potentially would not meet Objective 11 (generate positive fiscal impacts for the City through development within the SPA).

Because development of this alternative would not be feasible due to costs and logistics, this alternative was eliminated from further detailed study under CEQA because it would not achieve some of the key basic objectives of the project.

REGIONAL COMMERCIAL AVOIDANCE ALTERNATIVE

The Regional Commercial Avoidance Alternative would include the following additional area where wetlands would be avoided:

- ▶ a seasonal swale on the north-central portion of the SPA, in regional commercial and single family high density areas on both sides of Scott Road at Easton Valley Parkway.

The Regional Commercial Avoidance Alternative would reduce the acreage of affected wetlands and waters by 2.50 acres. In addition, this alternative would result in similar cost and logistic constraints as the Additional Avoidance Alternative, as described above. Without a feasible regional commercial project component, this alternative would not meet Objective 7 (provide neighborhood- and regional-serving retail areas within the SPA) and potentially would not meet Objective 11 (generate positive fiscal impacts for the City through development within the SPA).

Because development of this alternative would not be feasible due to costs and logistics, this alternative was rejected from consideration under CEQA because it would not achieve some of the basic objectives of the project.

WESTERN RESIDENTIAL AVOIDANCE ALTERNATIVE

The Western Residential Avoidance Alternative would include the following additional area where wetlands would be avoided:

- ▶ an artificially-constructed ditch on the western portion of the SPA, in a single family residential area south of Easton Valley Parkway and west of the electrical transmission line easement.

Implementation of the Western Residential Avoidance Alternative would reduce the acreage of affected wetlands and waters by 0.31 acres, and would reduce the developable area by 14.3 acres. Due to the hilly terrain of the site, implementation of this alternative would result in the creation of an isolated portion of the development which, in turn, would require the construction of a sanitary sewer pump station and force main. Construction of a pump station would increase costs and would increase potential environmental impacts that could result from a pump system failure. This alternative would require the construction of an additional street access to allow for a connection to Oak Avenue Parkway, as at least two points of access to a development area are required by City Ordinance for emergency vehicle and evacuation routes. Construction of this additional street would affect the open space area and result in the removal of oak woodland habitat. In addition, under this alternative, the construction of homes surrounded by a preserve area would result in adverse impacts on the preserved waters, reducing and potentially eliminating the functions of the surrounding waters.

Because implementation of this alternative would result in additional impacts to sensitive oak woodland habitat while only preserving 0.311 acres of man-made ditch and intermittent stream which would still be indirectly affected, this alternative was rejected from further detailed study under CEQA.

OFF-SITE "LAND" ALTERNATIVES

Under CEQA, off-site alternatives must be considered in environmental documents when one or more of the significant impacts of the project could be avoided or substantially reduced in magnitude through the implementation of a feasible alternative in a different location. To be considered feasible, development on potential off-site locations must be able to attain most of the basic objectives of the Folsom South of U.S. 50 Specific Plan project must meet the definition of feasibility in light of the factors identified in State CEQA Guidelines Section 15126.6(f)(1). These factors include: site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can

reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). To satisfy the project applicant(s)' and the City's project objectives under CEQA, a large undeveloped site within the City of Folsom, or within the City's sphere of influence, would be needed. State CEQA Guidelines Section 15126.6(f)(2)(b) states that "[i]f the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR."

Policy LU 81 of the Sacramento County General Plan provides very limited conditions under which the County can expand the Urban Service Boundary (USB), which would be necessary if the Proposed Project Alternative were constructed in an off-site location in unincorporated Sacramento County, south of Jackson Highway/State Route (SR) 16 or west of Grant Line Road. When considering such a proposal, the County must make several findings, including a finding that there is insufficient land within the USB to accommodate the project's 20-year demand for urban uses. If all of the criteria are not met, the County Board of Supervisors may still approve expansion of the USB, but must do so by a 4/5 vote. Since enactment of this policy in 1993, the board has not approved an application for any substantially-sized projects outside the USB.

The identification of off-site alternative locations was limited to those locations that could satisfy certain criteria, as described below. First, as discussed above, the geographic area for off-site alternatives was limited to areas within the Sacramento County USB. In addition to the policy reasons discussed above, the USB was chosen as an appropriate geographic boundary because locating the project outside of the existing USB would require massive expansion of infrastructure that is not currently planned.

Next, proximity of off-site alternatives to major transportation corridors was a consideration of site selection. This criterion was established to implement key project needs and objectives, including a large retail center. A location along a major arterial, preferably adjacent to a freeway, is preferable for a retail project of this size; however, suitable available sites meeting this criterion were not identified because no undeveloped, uncommitted sites are currently available that meet this criterion. However, other off-site locations not meeting this criterion have been identified, although not preferable.

Areas encompassing a size similar to the proposed development footprint of the SPA (i.e., approximately 2,500 acres) were considered preferable to provide similar residential and commercial use capacities. Although the SPA is approximately 3,500 acres, approximately 1,050 acres would be set aside as open space and therefore project development would occur on approximately 2,450 acres. However, to satisfy the NEPA objectives, smaller sites in eastern Sacramento County were considered as long as they were deemed appropriate to accommodate a "large-scale" mixed-use development including both residential and commercial components. Although smaller sites (as small as 1,500 acres) were considered, these sites would not be preferred because they would not accommodate the same volume and density of residential and commercial uses as the proposed development footprint. Furthermore, while these smaller sites might meet the USACE's NEPA purpose and need, they would not meet the City of Folsom's CEQA objectives.

The primary obstacle in identifying an off-site alternative that would meet the feasibility criteria discussed above is aggregating enough parcels to create a project of an adequate size. The City determined that there were no available sites that met the criteria, and that it would be infeasible to aggregate numerous small, contiguous parcels to create a project of sufficient size. Furthermore, all of the undeveloped parcels within the City of Folsom combined do not amount to more than 100 acres of developable land. Therefore, the only available uncommitted land that is of sufficient size to accommodate the proposed development is located outside of the City's current boundaries or sphere of influence and, therefore does not meet the City's project objectives. Identifying parcels in eastern Sacramento County would be extremely difficult for the City's because those parcels would be outside of the City's Sphere of Influence.

The majority of undeveloped land in eastern Sacramento County and within the USB is within the City of Rancho Cordova and unincorporated portions of Sacramento County east of Grant line Road. Several large, undeveloped tracts of land were identified in these areas but were ultimately eliminated as potential off-site alternative

locations because they are currently subject to project-level planning for separate projects (e.g., Sunrise Douglas Community Plan area, Mather Field Redevelopment, Easton Planning Area, SunCreek Specific Plan area). These projects include Arboretum, Cordova Hills, Excelsior Estates, Glenborough at Easton and Easton Place, Mather East and Mather Field, Rio del Oro, the Ranch at Sunridge, and Vineyard Springs, all of which currently have (or will soon have [i.e., reasonably foreseeable]) development applications filed with the applicable jurisdiction. Thus, the City determined that there were no sites that could be reasonably acquired, controlled, or that were otherwise accessible to the project sponsor other than the proposed site.

The SPA represents the only available major undeveloped land area in Folsom's Sphere of Influence that is capable of providing substantial job opportunities and a mix of uses, and that would fulfill the project applicant(s)' and the City's project purpose and attain most of the basic project objectives. The majority of undeveloped yet potentially developable land in the project vicinity is currently undergoing project-level planning for separate projects (e.g., Sunrise Douglas Community Plan area, Mather Field Redevelopment, Easton Planning Area, SunCreek Specific Plan area). These areas are not available to accommodate the project because they are committed to future development, are outside the City's jurisdictional boundaries, and are outside the control of the project applicant.

There is one area in eastern Sacramento County within the USB that could potentially meet the project's purpose under NEPA, but would not meet the City CEQA objectives because it would be located outside of the City's jurisdictional boundaries. However, because this site may meet the USACE defined purpose and need, it was further evaluated in the EIR/EIS to determine if the site is practicable for development, would impact fewer acres of waters of the U.S. than the Proposed Project Alternative, and if it is available.

2.7.2 PROPOSED PROJECT ALTERNATIVE

As described below, the Proposed Project Alternative would include a range of housing types, employment centers, open space, and recreation opportunities, as well as support services such as roadway improvements, support infrastructure, and utilities. Land uses are described below and shown in Table 2-1 (Table 2-1 on page 2-14 of the DEIR/DEIS).

Buildout of the Proposed Project Alternative would be split into four development phases, is anticipated to occur over an approximately 20-year period, and would include the elements described below.

Residential and Mixed-Use

The Proposed Project Alternative provides for the construction of approximately 10,210 dwelling units in five residential land use classifications on 1,477.2 acres. The proposed densities are as follows:

- ▶ Single Family, with a permitted density range of 1–4 dwelling units per acre (du/ac) and a desired density of 3 du/ac;
- ▶ Single Family High Density, with a permitted density range of 4–7 du/ac and a desired density of 5 du/ac;
- ▶ Multi-Family Low Density, with a permitted density range of 7–12 du/ac and a desired density of 9 du/ac;
- ▶ Multi-Family Medium Density, with a permitted density range of 12–20 du/ac and a desired density of 18 du/ac; and
- ▶ Multi-Family High Density, with a permitted density range of 20–30 du/ac and a desired density of 25 du/ac.

**Table 2-1
Acres of Proposed Folsom South of U.S. 50 Specific Plan Project Land Uses**

Land Use	Dwelling Units/Acre	Total Acres
Single Family	1–4	557.8
Single Family High Density	4–7	532.5
Multi-Family Low Density	7–12	266.7
Multi-Family Medium Density	12–20	67.0
Multi-Family High Density	20–30	49.9
Mixed-Use District	9–30	59.1
Office Park		89.2
Community Commercial		38.8
General Commercial		212.9
Regional Commercial		110.8
Parks – Community West		44.5
Parks – Community East		26.1
Parks – Neighborhood		47.6
Parks – Local		3.5
High School-Middle School		79.6
Elementary School		51.0
Country Day School		48.7
Circulation Improvements		171.6
Open Space		1,053.1
Specific Plan Area Total		3,510.4
Other Areas Proposed for Annexation		73.6
“Land” Project Total		3,584
Source: Torrance Planning 2009		

A total of 1,477.2 acres are proposed for residential development. In addition, 59.1 acres are proposed for a Mixed-Use District, which would include both residential and commercial uses. This district’s proposed density range is 9–30 du/ac, with a desired density of 12 du/ac.

Commercial/Industrial

The Proposed Project Alternative includes 451.7 acres of land designated for commercial/industrial use, under the commercial land use classifications of Office Park, Community Commercial, General Commercial, and Regional Commercial. Three office park areas are proposed along U.S. 50. Community Commercial sites, covering a total of 38.8 acres, are proposed for the intersection of Prairie City and White Rock Roads, and at two locations along Scott Road. 212.9 acres of General Commercial uses are proposed in the central and eastern portion of the SPA along U.S. 50, and on Scott Road in the northern portion of the SPA. A Regional Commercial district (shopping centers) is proposed for 110.8 acres at the southwest corner of Scott Road and U.S. 50.

Parks and Recreation

The Proposed Project Alternative includes a total of 121.7 acres of parks. With 10,210 dwelling units proposed, and a projected population of 24,335 (based on people-per-unit ratios of 2.92 for single-family residences and 1.94 for multi-family residences), this represents 5 acres of parkland per 1,000 residents. Two community parks, totaling 70.6 acres, would provide communitywide recreational facilities serving multiple neighborhoods. An additional 47.6 acres of neighborhood parks are proposed. These parks would be smaller than the community parks, ranging in size between three and ten acres, and would be linked to neighborhoods and services by trails and bicycle facilities. Each of the proposed school sites is located adjacent a proposed neighborhood park in order to provide joint use opportunities. An additional 3.5 acres of local parks would be designated within residential areas as tentative maps are approved. These local parks would serve the recreational needs of the immediately surrounding areas. In addition to the proposed park area, multi-use trails would be appropriate within some open space areas of the SPA, as discussed in “Open Space,” below.

Open Space

The Proposed Project Alternative includes 1,053.1 acres of land designated as open space. Measure W, passed by Folsom voters in 2004, amended the Folsom City Charter to require that 30% of the plan area be maintained as natural open space.

Alder Creek, which flows in a northwesterly direction across the western half of the SPA, is entirely encompassed within open space in the plan area. Multi-use trails connect the plan area’s proposed residential and commercial areas to services and schools, and provide an alternative to automobile use. The proposed specific plan highlights the importance of visual connections to open space areas; roadways are to be placed along the boundaries of open space areas where possible, with clear visibility at access points to trails.

Stormwater Management

Project implementation would include development of about 3,500 acres of land, most of which has not been previously developed. Drainage watercourses are needed to effectively drain the site, control flooding, and provide recreation and water quality benefits to the proposed development. Exhibit 2-5 on page 2-21 of the DEIR/DEIS shows the proposed pattern of stormwater drainage in the SPA at buildout. A network of conveyance pipes, inlets, manholes, and regulating structures would deliver runoff to the aforementioned system components.

Alder Creek and several tributaries flow across the SPA, along with several additional intermittent and ephemeral drainage watercourses on-site. The SPA lies within the Lower American and Upper Cosumnes Watersheds. Although most of the SPA has not been mapped for flood risk by the Federal Emergency Management Agency (FEMA), the SPA has been studied by the California Department of Water Resources (DWR) under its Awareness Flood Mapping Program, and the area along Alder Creek has been designated as Awareness Floodplain by DWR. The area along Alder Creek as it flows through the SPA has been designated by the Sacramento County Department of Water Resources as lying within a 100-year (0.01 Annual Exceedance Probability [AEP]) floodplain.

The SPA includes portions of the Alder Creek, Buffalo Creek, Coyote Creek, and Carson Creek Watersheds. Water currently flows off-site via Alder Creek, three outfalls to Buffalo Creek on the western boundary of the SPA, one outfall to Coyote Creek on the southern boundary of the SPA, and three outfalls to Carson Creek on the southern and eastern boundaries of the SPA. Water flows onto the SPA from three off-site developments north of U.S. 50, and from undeveloped properties to the south of the SPA.

Alder Creek originates outside and to the south of the SPA and flows across the SPA in a northwesterly direction. Downstream of the SPA, the Alder Creek and Buffalo Creek Watersheds flow west into areas of undeveloped vernal pool grassland and oak woodland with some scattered industrial development with roadways, utilities, and drainage conveyance systems. The Buffalo Creek and Coyote Creek Watersheds originate in the SPA in the

southwest corner. The Coyote Creek Watershed flows south from the SPA into undeveloped grazing lands with vernal pools. The Carson Creek Watershed flows through the eastern portion of the SPA and flows off the site into undeveloped grazing lands to the south and residential development to the east. The Alder Creek Watershed drains into Lake Natoma and the American River. Buffalo Creek is also part of the Lower American River Watershed. Carson Creek and Coyote Creek both ultimately flow into the Cosumnes River.

The Buffalo Creek and Coyote Creek Watersheds consist primarily of gently rolling terrain with slopes ranging from 0% to 15% and ground elevations ranging from approximately 300 to 380 feet above mean sea level in the SPA. The Alder Creek Watershed consists of gently rolling and hilly terrain with slopes from 0% to 30% and ground elevations ranging from 240 feet above mean sea level in the northwest to 770 feet in the northeast. The Carson Creek Watershed consists of hilly terrain with slopes ranging from 5% to 30% and ground elevations from approximately 440 to 800 feet above mean sea level in the eastern portion of the SPA.

A preliminary grading plan has been developed that accommodates needs for on-site stormwater detention, incorporates preferred alignments for roadways, and joins with existing conditions at the project boundaries. A stormwater system consisting of surface swales, catch basins, drainage inlets, underground pipes, and detention basins has been developed for the Proposed Project Alternative. These stormwater facilities would be constructed along the natural drainage courses within the SPA to mimic natural drainage patterns. The stormwater system has been designed to collect and convey 100-year (0.01 AEP) storm events. The proposed drainage and detention facilities would detain flows exiting the site such that 10-year (0.1 AEP) and 100-year (0.01 AEP) flow events would remain at or below existing conditions flows.

The Proposed Project Alternative would employ a Low Impact Development (LID) stormwater management system that would increase infiltration potential, evaporation, and surface storage while reducing excess stormwater runoff. A LID stormwater management system treats stormwater at its source rather than at a centralized collection site or pond. LID systems reduce runoff volume and rate by maximizing infiltration capacity through the use of undisturbed areas, on-site water management facilities, and functional landscaping to capture runoff at its source. Decentralizing stormwater collection can reduce pollutants because as stormwater travels from its source, it can pick up pollutants that can reduce water quality in receiving bodies. By allowing stormwater infiltration at its source, it does not have the opportunity to pick up pollutants as it travels to a centralized and distant collection system. Pollutant reduction is also achieved by minimizing paved surfaces in the SPA. The following elements may be included as part of the Proposed Project Alternative LID system: bioretention facilities, infiltration trenches, dry wells, landscape/buffer strips, and swales (grassed, bio retention, and/or wet). Specific features to be included would be determined between the project applicant(s) and the City.

The majority of the Alder Creek streambed through the SPA would be preserved in the open space land use designation as part of the site development plan, as would many of the other drainage channels and swales. Grading would be required in some of the open-space tract to contain seasonal flows to an active channel and more reliably define the extent of the 100-year (0.01 AEP) floodplain in this area. Construction of several roadway crossings are proposed over Alder Creek, however, and detention basins would be constructed in on-site drainage watercourses. During smaller events, runoff would be conveyed within the creek banks while larger flows would utilize up to the design depth of the detention basins. Sixteen detention and water quality basins are proposed throughout the SPA. These basins are sized to hold both the required detention volume, and an additional water quality volume. Exhibit 2-5 on page 2-21 of the DEIR/DEIS illustrates the locations of detention basins. As shown on Exhibit 2-5 on page 2-21 of the DEIR/DEIS, one detention basin is proposed to be located off-site, immediately west of Prairie City Road.

The City's Public Works Department provides stormwater services in Folsom. The SPA is not currently served with stormwater infrastructure. The Proposed Project Alternative would include stormwater infrastructure designed to collect and convey 100-year (0.01 AEP) storm events. The proposed infrastructure includes surface swales, catch basins, drainage inlets, underground pipes, and detention basins. Stormwater runoff would be

collected in the proposed system, and discharged into Alder Creek, Buffalo Creek, Carson Creek, and Coyote Creek. Exhibit 2-5 on page 2-21 of the DEIR/DEIS illustrates the conceptual stormwater system for the SPA.

Waters of the U.S., Including Wetland Impacts and Avoidance

A total of 84.94 acres of waters of the U.S. are located within the SPA. Additionally, 1.30 acres of waters were identified on the site that USACE determined to be nonnavigable, isolated, and intrastate waters with no apparent interstate commerce connection. Table 2-2 below (Table 2-2 on page 2-23 of the DEIR/DEIS) presents acreage of waters of the U.S., with detail shown for vernal pools, seasonal wetland swales, seasonal wetlands, freshwater marsh, freshwater seeps, ponds, stream channels, intermittent drainage channels, and ditches.

Table 2-2 Waters of the U.S., Including Wetlands in the SPA				
Wetland Type	Existing Acres	Acres Filled By Proposed Project Implementation (Direct Impact)	Acres Avoided by Proposed Project Implementation	Acres Fragmented by Proposed Project Implementation (Indirect Impact)
Vernal pool	4.64	2.92	1.72	0.00
Seasonal wetland	4.66	3.87	0.78	0.00
Seasonal swale	25.48	17.63	7.85	0.00
Seep	10.80	4.48	6.33	0.17
Marsh	0.21	0.07	0.14	0.016
Ponds	6.87	1.17	5.71	0.088
Stream channel	17.19	3.38	13.81	0.012
Drainage channel	11.72	4.47	7.25	0.00
Ditch	1.96	1.40	0.55	0.00
Willow Scrub	0.11	0.11	0.00	0.00
Total Waters of the U.S.	83.64	39.50	44.14	0.29
Isolated Waters	1.30	1.25	0.05	0.00
Grand Total	84.94	40.75	44.19	0.29

Source: ECORP Consulting, Inc. 2009 and 2010

The Proposed Project Alternative includes 1,050 acres of open space that would contain preserve areas intended to preserve and protect aquatic features, sensitive habitat areas, and cultural resources. Development impacts on wetland habitats and other waters of the U.S. within the preserve areas would be avoided. The boundaries of the preserve areas would be determined during the wetland permitting process. The open space would be distributed throughout the SPA, but concentrated primarily in the western portion of the site where oak woodlands and Alder Creek are present. Most of the stream channels and intermittent drainage channels are included in proposed open space corridors. As shown in Table 2-2 above, a total of 44.19 acres of waters of the U.S. and wetlands would be preserved in the SPA, including most of Alder Creek.

In addition to the waters of the U.S. that would be avoided, preserved, and protected (described above) in the open space areas, additional acreage of wetland habitat would be created within the open space areas as compensatory mitigation for impacts elsewhere in the SPA.

The open space designation includes oak woodlands, riparian corridors, landscape parkways 30 feet in width or greater, slope areas, and wetland and stream and drainage channel habitats. Buffers of at least 75 feet are included in the open space design to protect preserved habitats from adjacent development. No grading, trails, or improvements would be allowed within the first 25 feet of buffer, but temporary disturbance associated with contour grading, mitigation planting, trails, benches, and other passive recreational amenities may occur in the

outer 50 feet of buffer. Allowed uses within designated open space are designed to be consistent with the preservation and enhancement of natural open space and habitat features. These uses include passive outdoor recreation, such as hiking, walking, horseback riding, and bicycling on designated walkways and trails. Trailheads, restroom facilities, educational and interpretive signage, and similar facilities to enhance public enjoyment of the open space would also be allowed, as well as maintenance of stormwater systems and other utilities.

Wetland Preserve Mitigation and Monitoring Plan

A draft mitigation and monitoring plan (MMP) for the wetland preserve and additional mitigation areas has been developed by ECORP Consulting, Inc. (ECORP) on behalf of the project applicant(s) and is attached as Appendix N to the DEIR/DEIS. An updated MMP is attached to the FEIR/FEIS as Appendix Q. An operations and management plan (O&M plan) was also prepared for the project by ECORP on behalf of the project applicant(s) and is attached to the FEIR/FEIS as Appendix P. Both the MMP and the O&M plan would need to be reviewed and approved by USACE before implementation or work in waters of the U.S. The MMP outlines the monitoring methods and success criteria of compensatory wetland and riparian habitat while the O&M plan lists the responsibilities of the preserve steward, as well as the tasks required to ensure the long-term viability of the functions and values of the preserve.

Schools

The Proposed Project Alternative also includes approximately 130.6 acres designated for schools, including five elementary school sites, and one middle and high school site. Each elementary school site consists of 10.0 acres, with 79.0 acres for the middle and high school site. In addition to the public school sites, an approximately 50-acre parcel is planned for either a private or public school.

All of the public school sites would be part of the Folsom Cordova Unified School District (FCUSD). The proposed schools, along with adjacent community parks, would be jointly used by FCUSD and the Folsom Parks and Recreation Department. Funding would be provided through state bonds and local bonds and developer fees.

Buildout of the Folsom South of 50 Specific Plan development would generate approximately 4,999 pupils in grades K–12. Of this total, 2,807 pupils would be in grades K–5; 1,017 would be in grades 6–8; and 1,073 would be in grades 9–12 and continuation high school. An additional 102 pupils in grades K–12 would be enrolled in special education programs. FCUSD based these projections on the proposed land use designations and yield rates generated from similar types of development.

The timeline for construction of the proposed schools would coincide with the project applicant(s)' buildout schedule, which is dependent upon market trends for new homes.

Public Utilities and Services

Public services, utilities, and other infrastructure improvements would be needed to support the Proposed Project Alternative as outlined in the proposed specific plan. The project applicant(s) have initiated coordination with the various service providers regarding provision of these services on an as-needed basis. Table 2-3 below (Table 2-3 on page 2-25 of the DEIR/DEIS) provides details on the necessary off-site improvements.

A municipal services facility is proposed for the SPA. This facility would provide a range of services to residents of the SPA and of the City of Folsom as a whole, including "city hall" type facilities such as meeting rooms and offices, and could also provide space for a branch library facility. Two fire stations are also proposed in the SPA.

**Table 2-3
Folsom South of U.S. 50 Specific Plan Off-site Infrastructure Improvements**

Improvement	Approved/Existing CEQA Coverage?
Off-site water conveyance	No
Sewer force main connection underground from SPA to interceptor on Iron Point Road North of U.S. 50	No
EID Sewer connections to existing facilities in El Dorado Hills	No
Detention basin (west of Prairie City Road)	No
Prairie City Road improvements	No
White Rock Road improvements	No
Prairie City Road/U.S. 50 Interchange improvements (North of U.S. 50)	Yes
Oak Avenue/U.S. 50 Interchange	No
Rowberry Drive Overcrossing	No
Scott Road/U.S. 50 Interchange improvements (North of U.S. 50)	Yes
Empire Ranch Road/U.S. 50 Interchange improvements (North of U.S. 50)	Yes
Roadway connections from Folsom Heights property into El Dorado Hills	No
Sewer force main connections within roadway connections from Folsom Heights property into El Dorado Hills	No

Sources: MacKay & Soms 2008; data compiled by AECOM in 2009

Fire and Police Protection

Fire protection services would be provided by the City of Folsom’s Fire Department. The majority of the SPA is currently in the jurisdiction of the Sacramento Metro Fire District, but the City would seek detachment from the District in conjunction with its annexation proposal. An approximately 178-acre area in the northeastern portion of the SPA is currently served by the El Dorado Hills Fire Department. The City of Folsom and the El Dorado Hills Fire Department are negotiating whether this area will be transferred to the jurisdiction of the Folsom Fire Department. Two fire stations are included as part of the Proposed Project Alternative. The final size and location of these fire stations will be determined following response time analysis studies, but the conceptual locations for these facilities are near the intersection of Oak Avenue and Street “A,” and east of the intersection of Scott Road and Street “B.” A fire training facility may be paired with one of the two fire stations; the size and location of these facilities would be determined during the development phase of the project. (See Exhibit 2-3 on page 2-15 of the DEIR/DEIS.)

Police protection would be handled by the City’s Police Department. The facilities needs for law enforcement and protection would be determined by that department. An on-site police station is conceptually located north of Street “B” and east of Scott Road, with a conceptual police service center in the regional mall. (See Exhibit 2-3 on page 2-15 of the DEIR/DEIS.)

On-site Water

The City of Folsom Utilities Department, Water Division would provide water service to the majority of the SPA. In the EID service area (illustrated in Exhibit 2-6 on page 2-27 of the DEIR/DEIS), EID would provide water service. No water infrastructure is currently present in the SPA; a conceptual diagram of water distribution infrastructure is presented on Exhibit 2-7 on page 2-29 of the DEIR/DEIS. Under the terms of Measure W, adopted by Folsom voters in 2004 and incorporated into the City’s Charter as Section 7.08, a new water source for

the project area must be identified and provided at no cost to existing Folsom residents, so that the existing water supply currently serving users to the north of U.S. 50 is not reduced. Section 2.8 below provides a detailed description of the “Water” portion of the project, including information on the source of the water, and off-site conveyance improvements.

The Proposed Project Alternative includes installation of a non-potable water distribution system (“purple pipe” system). This system would be used to route non-potable water to parks and landscaped areas, reducing the use of drinking water for irrigation in the SPA. There currently is no recycled water supply to use within the SPA, but installation of the distribution system would expedite implementation of such a supply when it is available.

The project would conform to the 2007 requirements of Best Management Practices (BMPs) from the California Urban Water Conservation Memorandum of Understanding (or later edition if applicable). These BMPs could include: performing site-specific landscape and interior water surveys; conducting public information campaigns and school education programs; adopting a water waste ordinance; and identifying opportunities for installation of dedicated irrigation meters, monitoring progress through billing, and providing site-specific assistance for accounts 20% over budget. The California Urban Water Conservation BMPs would have a long-term affect on the City’s ability to manage water use throughout the SPA. To the extent that the City requires installation of dedicated irrigation meters in the SPA, a monitoring and survey program would provide an opportunity to ensure that landscape water demands are achieving desired water conservation targets. The City’s water conservation coordinator would be assigned to manage water conservation programs and City staff will be authorized to enforce the water waste ordinance. Through targeted outreach, the City can encourage continued customer use of highly efficient appliances and irrigation systems, emphasize the need to retain efficient landscape plantings, and minimize otherwise wasteful uses.

Sewer

Sanitary sewer service for the SPA would be provided by the City of Folsom Wastewater Division. The Wastewater Division discharges its wastewater into the Sacramento Regional County Sanitation District (SRCSD) interceptor system for conveyance and treatment at the SRCSD’s regional facility. An approximately 189-acre portion of the SPA east of Empire Ranch Road is in the El Dorado Irrigation District service area. Sanitary sewer service in this area would be provided by EID, through connection with the existing EID system in El Dorado Hills, with wastewater being conveyed to the El Dorado Hills WWTP. Exhibit 2-6 on page 2-27 of the DEIR/DEIS illustrates the location of the EID service area.

No sanitary sewer facilities are currently present in the SPA. Exhibit 2-8 on page 2-31 of the DEIR/DEIS presents a conceptual diagram of on-site sewer facilities. Sewer facilities would include both gravity-fed mains and force-mains, as well as several pump stations. Connection to the City’s existing wastewater system would proceed off-site along Oak Avenue, joining the existing system on Iron Point Road west of Oak Avenue.

Electricity

Electrical service would be provided by Sacramento Municipal Utility District (SMUD). All electrical lines under 69 kilovolts (kV) would be routed underground within the rights-of-way of streets in the SPA. SMUD has indicated that backbone electrical improvements necessary to support the project would include construction of three electric substations. The exact locations for these substations have not been defined; however, the approximate locations would be near the intersection of Easton Valley Parkway and Rowberry Drive, near the intersection of White Rock and Scott Roads, and along Placerville Road north of Easton Valley Parkway. The number of electric substations and the aforementioned locations are based on preliminary information provided to SMUD and are subject to change if the electrical demands and/or land uses are revised. These substations would be served by extensions of existing 69-kV overhead lines. At minimum, new 69 kV overhead lines would be required along White Rock Road from Prairie City Road to Placerville Road and along Placerville Road from

White Rock Road to Highway 50. Additional overhead 69 kV routes would be required, based on the locations of the distribution substation sites.

The project applicant(s) are currently working with SMUD to develop detailed design plans for electrical service to the SPA.

Natural Gas

Natural gas service would be provided by Pacific Gas & Electric Company (PG&E), and would be routed underground within the rights-of-way of streets in the SPA. The project applicant(s) is currently working with PG&E to develop detailed design plans for natural-gas service to the SPA, but one or more transmission pipelines and two natural gas regulator stations would be constructed in the SPA to serve buildout of the project.

Telephone

AT&T has existing underground and overhead telephone service in the vicinity of the SPA. AT&T would extend lines and construct facilities to serve the SPA concurrently with development phases.

Solid Waste Disposal

The City's Solid Waste Division would provide pickup and disposal of solid waste in the SPA.

Circulation Improvements

As shown in Exhibit 2-9 on page 2-35 of the DEIR/DEIS, the Proposed Project Alternative includes the development of an estimated 171.6 acres of major roadways and associated landscaping within the SPA. Access and circulation within the SPA would be provided through the construction of the following primary roadways:

- ▶ White Rock Road is a regional connector which forms the southern boundary of the SPA, and provides an alternative travel route parallel to U.S. 50. White Rock Road would be a 5-lane roadway with a 28-foot wide median to accommodate a future sixth traffic lane, if needed. A 50-foot-wide landscape parkway (including a 12-foot Class I bicycle trail) would buffer development in the SPA from White Rock Road.
- ▶ Easton Valley Parkway would be a regional roadway and transit corridor parallel to U.S. 50. The street section for Easton Valley Parkway would vary from two- to six-lanes, with a median of 16 to 38 feet. Four lanes (with Class II bicycle lanes on both sides of the road, a 6-foot wide meandering sidewalk on the south side of the street, and a Class I bike path on the north side of the street. No sidewalk will be provided on the north side of Easton Valley Parkway from Rowberry Road to Prairie City Road) are proposed from Prairie City Road to the western end of the proposed Regional Commercial center. Six lanes are proposed from the Regional Commercial center to Placerville Road (with eight-foot sidewalks on each side of the road), and two lanes east of Placerville Road (with 5-foot wide Class II bicycle lanes on both sides of the road, a separate 12-foot-wide class I bike path on the south side of the road, and a six-foot sidewalk on the north side). A Class II bicycle lane would run the length of Easton Valley Parkway in the SPA. Right of way for two lanes is reserved for dedicated transit service at the level of bus rapid transit, and eventually for light rail when demand justifies the service.
- ▶ Prairie City Road is a local arterial connecting U.S. 50 and White Rock Road along the western boundary of the SPA. Prairie City Road would be a 4 to 6 lane major arterial with 16-foot-wide center median. Class II bicycle lanes would be provided in each direction, with six-foot-wide sidewalks along both sides of the roadway. Six lanes are proposed from U.S. 50 to Easton Valley Parkway, with a four-lane roadway continuing from Easton Valley Parkway to White Rock Road. Empire Ranch Road would be extended from U.S. 50 to White Rock Road on the eastern portion of the SPA. Six lanes are proposed from U.S. 50 to Easton Valley Parkway, with four lanes proposed from Easton Valley Parkway to White Rock Road. The Empire

Ranch Road corridor would include Class II bicycle lanes in each direction, and six-foot sidewalks on both sides of the road.

- ▶ Oak Avenue would extend from U.S. 50 to White Rock Road, providing an alternative to existing north-south routes. Four lanes are proposed for Oak Avenue, with a 16-foot-wide center median. Class II bicycle lanes are proposed in each direction, with six-foot-wide sidewalks proposed on both sides of the road.
- ▶ Scott Road would be extended from U.S. 50 south to White Rock Road. Six lanes are proposed between U.S. 50 and Street B, with four lanes proposed between Street B and White Rock Road. Class II bicycle lanes and six-foot-wide sidewalks are proposed in each direction.
- ▶ Street B would connect Placerville Road to White Rock Road with two travel lanes, Class II bicycle lanes in each direction, and 15-foot-wide sidewalks on each side of the road. The corridor would contain a 38-foot-wide center median for limited left-turn movements and future transit use east of Scott Road.
- ▶ Placerville Road would extend from a U.S. 50 undercrossing to White Rock Road. The roadway would range from two to four lanes, with Class II bicycle lanes in each direction. A 38-foot-wide median is proposed from Easton Valley Parkway to Street B to accommodate future transit use. Sidewalk widths would be 15-feet south of Easton Valley Parkway, with six-foot sidewalk and 12-foot wide Class I bike paths constructed on other portions of the route.
- ▶ Rowberry Drive would extend from a U.S. 50 overpass to Easton Valley Parkway, with four travel lanes, Class II bicycle lanes in both directions, and six-foot-wide sidewalks on both sides of the road.
- ▶ Street A would connect Prairie City Road on the west with Empire Ranch Road on the east. Two travel lanes, with Class II bicycle lanes in both directions, six-foot-wide sidewalks on both sides of the road are proposed for Street A.

In addition to the principal roadways, a number of different types of local roadways are proposed. In the Town Center area, roads would be two-lanes with either parallel or angle parking on both sides and 10-foot-wide sidewalks. Alleys in the Town Center would be 20 feet wide, with no parking permitted.

In residential areas, entry roads would include two travel lanes, Class II bicycle lanes in both directions, and 5-foot-wide sidewalks. Internal roadways would have two travel lanes, with 5-foot-wide parking lanes on both sides, and five foot sidewalks on both sides. In hillside neighborhoods, local streets would have two travel lanes, with no parking or sidewalks. One-way roads with one travel lane and a parking lane and sidewalk on one side may be permitted in hillside neighborhoods.

In addition to on-site transportation improvements, the project applicant(s) would be required to pay their fair share of various regional and local roadway improvements, which are discussed in Chapter 3A.15, “Traffic and Transportation – Land,” of the DEIR/DEIS.

As shown in Exhibit 2-10 on page 2-39 of the DEIR/DEIS, the Proposed Project Alternative would include the development of bicycle and pedestrian trails within the SPA. In addition to sidewalks and recreational trails in the open space areas, Class I paved off-street bike paths would be provided along White Rock Road, and 5-foot-wide Class II bicycle lanes would be provided on major roadways as described above. 12-foot-wide multi-use trails would be provided along portions of several roadways, including Easton Valley Parkway, Prairie City Road, Oak Avenue, and Street A.

The Proposed Project Alternative would also include a proposed “transit corridor,” which would connect with proposed Bus Rapid Transit (BRT) service to the west of the SPA along Easton Valley Parkway. As shown on Exhibit 2-10 on page 2-39 of the DEIR/DEIS, the proposed transit corridor would extend from the western project boundary along Easton Valley Parkway, turning south on Placerville Road, and then turning east and south onto

Street B, terminating at White Rock Road. Proposed roadways along this transit corridor would include 38-foot-wide medians to permit later addition of dedicated bus lanes.

OFF-SITE “LAND” IMPROVEMENTS

Several off-site land development improvements (in addition to the off-site water facilities discussed in Section 2.8 of this document) would be necessary to serve development in the SPA under the Proposed Project Alternative. These improvements would include:

- ▶ a sewer pipeline connection extending from the SPA to an existing SRCSD pump station on Iron Point Road;
- ▶ improvements to the existing interchange at U.S. 50 and Prairie City Road (improvements for traffic from the south only);
- ▶ a new interchange at U.S. 50 and Oak Avenue (Proposed Project includes improvements for traffic from the south only);
- ▶ a new overcrossing of U.S. 50 at Rowberry Drive;
- ▶ improvements to the existing interchange at U.S. 50 and Scott Road/East Bidwell Street (improvements for traffic from the south only);
- ▶ a new interchange at U.S. 50 and Empire Ranch Road (improvements for traffic from the south only); and
- ▶ Construction of a detention basin on the west side of Prairie City Road.

Exhibit 2-11 on page 2-41 of the DEIR/DEIS illustrates the locations of proposed off-site land development improvements associated with development of the SPA. Analysis of these improvements is addressed under “On-site and Off-site Elements” in the impact discussions contained within the 3A “Land” sections of Chapter 3, “Affected Environment, Environmental Consequences, and Mitigation Measures” of the DEIR/DEIS.

PROJECT PHASING

Both LAFCo Resolution 1196 and the City’s Measure W require the SPA project applicants to develop phasing plans for certain improvements. In conjunction with their development of those plans, the SPA project applicants have developed an estimate of a schedule on which units within the SPA would be developed. This estimated schedule has five increments of units is discussed in the Public Facilities Financing Plan and the Water Supply Assessment (WSA). While that schedule is currently the project applicants’ best estimate of the pace of development within the SPA, that schedule is subject to change depending on market conditions and individual applicants’ preferences for how to develop their respective properties.

This estimated schedule of development, however, does not indicate where specific units will be developed geographically at specific times. As Exhibit 2-12 on page 2-43 of the DEIR/DEIS illustrates, the SPA project applicants have developed a generalized geographic depiction of four phases of construction (north, east, south and west). At the time of writing of the DEIR/DEIS, however, information on the order in which development of these geographic phases of SPA would occur was not available. It therefore would be speculative for the DEIR/DEIS to analyze development of any particular phase of the SPA as occurring before or separate from any other particular phase.

2.7.3 No Project Alternative

Under this alternative, the project as a whole would not be developed or implemented—meaning that none of the development proposed for the SPA would be constructed and no off-site water facilities would be constructed. The No Project Alternative assumes that existing land uses in the SPA would continue, including 80-acre agricultural development as permitted under the adopted Sacramento County General Plan designations and zoning, which would permit the construction of up to 44 individual rural residences on 80-acre parcels zoned for agricultural use. This analysis uses existing site conditions at the time that the NOP was published (September 2008) as the “existing conditions” portion of the “no project” scenario (see State CEQA Guidelines Section 15126.6[e][2]) to allow consideration of a full range of alternatives. Remediation of contaminated soil and groundwater on the Aerojet General Corporation parcel along the western property boundary is a separate action that will continue either with or without project implementation.

Under the No Project Alternative, the SPA would not be annexed into the City of Folsom. Instead, it would remain within and under the jurisdiction of Sacramento County. Although Chapter 3.0, “Affected Environment, Environmental Consequences, and Mitigation Measures,” of the DEIR/DEIS discusses the impacts related to the No Project Alternative, it is not appropriate in the EIR/EIS to propose mitigation measures for the No Project Alternative, because the City of Folsom has no authority or jurisdiction over any actions which would occur in the SPA under this alternative. In addition, this alternative would result in no impacts to wetlands or other waters of the U.S. (as compared to a total of 39.5 acres filled for the “Land” portion of the project and 6.8 acres filled for the “Water” portion of the project for a grand total of 46.3 acres filled by the project as a whole). Because no impacts would occur, the USACE would have no authority over any actions that would occur in the SPA under this alternative.

Although the Sacramento County General Plan contains goals and policies intended to protect many sensitive resources, such as cultural and biological resources, most of those goals and policies do not apply to land that is zoned and designated for agricultural use, because continued agricultural activities and agricultural land is a valuable resource in and of itself that is encouraged and protected by Sacramento County. The goal of Sacramento County’s Agricultural Element as stated in its General Plan is to “maintain the County’s agricultural lands, and (their) agricultural productivity...” and “disruption of one resource value for another is an historic pattern of land development in the County,” which the County is now trying to avoid. As further discussed in the Sacramento County General Plan, the County recognizes that while all resources are valuable, it is not always possible to achieve a balance between protecting agricultural land owners’ right to farm, and protecting other sensitive resources. The analysis of the No Project/No Action Alternative in the DEIR/DEIS assumes that “normal agricultural activities” would continue in the SPA; based on the soil types in the SPA, those activities would consist of dryland farming (i.e., livestock grazing), which is consistent with the historic use of the SPA over the last 100 years.

The No Project Alternative would not meet the CEQA project purpose, need, or objectives of the proposed Folsom South of U.S. 50 Specific Plan project as described in Chapter 1, “Introduction and Statement of Purpose and Need,” of the DEIR/DEIS.

2.7.4 No USACE Permit Alternative

This alternative was designed to avoid the placement of dredged or fill material into waters of the United States (including wetlands) from both the “Land” and “Water” portions of the project, thus eliminating the need for a USACE Section 404 CWA permit. As a result, there would be no fill of waters of the U.S. under this alternative, compared to 46.3 combined acres of fill under the total Proposed Project Alternative (i.e., including both land development and off-site water facilities). This alternative would likely still require that the applicants consult with the USFWS and the National Marine Fisheries Service (NMFS) to ensure compliance with Section 9 of the Endangered Species Act. A conceptual land use map showing development areas and jurisdictional wetlands with a 50-foot-wide avoidance buffer in the SPA is provided in Exhibit 2-13 of the DEIR/DEIS. Proposed backbone infrastructure improvements in this alternative are illustrated in Exhibit 2-14 of the DEIR/DEIS. Under this

alternative, 1,506.1 acres of the SPA would be designated as open space, compared to 1,057 acres under the Proposed Project Alternative. This alternative also would require more expensive/time-consuming, methods of construction for roadways and utilities. Under this alternative, approximately 3,837 fewer residential housing units would be constructed, and approximately 131 fewer acres would be used for commercial/industrial development, than under the Proposed Project Alternative See Tables 2-4 and 2-5 (Tables 2-4 and 2-5, respectively, on page 2-45 of the DEIR/DEIS). The acreage proposed for park use is reduced to 84.8 acres in this alternative. The off-site water facilities in this alternative would avoid fill of waters of the U.S. by using horizontal directional drilling (i.e., jack-and-bore) construction methods along the pipeline alignment and by siting the water treatment plant in a location that would avoid fill of waters of the U.S.

Land Use Type	No USACE Permit Alternative			Proposed Project Alternative		
	Acres	du/ac ¹	Units	Acres	du/ac ¹	Units
Single Family	795.8	3	2,388	557.8	3	1,687
Single Family High Density	204.9	5.5	1,127	532.5	5.5	2,933
Multi-Family Low Density	147.0	9	1,323	266.7	9	2,434
Multi-Family Medium Density	54.5	18	981	67.0	18	1,224
Multi-Family High Density	8.4	25	210	49.9	25	1,251
Mixed Use	28.7	12	344	59.1	12	681
Total	1,239.3		6,373	1,533		10,210

Notes:
¹ du/ac = dwelling units per acre
 Source: MacKay & Soms 2008, Torrance Planning 2009

Land Use Type	No USACE Permit Alternative Acres	Proposed Project Alternative Acres
Office Park	73.9	89.2
Community Commercial	7.2	38.8
General Commercial	177.6	212.9
Regional Commercial	131.7	110.8
Total	390.4	451.7

Source: MacKay & Soms 2008, Torrance Planning 2009

2.7.5 RESOURCE IMPACT MINIMIZATION ALTERNATIVE

This alternative would include a larger area of high-quality biological habitat in the proposed preserve area than under the Proposed Project Alternative, and would also preserve many of the on-site-cultural resources that would be eligible for listing on the California Register of Historical Resources and National Register of Historic Places. Within the DEIR/DEIS, Exhibit 2-15 on page 2-51 illustrates the conceptual land use plan for the Resource Impact Minimization Alternative, and Exhibit 2-16 on page 2-53 illustrates proposed backbone infrastructure improvements. A summary comparison of the long-term environmental benefits to be gained, or adverse impacts to be avoided, among all alternatives is provided in the DEIR/DEIS.

Under the Resource Impact Minimization Alternative, project components would be reconfigured to avoid many of the impacts on waters of the U.S., including wetlands and high-quality biological habitat, and the level of development would be decreased to reduce the amount of project-generated traffic, air quality emissions, and noise. A permit for fill of waters of the U.S., including wetlands, would still be required under this alternative;

26.47 acres of waters of the U.S. would be filled, 13.03 fewer acres than would be filled under the Proposed Project Alternative. An additional 375 acres of land across the SPA would be designated as open space.

A total of 1,429 acres, approximately 40% of the SPA, would become a protected wetland preserve. Areas of the SPA with higher concentrations of cultural resources, including areas on the northwestern portion of the SPA would also remain in open space in this alternative. The total acreage of residential development would be reduced by approximately 205 acres and approximately 2,245 fewer residential units would be constructed. Overall density would decrease (average density across the residentially designated area would be approximately 6 du/ac, compared to 6.65 du/ac under the Proposed Project Alternative). Commercial and industrial development sites would be reduced by approximately 113 acres. Development of park land would be reduced to 105.7 acres. The types of land uses and general on- and off-site infrastructure improvements would remain the same as under the Proposed Project Alternative. Tables 2-6 and 2-7 below (Tables 2-6 and 2-7 on page 2-46 of the DEIR/DEIS) list the total estimated residential, commercial, and industrial development under this alternative.

Land Use Type	Resource Impact Minimization Alternative			Proposed Project Alternative		
	Acres	du/ac ¹	Units	Acres	du/ac ¹	Units
Single Family	504.5	3	1,513	557.8	3	1,687
Single Family High Density	491.5	5.5	2,703	532.5	5.5	2,933
Multi-Family Low Density	245.9	9	2,213	266.7	9	2,434
Multi-Family Medium Density	52.3	18	942	67.0	18	1,224
Multi-Family High Density	11.5	25	287	49.9	25	1,251
Mixed Use	25.6	12	307	59.1	12	681
Total	1,331.3		7,965	1,533		10,210

Notes:
¹ du/ac = dwelling units per acre
 Sources: MacKay & Soms 2008, Torrance Planning 2009

Land Use Type	Resource Impact Minimization Alternative Acres	Proposed Project Alternative Acres
Office Park	52.1	89.2
Community Commercial	15.4	38.8
General Commercial	161.3	212.9
Regional Commercial	110.7	110.8
Total	339.5	451.7

Source: MacKay & Soms 2008, Torrance Planning 2009

2.7.6 CENTRALIZED DEVELOPMENT ALTERNATIVE

This alternative would preserve approximately 75% of the eastern part of the SPA, which lies within the Sierra Nevada foothills, in its current undeveloped state. Commercial development would still occur along the south side of U.S. 50 within the foothills. It would also entail about 1,000 fewer equivalent dwelling units (EDUs) than the Proposed Project Alternative. This alternative would reduce potential impacts to biological, cultural, and visual resources. Within the DEIR/DEIS, Exhibit 2-17 on page 2-57 illustrates the conceptual land use plan for the

Centralized Development Alternative, and Exhibit 2-18 on page 2-59 illustrates proposed backbone infrastructure improvements. This alternative would fill 37.06 acres of waters of the U.S., 2.48 acres fewer than would be filled under the Proposed Project Alternative.

The Centralized Development Alternative envisions a higher density of residential development on a smaller footprint compared to the Proposed Project Alternative, resulting in more dwelling units per acre. The total acreage of residential development would be reduced by approximately 387 acres, but total number of residential units would be reduced by only 1,186 units, resulting in a higher overall density per acre (7.85 du/ac in the Centralized Development Alternative compared to 6.65 du/ac in the Proposed Project Alternative). The acreage of commercial and industrial development would be similar in this alternative compared to the Proposed Project. The acreage proposed for park use is reduced to 118.7 acres in this alternative, including local parks which are included in acreage totals for residential and mixed-use designations. The types of land uses and general on- and off-site infrastructure improvements under the Centralized Development Alternative would remain the same as under the Proposed Project Alternative. A 1,464.4-acre area would be dedicated to open space (approximately 407 acres more than under the Proposed Project Alternative) is also designated under the Centralized Development Alternative. Tables 2-8 and 2-9 (Tables 2-8 and 2-9 on pages 2-55 and 2-56, respectively, of the DEIR/DEIS) list the total estimated development under this alternative.

Table 2-8 Summary Comparison of Residential Development under the Centralized Development Alternative and the Proposed Project Alternative						
Land Use Type	Centralized Development Alternative			Proposed Project Alternative		
	Acres	du/ac¹	Units	Acres	du/ac¹	Units
Single Family	213.7	3	641	557.8	3	1,687
Single Family High Density	473.1	5.5	2,602	532.5	5.5	2,933
Multi-Family Low Density	282.4	9	2,542	266.7	9	2,434
Multi-Family Medium Density	113.6	18	2,044	67.0	18	1,224
Multi-Family High Density	30.5	25	764	49.9	25	1,251
Mixed Use	36.1	12	433	59.1	12	681
Total	1,149.4		9,026	1,533		10,210

Notes:
¹du/ac = dwelling units per acre
 Source: MacKay & Soms 2008, Torrance Planning 2009

Table 2-9 Summary Comparison of Commercial and Industrial Development under the Centralized Development Alternative and the Proposed Project Alternative		
Land Use Type	Centralized Development Alternative Acres	Proposed Project Alternative Acres
Office Park	112.8	89.2
Community Commercial	15.4	38.8
General Commercial	186.6	212.9
Regional Commercial	133.6	110.8
Total	448.4	451.7

Source: MacKay & Soms 2008, Torrance Planning 2009

2.7.7 REDUCED HILLSIDE DEVELOPMENT ALTERNATIVE

This alternative would reduce the developed area on the eastern portion of the SPA, which lies within the Sierra Nevada foothills, leaving more of this area in its current undeveloped state for aesthetic, biological, and cultural resource purposes. It would also entail about 1,343 additional EDUs compared to the Proposed Project Alternative, with a much higher density of development within the central portion of the SPA, thus reducing potential impacts related to traffic and air quality. Within the DEIR/DEIS, Exhibit 2-19 on page 2-61 illustrates the proposed land use plan for the Reduced Hillside Development Alternative, and proposed backbone infrastructure improvements are illustrated in Exhibit 2-20 on page 2-63. The Reduced Hillside Development Alternative would fill 42.69 acres of waters of the U.S., 3.19 acres more than would be filled under the Proposed Project Alternative.

Although low density on a particular property may reduce the levels of impacts occurring on or emanating from the property, low densities can be considered an inefficient use of finite land resources. In areas with growing populations, low-density development coupled with increasing market demand can result in development being pushed outward toward other areas on the urban periphery, with the long-term consequence of more overall loss of habitat, open space, and farmland. In this alternative, the land use mix includes more residential areas at higher densities, and relatively less low-density single-family residential development. Although these higher densities may result in greater localized impacts on resources, the overall area of disturbance is reduced by concentrating development in particular locations. Sacramento County has experienced demographic pressure reflecting an increasing statewide population and intrastate migration from the San Francisco Bay Area and southern California, and the City is interested in furthering its goals and objectives of providing a mix of affordable housing and new jobs to its residents; therefore, developing the site with a higher density, centralized land use pattern would focus market demand for development into an area near existing development, infrastructure, and services while increasing the amount of land which remains as open space. Traffic modeling also shows that higher density development results in a reduction in vehicle miles traveled and associated greenhouse gas emissions.

The Reduced Hillside Development Alternative envisions a greater density of residential development on a slightly smaller footprint compared to the Proposed Project Alternative, resulting in more dwelling units per acre. The total acreage of residential development would be reduced by approximately 64 acres, but the density would be increased such that approximately 1,343 additional residential units would be constructed. The acreage of commercial and industrial development would be increased by less than 20 acres. The acreage proposed for park use (including local parks which are included in acreage totals for residential and mixed-use designations) is increased to 170.9 acres in this alternative. The types of land uses and general on- and off-site infrastructure improvements under the Reduced Hillside Development Alternative would remain the same as under the Proposed Project Alternative. A 1,057-acre area would be dedicated to open space (the same size as under the Proposed Project Alternative) is also designated under the Reduced Hillside Development Alternative. Tables 2-10 and 2-11 (Tables 2-10 and 2-11 on page 2-65 of the DEIR/DEIS) list the total estimated development under this alternative.

This alternative would include policies to reduce water use, including indoor water use and reduced-water landscapes. The other “Land” alternatives already assume water use reductions near the state of the art. The additional water conservation policies in this alternative are feasible because the increased number of units in this alternative generate more funding and fees for water conservation improvements. Fewer landscaped areas would be irrigated, and more native plantings and low-water demand plantings (including natural non-irrigated groundcover) would be used. A 50% reduction in irrigated landscape area would be required compared to the Proposed Project Alternative.

Table 2-10 Summary Comparison of Residential Development under the Reduced Hillside Development Alternative and the Proposed Project Alternative						
Land Use Type	Reduced Hillside Development Alternative			Proposed Project Alternative		
	Acres	du/ac¹	Units	Acres	du/ac¹	Units
Single Family	370.7	2.7	989	557.8	3	1,687
Single Family High Density	331.0	4.9	1,619	532.5	5.5	2,933
Multi-Family Low Density	483.2	8	3,866	266.7	9	2,434
Multi-Family Medium Density	144.6	16	2,314	67.0	18	1,224
Multi-Family High Density	107.1	22.2	2,380	49.9	25	1,251
Mixed Use	36.1	10.7	385	59.1	12	681
Total	1,472.7		11,553	1,533		10,210

Notes:
¹ du/ac = dwelling units per acre
Source: MacKay & Soms 2008, Torrance Planning 2009

Table 2-11 Summary Comparison of Commercial and Industrial Development under the Reduced Hillside Development Alternative and the Proposed Project Alternative		
Land Use Type	Reduced Hillside Development Alternative Acres	Proposed Project Alternative Acres
Office Park	111.8	89.2
Community Commercial	15.4	38.8
General Commercial	210.1	212.9
Regional Commercial	133.6	110.8
Total	470.9	451.7

Source: MacKay & Soms 2008, Torrance Planning 2009

2.8 “WATER” ALTERNATIVES

All of the “Water” alternatives considered in this DEIR/DEIS involve construction and operation of new off-site conveyance and/or treatment infrastructure within east-central portions of Sacramento County to support new development within the SPA. The City formulated a series of “Water” alternatives, referred to in the DEIR/DEIS as Off-site Water Facility Alternatives, which would involve the connection of this new water infrastructure to the Freeport Regional Water Project (Freeport Project) to enable for diversion of Central Valley Project (CVP) water at the Sacramento River.

To capture all the components associated with the Off-site Water Facility Alternatives, the “Water” Study Area encompasses approximately 40,000-acres within the lower Sacramento Valley, east of the Sacramento River. As shown in Exhibit 2-23 and 2-24, pages 2-76 and 2-77 of the DEIR/DEIS, the Natomas Central Mutual Water Company (NCMWC) service area is located east of the Sacramento River and north of the City of Sacramento in the northern section of the “Water” Study Area. The City and the SPA are located along U.S. 50 and situated near the eastern Sacramento County line, approximately 25 miles east of the Sacramento River, and within the eastern-most portion of the “Water” Study Area.

Exhibits 2-23 and 2-24 of the DEIR/DEIS illustrate the western and eastern portions of the “Water” Study Area, respectively, which for the purposes of discussion in the DEIR/DEIS analysis, is divided into four smaller zones. Each of these four zones is described below:

- ▶ **Zone 1** includes the approximately 37,160-acre NCMWC service area, which depicts the northern extent of the “Water” Study Area. Zone 1 is included in the “Water” Study Area to cover potential operational changes within NCMWC’s service area. No facility improvements are proposed in Zone 1 as part of the Off-site Water Facility Alternatives.
- ▶ **Zone 2** is the section of the Sacramento River between River Miles 48 and 66; an approximately 1,200-acre area. Under the “Water” project alternatives, surface water would not be diverted by the NCMWC and rather would continue to flow south along this section of the river prior to diversion at the Freeport Project intake facility. Zone 2 is included in the “Water” Study Area to cover changes in river hydrology as a result of the Off-site Water Facility Alternatives. No facility improvements are proposed in Zone 2 as part of the Off-site Water Facility Alternatives.
- ▶ **Zone 3** corresponds with the existing Freeport Project, which encompasses an approximately 155-acre linear area. The Freeport Project begins on the eastern bank of the Sacramento River, near the Town of Freeport. As shown in Exhibit 2-25, the western extent of the Freeport Project starts in the Town of Freeport, west of Interstate 5 (I-5) and extends from the intake facility to the north on Freeport Boulevard and then east/southeast on Meadowview Road. At the Mack/Power Inn Road intersection, the Freeport Project continues east on Elsie Road for a short distance and then north on Wilbur to the Gerber Road/Wilbur Way intersection. At Gerber Road, the Freeport Project extends east to the Folsom South Canal (FSC). Zone 3 of the “Water” Study Area is included to cover potential operational changes to the Freeport Project as a result of the Off-site Water Facility alternatives. No physical changes to Zone 3 are contemplated.
- ▶ **Zone 4** contains the new conveyance facilities that would be constructed as part of the Off-site Water Facility Alternatives, and extends from at or near the Freeport Project’s bifurcation¹ point at an area that roughly corresponds with the intersection of Vineyard Road and Gerber Road on the southwest (Latitude–38° 28’ 53.94” N, Longitude 121° 18’ 57.82” W) to the northeast to the intersection of White Rock and Prairie City Roads on the northeast (Latitude–38° 36’ 52.71” N, Longitude–121° 8’ 57.97” W). Zone 4 covers a total area of approximately 1,377-acres.

2.8.1 COMPONENTS COMMON TO ALL “WATER” ALTERNATIVES

This section describes the conveyance facilities and water supply components that are common to all the Off-site Water Facility Alternatives analyzed in the EIR/EIS. These common components include the source water supply from NCMWC, integration with the Freeport Project, the need for new pumping facilities, and the provision of sufficient water treatment capacity and distribution facilities within the SPA. Additionally, each of Off-site Water Facility Alternatives assumes the absence of any non-potable supplies. These topics are described in further below.

SOURCE WATER

The City is proposing to acquire not more than 8,000 AFY of CVP contract entitlement water from the NCMWC, which would be put to beneficial use within the SPA. This water supply consists of a long-term, CVP water entitlement from the NCMWC under Contract No. 14-06-200-885A-R-1 (NCMWC CVP Contract) with the U.S. Bureau of Reclamation (Reclamation). The City is an existing CVP contractor within the American River Unit

¹ The Freeport Regional Water Project provides water to both the Sacramento County Water Agency (SCWA) and East Bay Municipal Utility District (EBMUD). “Bifurcation” refers to the point in the Freeport Project where the joint facilities end and SCWA’s dedicated pipeline and EBMUD’s dedicated pipeline begin.

and, upon annexation into the City, the SPA would be within the CVP water rights place of use (POU). NCMWC's CVP contract supply originates from the Shasta/Trinity River Division of the CVP and is currently diverted and applied to agricultural lands in northern Sacramento County and southern Sutter County. The project applicant(s) are proposing to enter into an agreement with the NCMWC whereby the CVP contract entitlement water would be permanently assigned to the City and this water supply would be provided by Reclamation for diversion from the Sacramento River. NCMWC's current CVP contract provides surface water during the months of July and August and includes a shortage provision of up to 25% during critically-dry years.

The City is proposing to modify the existing delivery schedule with Reclamation to a year-round municipal and industrial (M&I) schedule to allow for a more consistent diversion of 6,000 AFY of the 8,000 AFY over the course of a given year. The contract water would be made available by NCMWC reducing its surface water diversions/pumping during the irrigation season by approximately 33 to 465 cubic feet per second (cfs) at the Riverside Pumping Plant. This water supply would then remain in the Sacramento River and flow approximately 20 miles downstream for diversion by the City at the existing Freeport Project diversion facility, which is described below.

The CVP contract supplies acquired by the City as part of the Off-site Water Facility Alternatives would more than meet demands associated with all phases of development within the SPA during normal and dry years. This higher quantity of water is required to factor in the 25% reduction that could occur in dry years thereby reducing the quantity delivered to 6,000 AFY. This shortage provision could leave a margin of only 400 AFY between the demands of the SPA at build-out and the available surface water supply. In recognition of this surplus, which ranges from 400 AFY in dry years up to 2,400 AFY, the City intends to make these supplies available to the NCMWC for diversion for irrigation. Any additional water not required by NCMWC would be put to beneficial use according to the provisions of the CVP water service contract and Central Valley Project Improvement Act (CVPIA), House Resolution (HR) 429, Public Law 102-575.

Natomas Central Mutual Water Company

NCMWC currently serves about 33,200 acres in Sacramento and Sutter Counties. Exhibit 2-22 on page 2-73 in the DEIR/DEIS illustrates the boundaries of the NCMWC service area. NCMWC maintains appropriate water rights to the Sacramento River pursuant to Water Right Licenses 1050, 2814, 3109, 3110, and 9794 and Permit 19400. NCMWC and Reclamation signed Settlement Contract No. 14-06-200-885A-R-1 to address the CVP's effect on those licenses and that permit under that contract. NCMWC diverts base supply¹ and CVP water² from the Sacramento River. This contract is effective through March 31, 2045. This contract obligates Reclamation to deliver the base supply of 98,000 AFY and "Project" water supply of 22,000 AFY for a combined total of 120,200 AFY. The City's assigned water supply from NCMWC would consist of 8,000 AFY of "Project" water, with no assignment or rescheduling of base supply proposed. "Project" water and base supply are defined in Article 1 of NCMWC's CVP settlement contract.

NCMWC's Renewal Contract, among many other CVP contracts, was recently challenged in *Natural Resources Defense Council v. Kempthorne*, Case No. 05-CV-01207 (Eastern District of California). In that case, the U.S. District Court for the Eastern District of California (United States District Court) upheld NCMWC's Renewal Contract and found that Reclamation had no discretion to reduce NCMWC's water supplies in executing the Renewal Contract. NCMWC's current contract includes a shortage provision of up to 25%². Given that the NCMWC's renewed CVP contract contains an up to 25% shortage provision during dry years and the fact that these supplies would be diverted north of the Sacramento-San Joaquin Delta (Delta), the City has assumed that no additional reductions in the amount of water delivered would occur even with factoring in climate change. A study prepared by Wagner and Bonsignore (2007) indicates that based on existing 2007 cropping patterns

² The Sacramento River Index is the sum of the unimpaired runoff of four rivers: the Sacramento River above Bend Bridge near Red Bluff (Station SBB), Feather River inflow to Oroville Reservoir (station FTO), Yuba River at Smartville (Station YRS) and American River inflow to Folsom reservoir (Station AMF). In applying the Sacramento Valley 40-30-30 Index, a water-year with an Index equal to or less than 5.4 MAF is classified as "critical."

within NCMWC's service area, NCMWC has sufficient surface water supplies to transfer up to 8,000 AFY without adversely affecting NCMWC's ability to meet irrigation demands with surface water. Based on this finding, it is reasonable to expect that no supplemental groundwater pumping would be required by landowners within the NCMWC to augment the surface supplies assigned to the City. The complete Wagner and Bonsignore report is included in Appendix M2 of the DEIR/DEIS.

Integration with Freeport Project Facilities

The City has identified the existing Freeport Project as the proposed point of diversion (POD) on the Sacramento River for the Off-site Water Facility Alternatives. The Freeport Project is a facility jointly owned by Sacramento County Water Agency (SCWA) and the East Bay Municipal Utilities District (EBMUD) and is permitted to divert and convey up to 185 mgd of surface water to their respective service areas. SCWA has a dedicated capacity within the Freeport Project of 85 mgd with EBMUD owning the remaining 100 mgd of capacity. The City and SCWA have entered into a MOU (See Appendix M3 of the DEIR/DEIS) for the City to acquire the right to use 6.5 mgd on average of dedicated capacity in the SCWA's 85 mgd portion of the Freeport Project. This MOU would also allow for additional capacity to accommodate limited peaking conditions. To provide a basis for the assessment of worst-case conditions, the analysis provided in this EIR/EIS assumes peaking operations of up to 10 mgd.

As part of the Off-site Water Facility Alternatives and pursuant to Section 4.3 of the Second Amended Joint Exercise of Powers Agreement Concerning the Freeport Regional Water Authority, the City would enter into an Agreement for Delivery of Water (Delivery Agreement) with SCWA for the right to use up to an average of 6.5 mgd of SCWA's Freeport Project dedicated capacity. Under the Delivery Agreement, SCWA would wheel³ the NCMWC's CVP contract supplies from the Sacramento River through the Freeport Project and to the bifurcation point where SCWA's and EBMUD's joint facilities end. Execution of the Delivery Agreement also would entail review and compliance with all applicable agreements related to operation of the Freeport Project. Of the Freeport Project's major facilities, the Off-site Water Facility Alternatives would use capacity within one or more of the following:

- ▶ Freeport Intake Facility – The intake facility is located near the Town of Freeport. It includes a pumping plant that contains eight separate pumps capable of diverting water from a well located behind a 180-foot long fish screen, designed to comply with criteria developed by the California Department of Fish and Game (DFG) and NMFS in order to allow migrating Delta smelt, Chinook salmon, steelhead, and other native fish species to pass by the intake diversion without the risk of entrainment. The intake facility connects to a pipeline that conveys water to SCWA and EBMUD; and
- ▶ Raw Water Pipelines – Raw water pipelines carrying water from the intake facility to the Vineyard Surface WTP (SWTP) or FSC:
 - Pipeline Segments 1 and 2, 185 mgd capacity (84-inch) pipelines from the intake facility to the turnout to the Zone 40 Surface WTP or bifurcation,
 - Pipeline Segment 4, an 85 mgd capacity (66-inch) pipeline from the bifurcation to the Vineyard SWTP.

The EIR/EIS for the Freeport Project analyzed impacts associated with the construction and operation of the Sacramento River diversion/intake structure and associated raw or untreated water conveyance pipelines. The Freeport Project EIR/EIS is incorporated by reference into this EIR/EIS and documents the environmental impacts of diverting of up to 185 mgd (or 568 AF) of surface water from the Sacramento River during all river hydraulic conditions. Pursuant to State Water Resources Control Board (SWRCB) Application No. 30454, SCWA's total diversions at Freeport are permitted for up to 286 cfs, but not to exceed 71,000 AFY. On average, however, SCWA's diversions are initially estimated more on the order of 21,700 AFY in 2010. The Off-site Water Facilities would operate within SCWA's permitted diversion rates and would not require any increase in the Freeport Project's currently permitted diversion capacity. For this reason, no physical changes to the Freeport

Project's diversion and pump structure and conveyance pipeline are contemplated as part of the "Water" portion of the project.

Pump Station

One raw or treated-water booster pumping station would need to be constructed at the City's Off-site Water Facility's connection with the Freeport Project to provide sufficient operating pressure within the transmission main. Under a treated-water transmission main scenario, the connection point would occur at the Vineyard SWTP, some point along SCWA's proposed North Service Area (NSA) pipeline, or the existing Douglas Treated-Water Storage Tanks (Douglas Tanks) within the North Douglas II development. The pumping station would consist of a concrete facility that would operate via electricity. The ultimate horsepower (HP) requirements are currently estimated at 1,700 HP for the longest routes. The number and type of pumps will depend on detailed design criteria, which is currently unavailable. At times, the pumps may operate 24-hours a day, seven days a week. The pump station structure(s) would be designed so that additional pumps can be installed. A standby generator would be installed in an enclosure to operate up to two pumps during a power outage. At this time, a precise location for the pump station has not been selected. However, the City anticipates that this facility would be in close proximity to the associated connection point to the Freeport Project facilities under of the Off-site Water Facility Alternatives.

Water Treatment and Treated-Water Transmission Facilities

Water treatment would be provided for the Off-site Water Facilities through the construction of a new Water Treatment Plant (WTP) or the purchasing of capacity within SCWA's Vineyard SWTP. Details regarding these water treatment options are provided under the respective Off-site Water Facility Alternatives for which they would be developed. In relation to the construction of new water treatment facilities, two alternative site locations have been identified outside the SPA as part of the City's preliminary investigation and analyzed in separate alternatives. In addition to these two off-site locations, the City has determined its preferred location for the WTP is within the SPA as shown in Exhibit 2-7 of the DEIR/DEIS. If located within the SPA, the WTP would be constructed at a location immediately northeast of the intersection of Oak Avenue and Street "A". Environmental impacts resulting from new development within the SPA are analyzed in the "Land" sections of Chapter 3 of the DEIR/DEIS. At the time of writing the DEIR/DEIS, the City considered a range of treatment options ranging from conventional to advanced treatment. Additionally, the exact placement of the WTP on each of the off-site properties under consideration has not been determined and, therefore, the City has considered full-build-out of the WTP sites as part of its analysis.

Depending on the conveyance alignment and WTP site location ultimately chosen, the Off-site Water Facilities would enter the SPA along Prairie City Road either from White Rock Road to the south or from an unnamed, dirt road that bisects the northern section of the Aerojet property, immediately west of the SPA and south of U.S. 50. This existing dirt roadway corresponds with the planned alignment for the Easton Valley Parkway. The treated-water transmission infrastructure proposed for areas within the SPA is described in the "Land" sections of the DEIR/DEIS.

Non-Potable Water Facilities

The proposed Folsom South of U.S. Specific Plan includes policies that encourage the installation of non-potable water infrastructure for new development within the SPA (see Section 12.5). In conjunction with the "Water" portion of the project, the City is actively seeking sources of non-potable water supplies for use in non-potable applications (i.e., landscape irrigation) within the SPA. Potential sources of non-potable water include local groundwater, recycled water from EID, and/or treated groundwater from Aerojet, among others. However, at the time of the preparation of the DEIR/DEIS, details regarding these sources and any associated facilities were insufficient to facilitate analysis within the DEIR/DEIS. The City expects to prepare separate, subsequent

environmental documentation for actions and improvements associated with future non-potable water improvements for the SPA.

2.8.2 “WATER” ALTERNATIVES CONSIDERED BUT REJECTED FROM FURTHER CONSIDERATION

The City has considered numerous potential water supplies and conveyance alternatives that are consistent with the requirements of Measure W as part of the “Water” project to support planned development within the SPA. The State CEQA Guidelines (CCR Section 15126.6[d]) require the identification of a range of reasonable alternatives and an adequate assessment of these alternatives to allow for meaningful consideration by the decision makers. The “B,” or “Water,” sections of Chapter 3 in the DEIR/DEIS analyze the potential impacts of constructing and operating the “Water” portion of the project under one of ten of the Off-site Water Facility Alternatives at a similar level of detail as required by NEPA. Each of the Off-site Water Facility Alternatives would involve the use of CVP water purchased from the NCMWC, use of the Freeport Project diversion/intake facility, and conveyance capacity within multiple reaches of the Freeport Project.

In this instance, to meet the requirements of both CEQA and NEPA for the analysis of alternatives, the City has used a three-tiered methodology in its evaluation of the numerous of water supply and conveyance alternatives for the Folsom South of U.S. 50 Specific Plan project. At the first tier, the City considered a wide range of water supply and conveyance alternatives with the premise that the supply needed to demonstrate a firm yield of 5,600 AFY to meet all water demands within the SPA. Several of these “Water” alternatives were eliminated from further consideration since they were not considered sufficiently developed at the time of the writing of the DEIR/DEIS. The alternatives were also eliminated from further consideration based on feasibility factors, such as institutional concerns, technical short-comings, and concerns regarding long-term reliability.

“Water” alternatives carried beyond this initial alternatives screening are analyzed in Chapters 3 and 4 of the DEIR/DEIS. The second tier “Water” alternatives are identified as Water Supply Options in the DEIR/DEIS and specifically discussed in Section 3A.18, “Water Supply – Land” of the DEIR/DEIS. The Water Supply Options considered at this intermediate tier are analyzed as required under CEQA, but were not carried forward for equal-level of analysis under NEPA, and are, thus, not analyzed in Chapter 3 of the DEIR/DEIS.

The third tier of alternatives analyses under the City’s methodology provides similar level analysis as required under NEPA for the Off-site Water Facility Alternatives. The “B,” or “Water” sections of Chapter 3 of the DEIR/DEIS analyze the potential construction and operational effects of the Off-site Water Facility Alternatives. The primary reasoning for carrying the NCMWC’s CVP supply forward into the third tier of analysis is based on the findings of the WSA, provided in Appendix M1 of the DEIR/DEIS, which identified this supply as the most reliable of the all supplies evaluated.

SCREENING PROCESS AND RESULTS FOR “WATER” ALTERNATIVES

The selection of “Water” alternatives, including optional water supply sources, to support the Folsom South of U.S. 50 Specific Plan development was based on several factors including their ability to meet the project objectives identified in Chapter 1, “Introduction,” of the DEIR/DEIS, current and projected reliability under a variety of water years, and their proximity to the SPA. The alternatives screening process consisted of two major steps:

Step 1: Define the range of water supplies and conveyance facilities along with their availability to facilitate comparative evaluation under the first tier of the alternatives analysis.

Step 2: Evaluate each alternative water supply in consideration of the following criteria:

- ▶ **Technical and Engineering and Feasibility.** An alternative must be technically and physically feasible. An alternative must be based on existing and accepted state-of-the-art engineering concepts and cannot be based on experimental technologies. Also, an alternative must not be dependent upon either the availability or acquisition of site locations that cannot be reasonably assured.
- ▶ **Raw-Water Quality.** An alternative must provide a water supply or, have the capability of providing a water supply that protects water quality and meets or exceeds State and Federal water quality standards or other applicable water quality standards associated with its use.
- ▶ **Environmental Fatal Flaw.** An alternative cannot have environmental impacts that are so significant as to negate the positive attributes of the alternative or, simply transfer potential environmental impacts from one location to another.
- ▶ **Economic Feasibility.** An alternative cannot be economically impractical or infeasible. An alternative should be economically attractive such that the total direct costs to the customers and purveyors are minimized and do not significantly exceed the costs of alternatives with similar benefits. Similarly, an alternative cannot result in excessive operation and maintenance costs.
- ▶ **Long-term Reliability.** An alternative must be capable of supplying raw-water reliably year round and on a long-term basis.
- ▶ **Public Health and Safety.** An alternative should be able to meet all existing and anticipated future State and Federal health and safety requirements.
- ▶ **Timing.** An alternative must be capable of being implemented within a reasonable timeframe such that the benefits and needs of the project are not unduly delayed.
- ▶ **Institutional.** An alternative cannot possess significant uncertainty that all permits, licenses, or other logistical requirements can be reasonably obtained.

Beyond the Off-site Water Facility Alternatives, which and would involve the use of CVP water from NCMWC, ten potential “Water” alternatives were reviewed against the criteria listed under Step 2. The range of other “Water” alternatives considered as part of the first tier of analysis under the City’s alternatives analysis methodology included the following:

- ▶ Groundwater from the Central Sacramento Groundwater Basin
- ▶ Diversion of Un-Appropriated American River Water
- ▶ Conservation of Existing Entitlements and Water System Retrofit
- ▶ Water Supply and Delivery from the El Dorado Irrigation District
- ▶ Other Senior Sacramento River Water Right Holders
- ▶ Non-Potable Water Supplies
- ▶ Water Supply Exchange with Sacramento Municipal Utilities District
- ▶ New Sacramento River Diversion and Water Rights
- ▶ Use of East Bay Municipal Utility District’s Capacity in Freeport Project
- ▶ Higher CVP Allocation From NCMWC

POTENTIAL “WATER” ALTERNATIVES NOT CONSIDERED FURTHER IN THE EIR/EIS

A number of “Water” alternatives were initially considered but eliminated based on further evaluation in conjunction with Step 2. Those “Water” alternatives that were found to be technically feasible and consistent with the City’s objectives were carried forward either as potential Off-site Water Facility Alternatives as described in Section 2.13 of the DEIR/DEIS, or as Water Supply Options under CEQA, which are described and qualitatively assessed in Section 3B.18, “Water Supply” of the DEIR/DEIS. Those “Water” alternatives eliminated from

additional analysis are identified below along with the City’s reasons of why the potential alternative was not carried forward for additional analysis in the DEIR/DEIS.

New Sacramento River Diversion and Water Rights

A new Sacramento River diversion and water rights application was determined to be infeasible based on a number of critical reasons. First and most importantly, a new diversion structure on the Sacramento River would no longer take advantage of the existing Freeport diversion facility thereby resulting in direct impacts to the Sacramento River. Construction of a new diversion facility would result in greater environmental impacts to biological resources along the Sacramento River, fisheries, and water quality within the river as compared to the Off-site Water Facility Alternatives. Additionally, the operation of an additional diversion structure could contribute to greater cumulative impacts to Delta inflows and water quality as compared to the Off-site Water Facility Alternatives. Based on these considerations, the City concluded that this “Water” alternative would result in greater environmental impacts when compared to the Off-site Water Facility Alternatives.

Beyond the operational and physical impacts of a new diversion, a new diversion facility and the additional length of conveyance pipeline(s) would add substantially to the cost of this alternative. Based on the added structural facilities, the additional cost would render the project cost-prohibitive.

Further, the completion of the application process for securing new water rights to the Sacramento River would not guarantee the City a secured water supply within the timeframe required for approval of the Folsom South of U.S. 50 Specific Plan project. The water rights application process can take several years to complete and there is no level of certainty in terms of whether the SWRCB would approve the application. Based on these circumstances, a new Sacramento River water right would be less certain when compared to the NCMWC’s CVP water supply proposed under the Off-site Water Facility Alternatives. For these collective reasons, this “Water” alternative was not carried forward for additional consideration in the EIR/EIS.

Diversion of Unappropriated American River Water

This “Water” alternative would involve the application to the SWRCB for new a new water right permit to appropriate surface water from the American River for diversion at Lake Natoma using the City’s existing turnout on the FSC. This alternative was ultimately determined infeasible for a variety of reasons. First, the level of certainty for acquiring newly appropriated American River water supplies was considered low given other pending applications along the American River which, if approved by the SWRCB, could have priority over any newly filed water rights application under this alternative. With the recent revocation of Reclamation’s Water Right Permits 16209 and 16212 for the Auburn-Folsom South Unit of the CVP (or the Auburn Dam Project; SWRCB Order WR 2008–0045), it is reasonable for the City to recognize the possibility of appropriating a fraction of this supply and putting it to beneficial use. Water right permits 16209 for up to 100 cfs and 16212 for up to 900 cfs included municipal supply as a beneficial use. However, even though the water supply required for the SPA represents a fraction of this supply, it would take several years for completion of the application process with SWRCB in order to secure this water supply and, therefore, the availability of this water supply within the timeframe necessary for the overall project is unlikely.

Unlike the Off-site Water Facility Alternatives, this alternative would involve the direct diversion of up to 6,000 AFY of surface water from the Lower American River through the FSC. Although this represents a relatively small proportion of total daily flows within the Lower American River, it is possible that the additional diversion under this option could affect flows within the Lower American River and water temperatures, especially during times of low flow. A number of fish species of primary management concern use the Lower American River during one or more of their life stages and include fall-run Chinook salmon, steelhead, splittail, American shad, and striped bass.

Water temperatures within the Lower American River already exceed regulatory standards during the months of August through October in most years. The biological opinion (BO) for Reclamation’s Operations Criteria and

Plan (OCAP) for Long-Term CVP/California State Water Project (SWP) Operations indicates that effects on steelhead are pronounced due to the inability to consistently provide suitable temperatures for various life stages and flow-related effects caused by operations. The BO's Reasonable and Prudent Alternative (RPA) prescribes a flow management standard, a temperature management plan, additional technological fixes to temperature control structures, and, in the long term, a passage at Nimbus and Folsom Dams to restore steelhead to native habitat (OCAP BO 2009). However, based on this existing condition combined with the fact that these improvements would likely not be in operation in time for this alternative's operation, it is reasonable to conclude that with incrementally less water, these exceedances could be more severe or last for longer durations under this "Water" alternative.

Given these circumstances combined with the City's voluntarily participation in the Water Forum Agreement (WFA), the City decided not to pursue this "Water" alternative due potential conflicts with the WFA. More specifically, the WFA specifically discourages new diversions along the Lower American River, if an agency can reasonably demonstrate an alternate location. Given that the City has identified the Off-site Water Facility Alternatives, which involve diversion of surface water from the Sacramento River, and the City's desire to continue to be an active member in the Water Forum, this "Water" alternative was considered too uncertain to be carried forward for additional analysis.

Water Supply and Delivery from El Dorado Irrigation District

A small portion of the SPA is located within the EID service area. For this reason, the City initially considered water supplies from EID as a potential source of potable water for the SPA. EID has two contracts with Reclamation for supplies from Folsom Reservoir. These contracts total 24,550 AFY and consist of a 7,550 AF CVP water service contract, and a 40-year Warren Act Contract that allows EID to convey 17,000 AF subject to EID's water-right permit through Reclamation facilities from the South Fork of the American River, along with an application submitted for a Fazio Water³ contract. EID also maintains a Western/Eastern Area supply of 36,000 AF, consisting of 15,080 AF from the Federal Energy Regulatory Commission Project 184 and approximately 20,920 AF from Sly Park's Jenkinson Lake (EID 2009).

Based on information contained in El Dorado County's General Plan Update EIR (2004), existing water demand for EID is estimated to range from 37,000–38,000 AFY. EID currently has a system firm yield⁴ of 43,280 AFY. However, current projections for build-out of the recently adopted general plan suggest that demands within EID's service area could increase up to 80,000 AFY thereby potentially resulting in major surface water shortages within EID's service area and the need to develop additional surface water supplies. This water supply impact was identified as a significant in El Dorado County's General Plan EIR (2004).

In response to this anticipated shortfall in water supply, the El Dorado County Water Agency (EDCWA), with the assistance of EID and the other water purveyors in the county, has prepared the EDCWA Water Plan, which is intended to provide a blueprint for actions and facilities needed to address El Dorado County's projected water shortages into the future. One source under consideration in EDCWA's Plan is 15,000 AFY of new CVP M&I contract water for El Dorado County allocated under Fazio Water contract. This new CVP water would be taken directly from Folsom Reservoir, or exchanged for non-CVP water to be diverted from the American River upstream of Folsom Reservoir.

However, this additional water is intended to serve areas within El Dorado County and not areas within Sacramento County as Public Law 101-514 separately allocates new CVP water to SCWA. This water supply is still undergoing environmental review and has not been sufficiently developed to a point where it could be

³ Fazio Water - Public Law 101-514 (Section 206), of the Water Resources Development Act of 1990 authorized and directed the Secretary of the Interior to enter into a M&I water service contract with local public water purveys including the City, SCWA, EID and others. Specific allocations of Fazio Water are discussed in Sections 3.2B and 3.3B.

⁴ EID defines its firm yield as the amount of water that is available for it to use from a source in 95 out of 100 years with existing facilities, while incurring shortages of no more than 20% annually in 5 out of 100 years (EDCWA 2003a).

considered reliable to support development within the SPA. Additionally, the development of new CVP water supplies within El Dorado County will require the construction of the necessary supporting infrastructure (e.g., dams) to facilitate the capture and storage of these new supplies. These facilities could result in physical environmental impacts that would likely be greater in extent and severity when compared to those associated within the Off-site Water Facility Alternatives.

For these reasons, a water supply and delivery alternative involving EID was not carried forward for further consideration in this EIR/EIS due to uncertainty whether EID would have enough supply to serve the entire SPA.

Non-Potable Water Supplies

In its pursuit of water supplies for the Folsom South of U.S. 50 Specific Plan development, the City considered several non-potable sources including process water from Granite’s proposed Walltown Quarry, Groundwater Extraction and Treatment (GET) water from Aerojet, and recycled water from SRCSD and EID. At the time of writing of this EIR/EIS, none of these sources has materialized to a point where they could be considered for the purposes of environmental analysis based on existing institutional issues. Further, the use of non-potable water supplies would only address one sector of demand within the Folsom South of U.S. 50 Specific Plan and would not address the potable water supply demand component of the proposed development.

Beyond these institutional issues, the use of recycled water within the SPA would require the construction of necessary conveyance infrastructure to facilitate delivery. At this time, the location and capacity for these conveyance facilities has not been determined. While it can be reasonably assumed that the pipelines would be installed within existing road utility easements, there may also be a need to construct additional facilities at the SCRSD Regional Wastewater Treatment Plant, or an additional scalping plant⁵ at another, undetermined location. A scalping plant option would require several miles of easements for pipelines, while modifications at SCRSD’s existing treatment plant could require up to ten of miles of easements.

The securing of these easements and construction of associated pipeline facilities would have physical environmental impacts similar to those of the Off-site Water Facility Alternatives. However, without a conceptual alignment and operational understanding for these facilities, a comparative analysis under CEQA and NEPA is not feasible at this time. As a result, separate environmental analysis would be required for any non-potable water infrastructure intended to serve the SPA.

East Bay Municipal Utilities District’s Capacity within the Freeport Project

Under this “Water” alternative, the City would wheel its CVP water through the Freeport Project using a portion (e.g., 6.5 mgd) of EBMUD’s allocated capacity. In concept, an alternative using EBMUD’s allocated supply within the Freeport Project would look similar to the Proposed Off-site Water Facility Alternative or Off-site Water Facility Alternative 1. However, rather than constructing a pump facility at the bifurcation point, the City would construct the pumping facility at the FSC. The alignment from this location would then resemble that of Proposed Off-site Water Facility Alternative or Off-site Water Facility Alternative 1 by following Grant Line Road north to the On-site WTP or White Rock WTP immediately south of the SPA.

This “Water” alternative was rejected from further consideration for two primary reasons. First, based on information contained in the Freeport Project EIR, EBMUD’s operations at Freeport require full use of the its allocated capacity three out of every ten years. This would eliminate capacity for the City during these three years and would create, for the City, an infeasible need to secure sufficient storage capacity, either above or below ground, to enable for continued service during these three years when capacity within the Freeport Project would otherwise be unavailable. The need to store up to 25,500 AF for three years, especially if the facility were above-

⁵ Satellite reclaimed water production plants that withdraw wastewater from trunk sewers and produce reclaimed water, usually returning the biosolids and any excess water produced back to the sewer.

ground, would result in a substantially greater footprint when compared to the Off-site Water Facility Alternatives.

Secondly, in preliminary negotiations with EBMUD, EBMUD has been adamant that any capacity allocated to the City within the Freeport Project must be replaced or augmented throughout the remainder of EBMUD's portion of the Freeport Project, which extends south to the Mokelumne River. This arrangement would be required to ensure that EBMUD's service area is not adversely affected by a loss in conveyance capacity. Based on the City's initial investigation, the level of improvements necessary to augment the capacity purchased by the City would render this alternative cost prohibitive. For these reasons, this "Water" alternative was not carried forward for further analysis in this EIR/EIS.

Water Supply Exchange with Sacramento Municipal Utility District

Under this alternative, the City would purchase up to 8,000 AFY of CVP Water from NCMWC and exchange this water supply with SMUD for up to 8,000 AFY of their CVP Water from the American River. SMUD has an existing water service contract with Reclamation that expires in 2012 for delivery of a maximum of 75,000 AFY via the FSC.

SMUD currently has two primary water uses: (1) decommissioning Rancho Seco Nuclear Plant; and (2) cooling requirements at the Cosumnes Power Plant. At the Rancho Seco Nuclear Plant, water is currently diverted from the FSC for dilution of treated-radioactive wastewater, which is subsequently discharged to Clay Creek. The current NPDES Permit (R5-2007-0016) indicates that over time the reduction in the volume of radioactive liquid waste will also result in a corresponding reduction in the quantity of dilution water. The actual reduction in water use resulting from this activity is unknown.

For the Cosumnes Power Plant, SMUD uses approximately 5,300 AFY to meet both phases of the Power Plant's cooling and process water requirements (SMUD 2002). Based on these operational considerations, the City has assumed that SMUD would be capable of exchanging up to 8,000 AFY of its existing CVP water from the American River.

Under this alternative, the City would construct raw and treated water facilities similar to those described for Water Supply Option 2, as described in more detail in Section 3B.18, "Water Supply" of the DEIR/DEIS, to facilitate diversion of the exchanged water from the FSC at the City's existing turnout. The City would then purchase capacity within EBMUD's dedicated portion of the Freeport Project to wheel up to 8,000 AFY of NCMWC water supply into the FSC. SMUD would then take delivery of the water from its existing intake downstream on the FSC.

In addition to the agreements identified for the Off-site Water Facility Alternatives, this alternative would require an additional agreement with SMUD to facilitate the exchange beyond that described for the Off-site Water Facilities Alternatives. In addition, capacity within EBMUD's portion of the Freeport Project would be required instead of SCWA's. Given that negotiations between the City and SMUD and EBMUD regarding any exchange option remain preliminary at the time of the preparation of this EIR/EIS, this alternative was not considered sufficiently developed to enable for analysis within the DEIR/DEIS.

Higher Central Valley Project Allocation from Natomas Central Mutual Water Company

The City considered allocations of CVP Water of up to 15,000 AFY from NCMWC during the course of its evaluation. After completing intensive water demand analysis for the SPA, the City determined that 8,000 AFY would be sufficient to serve the SPA development when considering the potential for reductions during dry years. Acquiring any additional supplies could have potential growth implications and, therefore, were not pursued.

2.8.3 PROPOSED OFF-SITE WATER FACILITY ALTERNATIVE – GERBER/GRANT LINE ROAD ALIGNMENT AND ON-SITE WTP

Under the Proposed Off-site Water Facility Alternative, the City would integrate its water supply conveyance facilities with SCWA by purchasing an average of 6.5 mgd, plus an appropriate peaking factor, of dedicated capacity within the Freeport Project and wheeling raw water through Pipeline Segments 1 and 2 of the Freeport Project. As previously indicated and for purposes of analyses, the City has assumed that this capacity could be temporarily increased up to 10 mgd to accommodate periods of peak demands.

Under the Proposed Off-site Water Facility Alternative, the City would construct a new 30-inch, raw-water conveyance pipeline that would connect with the pump station located in an area just northeast of the bifurcation. The raw-water pipeline would extend northeast approximately 16.5 miles from the bifurcation to the SPA. This pipeline length would result in a corridor under consideration of approximately 401-acres. An exact alignment has not been selected and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment. In reality, a temporary construction easement would be more on the order of 60 feet with a permanent easement of approximately 10 feet to facilitate access by maintenance vehicles. Construction of the pipeline may involve two methods of pipeline construction: open-cut trenching and trenchless construction. Trenchless construction could be used to traverse creeks or waterways, drainages, major roadway intersections, or railroad rights-of-way.

Near the bifurcation, at the intersection of Vineyard and Gerber Roads, the City would construct a 10-mgd capacity, raw water pump station to create the necessary operating pressure within the conveyance pipeline. As previously indicated, the pump station would operate on electricity with a total rated capacity of 1,700 HP. From the pump station, the conveyance pipeline under this alternative would parallel Pipeline Segment 4 of the Freeport Project along Gerber Road to Excelsior Road and from there traverse cross country to the FSC. The pipeline would then cross the FSC where it would intersect with Grant Line Road. The method of crossing the FSC will be determined in coordination with Reclamation. At Grant Line Road, the conveyance pipeline would transition to the north before intersecting White Rock Road. Once on White Rock Road, the alignment follows the roadway east to a newly constructed extension of Oak Avenue. At Oak Avenue, the conveyance pipeline would extend into the SPA to a new, approximately 10-acre On-site WTP.

The On-site WTP would be constructed within the SPA at the approximate location shown in Exhibits 2-7 and 2-26. A treated-water main would be constructed from the On-site WTP to connect with the backbone water infrastructure within the SPA. Under this alternative, the On-site WTP would have an ultimate capacity of approximately 10 mgd.

Water Treatment Processes. The WTP would use conventional and/or advanced treatment technologies to treat water supplies from the Sacramento River that meet the drinking water quality objectives specified in Title 22 of the California Code of Regulations (CCR). These regulations specify drinking water quality standards (e.g., maximum contaminant levels (MCLs) for biological contaminants, disinfection by-products, lead, copper, radioactivity, and inorganic and organic chemicals (e.g., pesticides and herbicides). In addition, a residual disinfectant level would be maintained in the water supply to insure that the water remains free of pathogens. The residual disinfection level would be maintained in compliance with applicable drinking water regulations.

The following components may be used at the WTP:

- ▶ chemical oxidation system;
- ▶ rapid mixing system;
- ▶ pre-treatment system (flocculation/sedimentation);
- ▶ filtration system;
- ▶ chemical storage and feed systems;
- ▶ filter backwash water supply system;

- ▶ wash-water recovery and sludge thickening system;
- ▶ sludge dewatering system;
- ▶ operations and maintenance building;
- ▶ site electrical and control systems improvements; and
- ▶ site/civil improvements.

Exhibit 2-27, page 2-87 of the DEIR/DEIS, shows a conceptual layout of the On-site WTP facility, including anticipated major physical features. The WTP facilities would be constructed of concrete and the exterior painted. The grit basins, flow split, flocculation and sedimentation basins, filters, equalization basins, and backwash clarification would be open-water areas. Membrane filtration may be considered as an alternative to the conventional treatment process. The administration/operations building, maintenance building, chemical building, electrical building, and treated water pump station(s) would be enclosed structures, constructed of concrete masonry units or steel. Buildings would be faced with materials such as stucco or split-face block. Steel structures would be painted to blend with the existing environment.

Waste from the water treatment process would include grit from the grit basins, sludge removed from the sedimentation basins, filter backwash water, filter-to-waste water, sampling water, and sludge lagoon decant water. This waste would be treated with a polymer and then stored in an equalization basin. Solids from the grit and equalization basins and sludge from the sedimentation basin would be sent to sludge lagoons for drying. Lagoons would be constructed to allow for cycling and settling periods. Dried sludge would be transported to a locally-certified landfill or other suitable location for ultimate disposal. The lagoons would be routinely cleaned, and the dried sludge removed as needed.

2.8.4 No USACE PERMIT OFF-SITE WATER FACILITY ALTERNATIVE

The No USACE Permit Off-site Water Facility Alternative would involve the same facilities described under the Proposed Off-site Water Facility Alternative above, and the conveyance pipeline would follow a similar route. However, the No USACE Permit Off-site Water Facility Alternative would avoid all direct impacts (i.e., fill) of waters of the U.S., which include wetlands, through the incorporation of trenchless construction technologies. Construction staging areas and the entry/exits for all trenchless construction activities would also be sited within non-sensitive areas and a minimum of 50 feet from waters of the U.S. At each location where trenchless construction would occur, the City would use a single or combination of trenchless technologies, including but not limited to, microtunneling, horizontal directional drilling (HDD), or jack-in-bore, to avoid these jurisdictional features. The new water treatment plant, regardless of its location, would not be placed within 50 feet of any waters of the U.S., including wetlands. Similar to the other “Water” Alternatives, all construction activities would occur within the 200-foot corridor under consideration for northeastern portions of Zone 4 of the “Water” Study Area.

2.8.5 OFF-SITE WATER FACILITY ALTERNATIVE 1. RAW WATER CONVEYANCE – GERBER/GRANT LINE ROAD ALIGNMENT AND WHITE ROCK WTP

Under Off-site Water Facility Alternative 1, the City would construct facilities similar to those proposed under the Proposed Off-site Water Facility Alternative and described in Section 2.13.3 of the DEIR/DEIS. The City would integrate its water supply conveyance facilities with the Freeport Project and wheel raw water through Pipeline Segments 1 and 2 of the Freeport Project. Under Off-site Water Facility Alternative 1, the City would construct a new 30-inch, raw-water conveyance pipeline that would connect with the pump station located in an area just northeast of the bifurcation. As shown in Exhibit 2-26, the raw-water pipeline would extend northeast approximately 15.3 miles from the bifurcation to a new WTP south of the SPA. This pipeline length would result in a corridor under consideration of approximately 372 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment.

Similar to the Proposed Off-site Water Facility Alternative, a 10-mgd capacity, raw water pump station would be constructed near the Freeport Project bifurcation and would include a rated horsepower of 1,700 HP. From the pump station, the conveyance pipeline under this alternative would follow the same alignment as the Preferred Alternative up to a new WTP located southeast of the intersection of White Rock Road and Prairie City Road, at a City-proposed Corporation Yard. The White Rock WTP would be constructed on a 10-acre portion of a 68-acre parcel, Assessor's Parcel Number (APN) 072-006-0052, and to the south of the City's proposed Corporation Yard. A treated-water main would be constructed from the White Rock WTP to connect with the backbone water infrastructure within the SPA. Under this alternative, the White Rock WTP would have an ultimate capacity of approximately 10 mgd.

Treatment process and facilities under this alternative would be similar to those described for the Proposed Off-site Water Facility Alternative. At this time, the City has not determined whether it would annex the WTP site into its jurisdiction or whether it would seek development entitlements through Sacramento County and, therefore, the environmental analysis considers both options.

2.8.6 OFF-SITE WATER FACILITY ALTERNATIVE 1A. RAW WATER CONVEYANCE – GERBER/GRANT LINE ROAD ALIGNMENT VARIATION AND WHITE ROCK WTP

Off-site Water Facility Alternative 1A consists of a variation in the conveyance pipeline alignment for Off-site Water Facility Alternative 1. All other features of this alternative, including the WTP and pump station, would be similar to that of Off-site Water Facility Alternative 1. Off-site Water Facility Alternative 1A would realign the conveyance pipeline alignment so that it deviates from White Rock Road prior to the first curve north of the intersection of White Rock Road and Grant Line Road. The pipeline would travel north-northeast along a property line boundary, prior to re-intersecting with the Off-site Water Facility Alternative 1 alignment on the current White Rock Road right-of-way. Off-site Water Facility Alternative 1A would reduce the length of pipeline by approximately a quarter of a mile when compared to Off-site Water Facility Alternative 1. This pipeline length of 15.2 miles would result in a corridor under consideration of approximately 364 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment.

2.8.7 OFF-SITE WATER FACILITY ALTERNATIVE 2. TREATED WATER CONVEYANCE – DOUGLAS ROAD ALIGNMENT AND VINEYARD SWTP

Under Off-site Water Facility Alternative 2, the City would purchase 6.5 mgd, on average, of capacity within the Freeport Project and Vineyard SWTP.⁶ This capacity would be augmented with additional peaking capacity of up to 10 mgd within the Freeport Project and Vineyard SWTP, which is located on an 80-acre site on Florin Road between Bradshaw and Excelsior Roads, instead of constructing a new WTP. SCWA is nearing the completion of the Vineyard SWTP, which is initially designed to treat up to 50 mgd for SCWA's Zone 40 Northern Service Area, and expected to start operation in fall 2011.

In addition to purchasing capacity within the Vineyard SWTP, this alternative would involve the construction of a new pumping facility and treated-water conveyance pipeline approximately 17.4 miles in length. This pipeline length results in a corridor under consideration of approximately 423 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment. The pumping facility would be constructed according to the parameters identified for the Proposed Off-site Water Facility Alternative and located on-site at the Vineyard SWTP. From the Vineyard SWTP, the

⁶ For the purposes of differentiating between the City's proposed WTP under several of the Off-site Water Facility Alternatives and SCWA's existing Vineyard SWTP, separate acronyms are used to clearly distinguish between these facilities.

alignment would extend from Florin Road east to Eagles Nest Road, at which point, the alignment would extend north to Douglas Road. Once at Grant Line road, the alignment would follow the same route as Off-site Water Facility Alternative 1. At the terminus of the conveyance alignment, this alternative would connect to new equalization facilities sited within the SPA instead of a new WTP as described for Off-site Water Facility Alternative 1. The equalization facilities are described below.

Equalization Facilities

As part of Off-site Water Facility Alternative 2, the City may construct a 4-million-gallon (MG) ground-based storage tank within the SPA and an associated pumping station on approximately 1-acre. The equalization tanks would be sited with the storage tanks identified to the northeast of the intersection of Road A and Oak Avenue within the SPA and would consist of pre-stressed concrete similar to existing City-owned tanks. The tank height would be no more than three stories or approximately 30 feet.

Pumping and backup power generation would be part of the on-site water distribution infrastructure constructed in conjunction with new development within the SPA. Chemical re-treatment facilities may also be constructed, if determined necessary. To achieve the tank foundation elevation, the existing ground surface at the site may require excavations of up to 10 feet beneath the ground surface. The exterior wall facing would be painted or other architectural treatment administered as desired for aesthetic purposes.

2.8.8 OFF-SITE WATER FACILITY ALTERNATIVE 2A. TREATED WATER CONVEYANCE – EXCELSIOR ROAD ALIGNMENT VARIATION AND VINEYARD SWTP

Off-site Water Facility Alternative 2A involves a variation in the conveyance route alignment for Off-site Water Facility Alternative 2. All other features associated within this alternative would be the same as Off-site Water Facility Alternative 2. Under Off-site Water Facility Alternative 2A, the conveyance pipeline alignment would deviate from the Off-site Water Facility Alternative 2 route at the intersection of Florin and Excelsior Roads and travel north along Excelsior Road to Mather Boulevard. At the intersection with Douglas Road, this alignment would travel back to the east and follow the Off-site Water Facility Alternative 2 alignment east to Grant Line Road where it would then travel north to White Rock Road. Unlike Off-site Water Facility Alternative 2, this alternative would follow the Off-site Water Facility Alternative 1A alignment north of the intersection of Grant Line Road and White Rock Road and follow it to the SPA where it would directly connect with the equalization facility. The length of this alignment would be approximately 16.3 miles thereby resulting in a corridor under consideration of approximately 390 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment. Equalization facilities constructed under this alternative would be similar to those described for Off-site Water Facility Alternative 2.

2.8.9 OFF-SITE WATER FACILITY ALTERNATIVE 2B. TREATED WATER CONVEYANCE – NORTH DOUGLAS TANKS VARIATION AND VINEYARD SWTP

Off-site Water Facility Alternative 2B involves a shortened variation in the conveyance alignment as described for Off-site Water Facility Alternative 2 and would connect to the North Douglas Water Tanks (North Douglas Tanks), which were constructed by SCWA to serve areas within Sunrise Douglas Community Plan area, and extend south along Ivan Way to Douglas Road. The alignment would then follow the same route as Off-site Water Facility Alternative 2 to the SPA. All other features associated with this alternative would be the similar to those described for Off-site Water Facility Alternative 2 with treatment provided at the Vineyard SWTP and equalization facilities within the SPA. By constructing the conveyance alignment from the North Douglas Tanks, the length of the pipeline is reduced to approximately 6 miles, thereby resulting in a corridor under consideration of approximately 157 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has

not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment.

Under this alternative, construction of the pumping facility would occur according to the parameters identified for Off-site Water Facility Alternative 1 and located on the existing North Douglas Tanks site. The electrical load requirements for the pumping facility under this alternative are currently estimated at 1,100 HP. Similar to Off-site Water Facility Alternative 2, the conveyance alignment under this alternative would directly connect with the Equalization Tanks within the specific land area.

2.8.10 OFF-SITE WATER FACILITY ALTERNATIVE 3. TREATED WATER CONVEYANCE – NORTH DOUGLAS TANKS VARIATION AND VINEYARD SWTP

Off-site Water Facility Alternative 3 involves the construction of a raw-water conveyance pipeline from the bifurcation point to the White Rock WTP site south of the intersection of White Rock and Prairie City Roads. As shown in Exhibit 2-29, the Off-site Water Facility Alternative 3 raw water conveyance alignment would follow the same alignment as described for the treated-water pipeline in Off-site Water Facility Alternative 2. This would result in a pipeline length of 17.4 miles and a corridor under consideration of approximately 423 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment.

The pump station would be constructed at the same site location and according to the same parameters as identified for Off-site Water Facility Alternative 1. The main difference under Off-site Water Facility Alternative 3 would be that, rather than connecting directly to the equalization facilities within the SPA, this alternative would involve the construction of a new, 10-acre White Rock WTP at the same location as described in Off-site Water Facility Alternative 1. The treatment process under this alternative would be the same as those described for Off-site Water Facility Alternative 1. In addition, similar to Off-site Water Facility Alternative 1, a new treated water pipeline would be constructed from the WTP, which would connect with water backbone infrastructure within the SPA.

2.8.11 OFF-SITE WATER FACILITY ALTERNATIVE 3A. RAW WATER CONVEYANCE – EXCELSIOR ROAD ALIGNMENT VARIATION AND WHITE ROCK WTP

Off-site Water Facility Alternative 3A is only differentiated from Off-site Water Facility Alternative 3 by an alternate raw-water conveyance alignment. The main difference under this alternative would be that the raw water conveyance alignment would follow the same alignment as described for Off-site Water Facility Alternative 2A. Under this alternative, the City would construct a new, 10-acre White Rock WTP, similar to that described for Off-site Water Facility Alternative 1. This would result in a pipeline length of 16.3 miles and a corridor under consideration of approximately 389 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or 100-foot-wide buffer off the roadway centerline along the alignment.

2.8.12 OFF-SITE WATER FACILITY ALTERNATIVE 4. RAW WATER CONVEYANCE – EASTON VALLEY PARKWAY ALIGNMENT AND FOLSOM BOULEVARD WTP

Off-site Water Facility Alternative 4 would entail the construction of a raw water conveyance pipeline from the bifurcation pump station north to a new WTP located south of Folsom Boulevard – or the Folsom Boulevard WTP – and east of Sunrise Boulevard. The raw-water pump station would be constructed according to the same parameters as described for the Proposed Off-site Water Facility Alternative. This would result in a total pipeline length of 19.4 miles and a corridor under consideration of approximately 469.6 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore,

this alternative considers a 200-foot-wide corridor or 100-foot-wide buffer off the roadway centerline along the alignment.

The raw water pipeline would follow the same alignment as Off-site Water Facility Alternative 3 alignment north to Douglas Road and travel east. Along Douglas Road, the Off-site Water Facility Alternative 4 alignment would deviate from Off-site Water Facility Alternative 3 and transition back to the north at Sunrise Boulevard. From Sunrise Boulevard, the alignment extends north in a cross-country alignment along the western boundary of the Rio del Oro Specific Plan area to White Rock Road. At White Rock Road, the alignment would travel east for a short distance to the southwestern corner of the Aerojet Property. The alignment is currently planned to conform to the planned Rancho Cordova Parkway, which will serve as main arterial roadway through the proposed Westborough at Easton project.

Just south of the FSC, the raw water conveyance pipeline would turn back to the east along an existing dirt road to the Folsom Boulevard WTP. Under this alternative, the City would construct the Folsom Boulevard WTP with an ultimate capacity of approximately 10 mgd on a 10-acre portion of a 118-acre parcel (APN 072-025-1075) south of Folsom Boulevard. Water treatment processes proposed under this alternative would be the same as those described for the Proposed Off-site Water Facility Alternative. At this time, the City has not determined whether it would annex the WTP site into its jurisdiction or whether it would seek development entitlements through the City of Rancho Cordova or Sacramento County depending on timing and, therefore, the environmental analysis considers both options.

From the Folsom Boulevard WTP, the City would construct a new treated-water conveyance pipeline that would travel east along an existing dirt road south of Folsom Boulevard. The treated water alignment would follow the existing dirt road, which parallels U.S. 50 to the south, to Prairie City Road. At Prairie City Road, the treated-water alignment would connect with an equalization facility or directly with water backbone infrastructure within the SPA. The existing direct road conforms to the planned roadway alignment for the Easton Valley Parkway.

2.8.13 OFF-SITE WATER FACILITY ALTERNATIVE 4A. RAW WATER CONVEYANCE – EASTON VALLEY PARKWAY ALIGNMENT VARIATION AND FOLSOM BOULEVARD WTP

Alternative 4A would include a minor variation to the raw-water pipeline route described for Off-site Water Facility Alternative 4. Similar to Off-site Water Facility Alternative 3A, this alternative would deviate from the Off-site Water Facility Alternative 4 route at the intersection of Florin and Excelsior Roads and travel north along Excelsior Road and Mather Boulevard. At the intersection with Douglas Road, this alignment would travel back to the east and rejoin the Off-site Water Facility Alternative 4 raw-water alignment east of Eagles Nest Road. The remainder of this alignment and the associated facilities would be identical to those described for Off-site Water Facility Alternative 4. This would result in a total pipeline length of 18.3 miles and a corridor under consideration of approximately 444 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment.

3 FINDINGS REQUIRED UNDER CEQA

3.1 PROCEDURAL FINDINGS

The City Council of the City of Folsom finds as follows:

Based on the nature and scope of the Folsom South of U.S. 50 Specific Plan Project, State Clearinghouse Number #2008092051, the City of Folsom determined, based on substantial evidence, that the project may have a significant impact on the environment and prepared a program environmental impact report (EIR) for

the project. The EIR was prepared as a joint EIR/EIS pursuant to Section 15170 of the State CEQA Guidelines. The EIR was prepared, noticed, published, circulated, reviewed, and completed in full compliance with CEQA (PRC Sections 21000 et seq.) (CEQA) and the State CEQA Guidelines (14 CCR Sections 15000 et. seq.), as follows:

- ▶ A NOP of the DEIR/DEIS was filed with the Office of Planning and Research and each responsible and trustee agency and was circulated for public comments from September 12, 2008 through October 27, 2008.
- ▶ A notice of completion (NOC) and copies of the DEIR/DEIS were distributed to the Office of Planning and Research on June 28, 2010, to those public agencies that have jurisdiction by law with respect to the project, or which exercise authority over resources that may be affected by the project, and to other interested parties and agencies as required by law. A 45-day public comment period for the DEIR/DEIS, between June 28, 2010 and September 3, 2010, was established by the Office of Planning and Research. The City provided a longer comment period than required in order to allow more extensive public review and comment. The public comment period began on June 28, 2010 and ended on September 10, 2010.
- ▶ A notice of availability (NOA) of the DEIR was mailed to all interested groups, organizations, and individuals who had previously requested notice in writing on June 28, 2010. The NOA stated that the City had completed the DEIR/DEIS and that copies were available at the City of Folsom Community Development Department, 50 Natoma Street, Folsom, or at the Folsom Public Library, 411 Stafford Street, Folsom.
- ▶ A public notice was placed in the Sacramento Bee and Folsom Telegraph on June 28, 2010, which stated that the DEIR/DEIS was available for public review and comment.
- ▶ A public notice was posted in the office of the City of Folsom Community Development Department on June 28, 2010.
- ▶ Following closure of the public comment period, all comments received on the DEIR/DEIS during the comment period, the City's written responses to the significant environmental points raised in those comments, and additional information added by the City were added to the DEIR/DEIS to produce the FEIR/FEIS.
- ▶ Following preparation of the FEIR/FEIS, the City determined that additional changes in the EIR were required, and the Errata, dated May 6, 2011, was prepared.

3.2 RECORD OF PROCEEDINGS

The FEIR/FEIS is incorporated into these findings in its entirety. Without limitation, this incorporation is intended to elaborate on the scope and nature of mitigation measures, the basis for determining the significance of impacts, the comparative analysis of alternatives, and the reasons for approving the Proposed Project Alternative in spite of the potential for associated significant and unavoidable adverse impacts.

Various documents and other materials constitute the record upon which the City Council bases these findings and the approvals contained herein. The location and custodian of these documents and materials is David Miller, City of Folsom, Community Development Director, 50 Natoma Street, Folsom, CA 95630.

3.3 FINDINGS

3.3.1 SIGNIFICANT IMPACTS

The project has potentially significant environmental impacts in the areas discussed below. The DEIR/DEIS identified feasible mitigation measures to avoid or substantially reduce some or all of the environmental impacts in these areas, although some impacts remain significant even with implementation of all feasible mitigation.

AESTHETICS – LAND

IMPACT **Substantial Adverse Effect on a Scenic Vista.** *Project implementation would result in the degradation of the*
3A.1-1 *visual quality of a scenic vista.*

Mitigation

Mitigation Measure 3A.1-1: Construct and Maintain a Landscape Corridor Adjacent to U.S. 50.

The project applicant(s) for any particular discretionary development application adjacent to U.S. 50 shall fund, construct, and maintain a landscaped corridor within the SPA, south of U.S. 50. This corridor shall be 50 feet wide, except that the landscaped corridor width shall be reduced to 25 feet adjacent to the proposed regional mall. Landscaping plans and specifications shall be approved by Caltrans and the City of Folsom, and constructed by the project applicant(s) before the start of earthmoving activities associated with residential or commercial units. Landscaped areas would not be required within the preserved oak woodlands. As practicable, landscaping shall primarily contain native and/or drought tolerant plants. Landscaped corridors shall be maintained in perpetuity to the satisfaction of the City of Folsom.

Implementation: Project applicant(s) for any particular discretionary development application adjacent to U.S. 50.

Timing:

1. Plans and specifications: before approval of grading plans and building permits.
2. Construction: before the approval of occupancy permits associated with residential and commercial units.
3. Maintenance: in perpetuity.

Enforcement: City of Folsom Community Development Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

A scenic vista is generally considered a view of an area that has remarkable scenery or of a resource that is endemic to the area. The SPA is located on approximately 3,500 acres of undeveloped open space. The scenery consists of grasslands on rolling hills and narrow valleys, waterways, and oak woodlands. Existing development is generally limited to the perimeter, and includes agricultural fencing, electrical transmission lines, and radio towers. Because the SPA contains high levels of vividness, intactness, and unity, and due to its location along U.S. 50 where it is seen by thousands of motorists, viewer sensitivity is considered to be high. This region is part

of the Sierra Nevada foothills and the Central Valley, and is exemplary of those landscapes and of resources that are endemic to the area.

Project implementation would substantially degrade this scenic vista. The compositional harmony of this area relies upon the flow of oak woodlands, to gently rolling grasslands, to steep vegetation-covered hillsides. The Proposed Project Alternative would include a minimum of 30% open space pursuant to the LAFCo Resolution, which would therefore provide preservation of the existing scenic qualities on over 1,000 acres of the SPA. However, the scenic qualities of the SPA are reliant on coherence between the different landscape types (see Viewpoint 21, Exhibit 3A.1-1 on page 3A.1-4 of the DEIR/DEIS.) Views along nearby roadways would change to housing developments, schools, and general commercial endeavors. In addition, viewsheds that include the SPA are part of thousands of acres of open space that would no longer exist. Instead, this area would contain development that would substantially degrade the existing scenic view of the landscape. This area would become of similar visual quality to nearby developed land, and would no longer be considered a unique or scenic vista.

Because the project-related alterations would have a substantial adverse effect on a scenic vista, this direct impact is significant. No indirect impacts would occur.

Implementation of the Proposed Project Alternative would permanently and substantially alter the scenic vista at the SPA. Implementation of Mitigation Measure 3A.1-1 would reduce the impact of substantial alteration of a scenic vista, but not to a less-than-significant level. Therefore, this impact remains significant and unavoidable. No other feasible mitigation measures are available to reduce impacts associated with the alteration of scenic vistas from project development to a less-than-significant level because it is technically infeasible to allow new development without permanently and substantially altering existing scenic vistas. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50.

Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without impacting scenic vistas, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is **significant and unavoidable**. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to scenic vistas.

IMPACT 3A.1-2 **Damage to Scenic Resources Within a Designated Scenic Corridor.** *Project implementation could damage the character of the viewshed from a County-designated scenic corridor.*

Mitigation

In light of known economic, legal, social, technological, or other considerations, no feasible or potentially feasible measures to mitigate this impact were identified in the FEIR/FEIS.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Implementation of the Proposed Project Alternative would permanently and substantially alter the scenic character of the SPA from open space to urban development, and would therefore substantially damage the viewshed from the northern portion of Scott Road. These changes are inherent to the change from a rural to urban development pattern, and no feasible mitigation measures are available to reduce impacts associated with the

damage of scenic resources within a County-designated scenic corridor. Therefore, this impact remains significant and unavoidable.

No feasible mitigation measures are available to reduce impacts on scenic resources within a scenic corridor from project development to a less-than-significant level because it is technically infeasible to allow new development without permanently and substantially altering existing scenic resources. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without impacting scenic resources, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is **significant and unavoidable**. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to scenic resources within a scenic corridor.

IMPACT 3A.1-3 Substantial Degradation of Existing Visual Character or Quality of the Site and its Surroundings. *Project implementation would substantially degrade the visual character of the SPA through conversion of rolling hills and oak woodland to developed urban uses.*

Mitigation

Implement Mitigation Measures 3A.1-1 and 3A.7-4a.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

On-Site Elements

The SPA consists of approximately 3,500 acres of grasslands and oak woodlands set on undeveloped rolling hills. Under the Proposed Project Alternative, substantial alterations would occur to all landscape areas within the SPA. At full buildout, the visual character of the SPA would consist of developed urban land uses with small areas of open space and parks. The majority of the existing oak woodlands in the central portion of the SPA would also be retained.

SPA development, upon annexation to the City of Folsom, is required to preserve at least 30% as natural open space. Implementation of the Proposed Project Alternative would result in conversion of grassy hillsides to urban areas, generally consisting of housing units and commercial developments. Views would be permanently altered to urban development, substantially degrading viewsheds located on Scott Road, Placerville Road, White Rock Road, U.S. 50, and for people located within the community of El Dorado Hills, the City of Folsom, and nearby rural residences.

Reasonable people may differ as to the aesthetic value of undeveloped grasslands and oak woodlands, and whether development of urban uses in the SPA would constitute a substantial degradation of the existing visual character or quality of the site and its surroundings. However, given the large scale of this urban development and the rural nature of its setting, a conservative approach has been taken for this analysis, and the degradation of visual character at the SPA is considered to be substantial, and impacts on visual resources from project implementation are considered to be direct and significant. No indirect impacts would occur.

Implementation of Mitigation Measures 3A.1-1 and 3A.7-4 would reduce significant impacts associated with substantial adverse effects on a scenic vista under the Proposed Project Alternative by reducing the extent of

grading within the SPA and providing a 50-foot-wide landscaped corridor between U.S. 50 and the SPA. However, views of new housing developments, schools, and general commercial endeavors would only be slightly obstructed and hillside grading would remain pronounced. Once open space is converted to urban land uses, it is a permanent change in land use and to the visual character. Project implementation would still substantially alter a scenic vista. Therefore, this direct impact is considered significant and unavoidable.

Off-Site Elements

The landscape at the proposed detention basin site is similar to the western lowlands with the exception of an approximately 8-foot-high chain link fence. The detention basin would be constructed with bermed sides, and would therefore appear as a steeply graded hill. The basin would be highly visible to motorists traveling on White Rock Road and Prairie City Road, and would result in a direct, significant impact from degradation of the existing visual character. No indirect impacts would occur.

Implementation of Mitigation Measures 3A.1-1 and 3A.7-4 would reduce significant impacts associated with substantial adverse effects on a scenic vista under the No USACE Permit, Proposed Project, Resource Impact Minimization, and Reduced Hillside Development Alternatives by reducing the extent of grading within the SPA and providing a 50-foot-wide landscaped corridor between U.S. 50 and the SPA. However, views of new housing developments, schools, and general commercial endeavors would only be slightly obstructed and hillside grading would remain pronounced. Once open space is converted to urban land uses, it is a permanent change in land use and to the visual character. Project implementation would still substantially alter a scenic vista. Therefore, this direct is considered significant and unavoidable.

No other feasible mitigation measures are available to reduce impacts associated with the degradation of existing visual character from project development to a less-than-significant level because it is technically infeasible to allow new development without permanently altering the existing visual character or qualities. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without impacting the existing visual character, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is **significant and unavoidable**. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to degradation of the existing visual character.

IMPACT 3A.1-4 **Temporary, Short-Term Degradation of Visual Character for Developed Project Land Uses During Construction.** *Project implementation would involve four phases of construction over a 20-year-buildout period. Construction activity would involve the temporary and short-term use of staging areas for construction equipment and materials, which would be visible to adjacent project land uses that have already been developed.*

Mitigation

Mitigation Measure 3A.1-4: Screen Construction Staging Areas.

The project applicant(s) for any particular discretionary development application shall locate staging and material storage areas as far away from sensitive biological resources and sensitive land uses (e.g., residential areas, schools, parks) as feasible. Staging and material storage areas shall be approved by the appropriate agency (identified below) before the approval of grading plans for all project phases and shall be screened from adjacent occupied land uses in earlier development phases to the maximum extent practicable. Screens may include, but are not limited to, the use of such visual barriers such as berms or fences. The screen design shall be approved by the appropriate agency to further reduce visual effects to the extent possible.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries shall be developed by the project applicant(s) of each applicable project phase in consultation with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, and Caltrans) to reduce to the extent feasible the visual effects of construction activities on adjacent project land uses that have already been developed..

Implementation: Project applicant(s) for any particular discretionary development application.

Timing: Before approval of grading plans and during construction for all project phases.

Enforcement:

1. For those improvements that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.
2. For the two local roadway connections from Folsom Heights into El Dorado Hills: El Dorado County Community Services Department.
3. For the U.S. 50 interchange improvements: Caltrans.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Implementation of Mitigation Measure 3A.1-4 would reduce significant impacts associated with temporary visual-quality degradation for developed land uses from concurrent construction staging areas under the Proposed Project Alternative by providing visual screening. However, because screening may not always be feasible (i.e., projects covering a large area or tall buildings); this temporary, short-term impact is considered potentially significant and unavoidable. Additionally, some of the off-site elements fall under the jurisdiction of El Dorado County or Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation.

No other feasible mitigation measures are available to reduce impacts associated with the temporary, short-term degradation of existing visual character during construction to a less-than-significant level because it is technically infeasible to allow new development without temporary, short-term degradation of existing visual character. The project’s objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to engage in construction activities without temporary, short-term degradation of existing visual character, mitigation of this impact to on-site elements and some off-site elements to a less-than-significant level would be facially infeasible and this impact is **significant and unavoidable**. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to temporary, short-term degradation of existing visual character.

IMPACT 3A.1-5 **Creation of a New Source of Substantial Light or Glare that would Adversely Affect Day or Nighttime Views in the Area.** *Project implementation would require lighting of new development, which would cause new and increased light and glare.*

Mitigation

Mitigation Measure 3A.1-5: Establish and Require Conformance to Lighting Standards and Prepare and Implement a Lighting Plan.

To reduce impacts associated with light and glare, the City shall:

- ▶ Establish standards for on-site outdoor lighting to reduce high-intensity nighttime lighting and glare as part of the Folsom Specific Plan design guidelines/standards. Consideration shall be given to design features, namely directional shielding for street lighting, parking lot lighting, and other substantial light sources, that would reduce effects of nighttime lighting. In addition, consideration shall be given to the use of automatic shutoffs or motion sensors for lighting features to further reduce excess nighttime light.
- ▶ Use shielded or screened public lighting fixtures to prevent the light from shining off of the surface intended to be illuminated.

To reduce impacts associated with light and glare, the project applicant(s) of all project phases shall:

- ▶ Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties.
- ▶ Flood and area lighting needed for construction activities, nighttime sporting activities, and/or security shall be screened or aimed no higher than 45 degrees above straight down (half-way between straight down and straight to the side) when the source is visible from any off-site residential property or public roadway.
- ▶ For public lighting in residential neighborhoods, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash.
- ▶ Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, earth-toned colored paint and roofing materials), shielded or screened lighting, and appropriate signage in the office/commercial areas to prevent light and glare from adversely affecting motorists on nearby roadways.
- ▶ Design exterior on-site lighting as an integral part of the building and landscape design in the Folsom Specific Plan area. Lighting fixtures shall be architecturally consistent with the overall site design.
- ▶ Lighting of off-site facilities within the City of Folsom shall be consistent with the City's General Plan standards.
- ▶ Lighting of the off-site detention basin shall be consistent with Sacramento County General Plan standards.
- ▶ Lighting of the two local roadway connections from Folsom Heights off-site into El Dorado Hills shall be consistent with El Dorado County General Plan standards.

A lighting plan for all on- and off-site elements within the each agency's jurisdictional boundaries (specified below) shall be submitted to the relevant jurisdictional agency for review and approval, which shall include the above elements. The lighting plan may be submitted concurrently with other improvement plans, and shall be submitted before the installation of any lighting or the approval of building permits for each phase. The project applicant(s) for any particular discretionary development application shall implement the approved lighting plan.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties).

Implementation: Project applicant(s) for any particular discretionary development application.

Timing: Before approval of building permits.

Enforcement:

1. For all on-site and off-site facilities that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.
2. For the off-site detention basin: Sacramento County Planning Department.
3. For the two local roadways off-site into El Dorado Hills: El Dorado County Community Services Department.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Because of the scale of proposed development and because project implementation would introduce a substantial quantity of light into a rural landscape, overall light and glare effects are considered significant and direct. No indirect impacts would occur. Implementation of Mitigation Measure 3A.1-5 by the City of Folsom would reduce significant impacts associated with effects from new sources of light and glare to a less-than-significant level under the Proposed Project Alternative by establishing on-site lighting standards in the specific plan, requiring conformance with established general plan standards, and requiring the project applicant(s) of all project phases to prepare and implement a lighting plan.

Finding for Elements Outside the City of Folsom's Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City's jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements (two roadway connections in El Dorado County and detention basin in Sacramento County) fall under the jurisdiction of El Dorado and Sacramento Counties; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.1-5. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.1-5, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.1-6 **New Skyglow Effects.** *Project implementation would require lighting of new development that would result in the generation of new and increased skyglow effects, obscuring views of stars, constellations, and other features of the night sky.*

Mitigation

Implement Mitigation Measure 3A.1-5.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Implementation of Mitigation Measure 3A.1-5 would partially reduce significant impacts associated with effects from skyglow under the Proposed Project Alternative. Mitigation Measure 3A.1-5 would require the development and implementation of an on-site lighting plan and by requiring conformance with general plan standards for the off-site facilities. However, because of the scale and location of the SPA and the off-site elements, screening or shielding of light fixtures to direct light downward or the use of low-pressure sodium or other lighting would not reduce the effects of new skyglow on the night sky to a less-than-significant level. Therefore, impacts would remain **significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with new skyglow to a less-than-significant level because it is technically infeasible to allow new development without introducing new skyglow effects. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without introducing new sources of skyglow, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable.

AESTHETICS – WATER

IMPACT 3B.1-2 **Substantial Degradation of Existing Visual Character or Quality of the “Water” Study Area.** *Implementation of the Off-site Water Facility Alternatives could substantially degrade the existing visual character or quality of the “Water” Study Area and its surroundings.*

Mitigation

Mitigation Measure 3B.1-2a: Enhance Exterior Appearance of Structural Facilities.

The external appearance of above-ground facilities, including the choice of color and materials, shall seek to reduce the visual impact of the proposed WTP, pump station, and above-ground storage tank facilities. Bright reflective materials and colors shall be avoided. As appropriate, the exterior design of these facilities should follow design guidelines provided in applicable land use plans. Minimum exterior design requirements shall include, but are not limited to, the following:

- ▶ painting (with earth-colored tones) of structural façades to blend with surrounding land uses,
- ▶ use of fencing or structural materials similar to those used by nearby land uses,

- ▶ installation of berms and/or landscaping around the facility (see Mitigation Measure 3B.2-2b for additional detail), and
- ▶ clustering of structural facilities to maximize open space buffering.

Implementation: City of Folsom Utilities Department.

Timing: Prior to approval of grading plans and building permits for WTP, pump stations, and storage tank facilities.

- Enforcement:**
1. For structural improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.
 3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Mitigation Measure 3B.1-2b: Prepare Landscaping Plan.

The City shall develop a landscaping plan for each structural facility site that uses a combination of native vegetation, earthen features (e.g., boulders), and, if appropriate, topographical separations (e.g., berms) to maximize site appearance and shield the new facilities from nearby sensitive receptors to the extent feasible. In addition to complying with local standards, the landscaping plan shall require the following at each site:

- ▶ Vegetation shall be arranged in a hierarchy of plant groupings to enhance the visual and scenic qualities of the site(s). To the extent practical, the design will minimize the need for supplemental irrigation.
- ▶ New or replacement vegetation shall be compatible with surrounding vegetation and shall be adaptable to the site with regard to rainfall, soil type, exposure, growth rate, erosion control, and energy conservation purposes.
- ▶ Plant materials chosen shall be species which do not present any safety hazards, which allow native flora to reestablish in the area, and which require minimal maintenance, including watering, pest control, and clean-up of litter from fruit and droppings.

Implementation: City of Folsom Utilities Department.

Timing: Prior to approval of grading plans and building permits for WTP, pump stations, and storage tank facilities.

- Enforcement:**
1. For structural improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.

3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Although the Off-site Water Facilities would change the visual character of the WTP site, the extent and magnitude of this change is not considered substantial in relation to other adjacent uses, which include OHV use and aggregate mining. However, the design of the WTP could be inconsistent with the development proposed within the Folsom SPA. In addition, the WTP would be located outside and to the south of the delineated Urban Services Boundary as proposed in the current Sacramento County General Plan Update and the WTP could degrade the existing visual character of the study area in the vicinity of the urban-rural interface that will ultimately transition through the WTP site. Therefore, the direct and indirect impacts from implementation of the Proposed Off-site Water Facility Alternative are considered potentially significant.

Implementation of Mitigation Measures 3B.1-2a and 3B.1-2b would reduce potentially significant direct and indirect impacts associated with visual quality degradation to a less-than-significant level by ensuring structural elements of the WTP, pump stations, and storage tanks blend with the development patterns proposed for the Folsom SPA and within adjacent jurisdictions through the provision of visual screening.

IMPACT 3B.1-3 **Creation of a New Source of Substantial Light or Glare that would Adversely Affect Day or Nighttime Views in the “Water” Study Area.** *Implementation of the Off-site Water Facility Alternatives would create new sources of substantial light or glare, which could adversely affect day or nighttime views in the “Water” Study Area.*

Mitigation

Mitigation Measure 3B.1-3a: Conform to Construction Lighting Standards.

The City shall limit construction to daylight hours to the extent possible. If nighttime lighting or construction is necessary, the City shall ensure that unshielded lights, reflectors, or spotlights are not located and directed to shine toward or be directly visible from adjacent properties or streets. To the extent possible, the City shall minimize the use of nighttime construction lighting within 500 feet of existing residences. This measure shall be identified on grading plans and in construction contracts.

Implementation: City of Folsom Utilities Department.

Timing: Prior to approval of grading plans and building permits for WTP, pump stations, and storage tank facilities.

- Enforcement:**
1. For structural improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.
 3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Mitigation Measure 3B.1-3b: Prepare and Submit a Lighting Master Plan.

The City shall prepare a Lighting Master Plan that covers all Off-site Water Facilities-related outdoor light sources. The Lighting Master Plan shall include the following minimum requirements:

- ▶ outdoor lighting shall be properly shielded and installed to prevent light trespass on adjacent properties;
- ▶ flood or spot lamps installed as part of the Off-site Water Facilities shall be aimed no higher than 45 degrees above straight down (half-way between straight down and straight to the side) when the source is visible from any off-site residential property or public roadway;
- ▶ prohibit the use of harsh mercury vapor, low-pressure sodium, or fluorescent bulbs for public lighting in residential neighborhoods; and
- ▶ comply with requirements of local jurisdiction, if applicable.

Implementation: City of Folsom Utilities Department.

Timing: Prior to approval of grading plans and building permits for WTP, pump stations, and storage tank facilities.

Enforcement:

1. For structural improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.
3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Construction can involve numerous potential sources of nighttime lighting, including earthmoving and other construction equipment, temporary construction trailers, employee vehicles, and flood and security lighting. Nighttime construction along the conveyance alignments could adversely affect single-family residences along Gerber, Florin, Excelsior, Grant Line, Eagles Nest, and Grant Line Roads and could interfere with the nighttime vision of drivers using these roadways. Because nighttime construction lighting could adversely affect nearby residents and drivers on adjacent roads, this **direct** impact would be **potentially significant**. **No indirect** impacts would result.

The WTP under the Proposed Off-site Water Facility Alternative would be constructed in an undeveloped area that has minimal to no existing sources of light and glare. As a result, the WTP would generate new sources of night lighting and glare within an area that currently lacks these sources, thereby, incrementally increasing the amount of light generated within the immediate vicinity of the WTP. Although light generated by the WTP would be typical of similar industrial development to the south, such as existing aggregate processing, by virtue that the

new source of illumination would originate from a different location, potentially affecting previously unaffected residences. This direct impact would be potentially significant. No indirect impacts would result.

Implementation of Mitigation Measures 3B.1-3a and 3B.1-3b would reduce potentially significant impacts associated with the temporary use of construction lighting to a less-than-significant level through adherence to construction lighting standards and preparation and implementation of a lighting master plan for operational, above-ground facilities.

AIR QUALITY – LAND

IMPACT 3A.2-1 **Generation of Construction Emissions of NO_x and PM₁₀.** *Construction activities associated with the project would generate intermittent emissions of NO_x and PM₁₀. Because of the large size of the project, construction-generated emissions of NO_x, an ozone precursor, and fugitive PM₁₀ dust would exceed SMAQMD-recommended thresholds and would substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS. Thus, project-generated, construction-related emissions of criteria air pollutants and precursors could violate or contribute substantially to an existing or projected air quality violation, expose sensitive receptors to substantial pollutant concentrations, and/or conflict with air quality planning efforts.*

Mitigation

Mitigation Measure 3A.2-1a: Implement Measures to Control Air Pollutant Emissions Generated by Construction of On-Site Elements.

To reduce short-term construction emissions, the project applicant(s) for any particular discretionary development application shall require their contractors to implement SMAQMD's list of Basic Construction Emission Control Practices, Enhanced Fugitive PM Dust Control Practices, and Enhanced Exhaust Control Practices (list below) in effect at the time individual portions of the site undergo construction. In addition to SMAQMD-recommended measures, construction operations shall comply with all applicable SMAQMD rules and regulations.

Basic Construction Emission Control Practices

- ▶ Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- ▶ Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- ▶ Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- ▶ Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- ▶ All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- ▶ Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, Section 2485 of the

California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site.

- ▶ Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Enhanced Fugitive PM Dust Control Practices – Soil Disturbance Areas

- ▶ Water exposed soil with adequate frequency for continued moist soil. However, do not overwater to the extent that sediment flows off the site.
- ▶ Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 mph.
- ▶ Plant vegetative ground cover (fast-germinating native grass seed) in disturbed areas as soon as possible. Water appropriately until vegetation is established.

Enhanced Fugitive PM Dust Control Practices – Unpaved Roads

- ▶ Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
- ▶ Treat site accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads.
- ▶ Post a publicly visible sign with the telephone number and person to contact at the construction site regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of SMAQMD and the City contact person shall also be posted to ensure compliance.

Enhanced Exhaust Control Practices

- ▶ The project shall provide a plan, for approval by the City of Folsom Community Development Department and SMAQMD, demonstrating that the heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NO_x reduction and 45% particulate reduction compared to the most current California Air Resources Board (ARB) fleet average that exists at the time of construction. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The project applicant(s) of each project phase or its representative shall submit to the City of Folsom Community Development Department and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 hp, that would be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. SMAQMD's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction (SMAQMD 2007a). The project shall ensure that emissions from all off-road diesel powered equipment used on the SPA do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40 % opacity (or Ringelmann 2.0) shall be repaired immediately, and the City and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment

shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. SMAQMD staff and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation measure shall supersede other SMAQMD or state rules or regulations.

- ▶ If at the time of construction, SMAQMD has adopted a regulation or new guidance applicable to construction emissions, compliance with the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if SMAQMD so permits.

Implementation: The project applicant(s) of all project phases.

Timing: Before the approval of all grading plans by the City and throughout project construction, where applicable, for all project phases.

Enforcement: City of Folsom Community Development Department.

Mitigation Measure 3A.2-1b: Pay Off-Site Mitigation Fee to SMAQMD to Off-Set NO_x Emissions Generated by Construction of On-Site Elements.

Implementation of the Proposed Project Alternative or the other four other action alternatives would result in construction-generated NO_x emissions that exceed the SMAQMD threshold of significance, even after implementation of the SMAQMD Enhanced Exhaust Control Practices (listed in Mitigation Measure 3A.2-1a).

Therefore, the project applicant(s) shall pay SMAQMD an off-site mitigation fee for implementation of any of the five action alternatives for the purpose of reducing NO_x emissions to a less-than-significant level (i.e., less than 85 lb/day). All NO_x emission reductions and increases associated with GHG mitigation shall be added to or subtracted from the amount above the construction threshold to determine off-site mitigation fees, when possible. The specific fee amounts shall be calculated when the daily construction emissions can be more accurately determined: that is, if the City/USACE select and certify the EIR/EIS and approves the Proposed Project Alternative or one of the other four other action alternatives, the City and the applicants must establish the phasing by which development would occur, and the applicants must develop a detailed construction schedule. Calculation of fees associated with each project development phase shall be conducted by the project applicant(s) in consultation with SMAQMD staff before the approval of grading plans by the City. The project applicant(s) for any particular discretionary development application shall pay into SMAQMD's off-site construction mitigation fund to further mitigate construction-generated emissions of NO_x that exceed SMAQMD's daily emission threshold of 85 lb/day. The calculation of daily NO_x emissions shall be based on the cost rate established by SMAQMD at the time the calculation and payment are made. At the time of writing this EIR/EIS the cost rate is \$16,000 to reduce 1 ton of NO_x plus a 5% administrative fee (SMAQMD 2008c). The determination of the final mitigation fee shall be conducted in coordination with SMAQMD before any ground disturbance occurs for any project phase. Based on information available at the time of writing this EIR/EIS, and assuming that construction would be performed at a consistent rate over a 19-year period (and averaging of 22 work days per month), it is estimated that the off-site construction mitigation fees would range from \$517,410 to \$824,149, depending on which alternative is selected. Because the fee is based on the mass quantity of emissions that exceed SMAQMD's daily threshold of significance of 85 lb/day, total fees would be substantially greater if construction activity is more intense during some phases and less intense during other phases of the 19-year build out period, and in any event, based on the actual cost rate applied by SMAQMD. (This fee is used by SMAQMD to purchase off-site emissions

reductions. Such purchases are made through SMAQMD's Heavy Duty Incentive Program, through which select owners of heavy-duty equipment in Sacramento County can repower or retrofit their old engines with cleaner engines or technologies.)

Implementation: The project applicant(s) of all project phases.

Timing: Before the approval of all grading plans by the City and throughout project construction for all project phases.

Enforcement: The City of Folsom Community Development Department shall not grant any grading permits to the respective project applicant(s) until the respective project applicant(s) have paid the appropriate off-site mitigation fee to SMAQMD.

Mitigation Measure 3A.2-1c: Analyze and Disclose Projected PM₁₀ Emission Concentrations at Nearby Sensitive Receptors Resulting from Construction of On-Site Elements.

Prior to construction of each discretionary development entitlement of on-site land uses, the project applicant shall perform a project-level CEQA analysis (e.g., supporting documentation for an exemption, negative declaration, or project-specific EIR) that includes detailed dispersion modeling of construction-generated PM₁₀ to disclose what PM₁₀ concentrations would be at nearby sensitive receptors. The dispersion modeling shall be performed in accordance with applicable SMAQMD guidance that is in place at the time the analysis is performed. At the time of writing this EIR/EIS, SMAQMD's most current and most detailed guidance for addressing construction-generated PM₁₀ emissions is found in its Guide to Air Quality Assessment in Sacramento County (SMAQMD 2009a). The project-level analysis shall incorporate detailed parameters of the construction equipment and activities, including the year during which construction would be performed, as well as the proximity of potentially affected receptors, including receptors proposed by the project that exist at the time the construction activity would occur.

Implementation: All detailed, project-level analysis shall be performed and funded by the project applicant(s) for each discretionary development entitlement. All feasible mitigation shall be also be funded by the project applicant(s).

Timing: Before the approval of all grading plans by the City.

Enforcement: City of Folsom Community Development Department.

Mitigation Measure 3A.2-1d: Implement SMAQMD's Basic Construction Emission Control Practices during Construction of all Off-Site Elements located in Sacramento County.

The applicants responsible for the construction of each off-site element in Sacramento County shall require their contractors to implement SMAQMD's Basic Construction Emission Control Practices during construction. A list of SMAQMD's Basic Construction Emission Control Practices is provided under Mitigation Measure 3A.2-1a.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be developed by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., Sacramento County or Caltrans) to implement SMAQMD's Basic Construction Emission Control Practices or comparable feasible measures.

Implementation: The project applicant(s) responsible for construction of each off-site element in Sacramento County.

Timing: Before the approval of all grading plans from SMAQMD.

- Enforcement:**
1. For all off-site improvements within Sacramento County: Sacramento County Planning and Community Development Department.
 2. For the U.S. 50 interchange improvements: Caltrans.

Mitigation Measure 3A.2-1e: Implement EDCAQMD-Recommended Measures for Controlling Fugitive PM₁₀ dust During Construction of the Two Roadway Connections in El Dorado County.

Prior to construction of each roadway extension in El Dorado County, the applicants or its contractors shall develop a fugitive dust control plan that is approved by EDCAQMD and the applicants shall require their contractors to implement the dust control measures identified in the EDCAQMD-approved fugitive dust control plan. The fugitive dust control plan shall contain measures that are recommended by EDCAQMD at the time the plan is developed, which may include, but is not limited to, the current list of EDCAQMD-recommended dust control measures provided in Table 3A.2-5 below.

Table 3A.2-5 EDCAQMD-Recommend Fugitive Dust Control Measures	
Source	Mitigation Measure
Soil Piles	Enclose, cover, or water twice daily all soil piles
	Automatic sprinkler system installed on soil piles
Exposed Surface/Grading	Water all exposed soil twice daily
	Water exposed soil with adequate frequency to keep soil moist at all times
Truck Hauling Road	Water all haul roads twice daily
	Pave all haul roads
Truck Hauling Load	Maintain at least two feet of freeboard
	Cover load of all haul/dump trucks securely
Source: Table 4.12 of EDCAQMD's <i>Guide to Air Quality Assessment</i> (EDCAQMD 2002).	

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be developed by the project applicant(s) of each applicable project phase in consultation with the affected oversight agency(ies) (i.e., El Dorado County).

Implementation: The project applicant(s) responsible for constructing the roadway connections in El Dorado County.

Timing: Before the approval of grading plans by EDCAQMD.

Enforcement: El Dorado County Development Services Department.

Mitigation Measure 3A.2-1f: Implement SMAQMD's Enhanced Exhaust Control Practices during Construction of all Off-Site Elements.

Implement SMAQMD's Enhanced Exhaust Control Practices, which are listed in Mitigation Measure 3A.2-1a, in order to control NO_x emissions generated by construction of all off-site elements (in Sacramento and El Dorado Counties, or Caltrans right-of-way).

Implementation: The project applicant(s) responsible for construction of each off-site element in Sacramento and El Dorado counties.

Timing: Before the approval of all grading plans from the respective air district (i.e., SMAQMD or EDCAQMD).

- Enforcement:**
1. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
 2. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 3. For the U.S. 50 interchange improvements: Caltrans.

Mitigation Measure 3A.2-1g: Pay Off-Site Mitigation Fee to SMAQMD to Off-Set NO_x Emissions Generated by Construction of Off-Site Elements.

The off-site elements could result in construction-generated NO_x emissions that exceed the SMAQMD threshold of significance, even after implementation of the SMAQMD Enhanced Exhaust Control Practices (listed in Mitigation Measure 3A.2-1a). Therefore, the responsible project applicant(s) for each off-site element in Sacramento County shall pay SMAQMD an off-site mitigation fee for implementation of each off-site element in Sacramento County for the purpose of reducing NO_x emissions to a less-than-significant level (i.e., less than 85 lb/day). The specific fee amounts shall be calculated when the daily construction emissions can be more accurately determined. This calculation shall occur if the City/USACE certify the EIR/EIS and select and approves the Proposed Project Alternative or one of the other four other action alternatives, the City, Sacramento County, and the applicants establish the phasing by which construction of the off-site elements would occur, and the applicants develop a detailed construction schedule. Calculation of fees associated with each off-site element shall be conducted by the project applicant(s) in consultation with SMAQMD staff before the approval of respective grading plans by Sacramento County. The project applicant(s) responsible for each off-site element in Sacramento County shall pay into SMAQMD's off-site construction mitigation fund to further mitigate construction-generated emissions of NO_x that exceed SMAQMD's daily emission threshold of 85 lb/day. The calculation of daily NO_x emissions shall be based on the cost rate established by SMAQMD at the time the calculation and payment are made. At the time of writing this EIR/EIS the cost rate is \$16,000 to reduce 1 ton of NO_x plus a 5% administrative fee (SMAQMD 2008c). The determination of the final mitigation fee shall be conducted in coordination with SMAQMD before any ground disturbance occurs for any project phase. Because the fee is based on the mass quantity of emissions that exceed SMAQMD's *daily* threshold of significance of 85 lb/day, total fees for construction of the off-site elements would vary according to the timing and potential overlap of construction schedules for off-site elements. This measure applies only to those off-site elements located in SMAQMD's jurisdiction (i.e., in Sacramento County) because EDCAQMD does not offer a similar off-set fee program for construction-generated NO_x emissions in its jurisdiction. (This fee is used by SMAQMD to purchase off-site emissions reductions. Such purchases are made through SMAQMD's Heavy Duty Incentive Program, through which select owners of heavy-duty equipment in Sacramento County can repower or retrofit their old engines with cleaner engines or technologies.)

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be developed by the project applicant(s) of each applicable project phase in coordination with the affected oversight agency(ies) (i.e., Sacramento County or Caltrans).

Implementation: The project applicant(s) of all off-site elements in Sacramento County.

Timing: Before the approval of each grading plan for the off-site elements in Sacramento County.

- Enforcement:**
1. For all off-site improvements within Sacramento County: Sacramento County Planning and Community Development Department shall not grant any grading permits to the respective project applicant(s) until the respective project applicant(s) have paid the appropriate off-site mitigation fee to SMAQMD.
 2. For the U.S. 50 interchange improvements: Caltrans shall not grant any grading permits to the respective project applicant(s) until the respective project applicant(s) have paid the appropriate off-site mitigation fee to SMAQMD.

Mitigation Measure 3A.2-1h: Analyze and Disclose Projected PM₁₀ Emission Concentrations at Nearby Sensitive Receptors Resulting from Construction of Off-Site Elements.

Prior to construction of each off-site element located in Sacramento County that would involve site grading or earth disturbance activity that would exceed 15 acres in one day, the responsible agency or its selected consultant shall require that detailed dispersion modeling is conducted of construction-generated PM₁₀ emissions pursuant to SMAQMD guidance that is in place at the time the analysis is performed. At the time of writing this EIR/EIS, SMAQMD's most current and most detailed guidance for addressing construction-generated PM₁₀ emissions is found in its *Guide to Air Quality Assessment in Sacramento County* (SMAQMD 2009a). SMAQMD emphasizes that PM₁₀ emission concentrations at nearby sensitive receptors be disclosed in project-level CEQA analysis. Each project-level analysis shall incorporate detailed parameters of the construction equipment and activities, including the year during which construction would be performed, as well as the proximity of potentially affected receptors, including receptors proposed by the project that exist at the time the construction activity would occur. If the modeling analysis determines that construction activity would result in an exceedance or substantial contribution to the CAAQS and NAAQS at a nearby receptor, then the project applicant(s) shall require their respective contractors to implement additional measures for controlling construction-generated PM₁₀ exhaust emission and fugitive PM₁₀ dust emissions in accordance with SMAQMD guidance, requirements, and/or rules that apply at the time the project-level analysis is performed. It is likely that these measures would be the same or similar to those listed as Enhanced Fugitive PM Dust Control Practices for Soil Disturbance Areas and Unpaved Roads and Enhanced Exhaust Control Practices included in Mitigation Measure 3A.2-1a. Dispersion modeling is not required for the two El Dorado County roadway connections because the total amount of disturbed acreage is expected to be less than the EDCAQMD screening level of 12 acres.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be developed by the project applicant(s) of each applicable project phase in coordination with the affected oversight agency(ies) (i.e., Sacramento County or Caltrans).

Implementation: All detailed, project-level analysis shall be performed by the responsible lead agency or its selected consultant and funded by the project applicant(s). Implementation of the project-level modeling analysis and any necessary additional mitigation shall be fully funded by the project applicant(s) responsible for each off-site improvement.

Timing:

1. For all off-site improvements within unincorporated Sacramento County: Before the approval of the respective grading plans from the Sacramento County Planning and Community Development Department.

2. For the U.S. 50 interchange improvements: Before the approval of construction plans from Caltrans.
- Enforcement:**
1. For all off-site improvements within Sacramento County: Sacramento County Planning and Community Development Department.
 2. For the U.S. 50 interchange improvements: Caltrans.

Finding Regarding NO_x Emissions

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen potential impacts from NO_x emissions for both the on-site and the off-site elements of the Proposed Project Alternative.

The maximum daily level of construction-generated NO_x emissions under the Proposed Project would exceed the SMAQMD-recommended threshold of 85 lb/day. It should be noted that the maximum daily emissions level estimates displayed in Table 3A.2-3 on page 3A.2-29 of the DEIR/DEIS assume that the intensity of construction activity would be the same during the 19 years of construction on the site. It is more likely, however, that some period of construction (and associated emissions) would be more intense than other periods due to changes in market conditions and according to preferences of the City and the project applicants. If, for instance, peak construction activity would be as much as three times as intense as the average level of construction activity during the 19-year build out period, then the maximum daily emission levels would be three times the levels presented in Table 3A.2-3 (page 3A.2-29 of the DEIR/DEIS).

Because mass emissions of NO_x would exceed SMAQMD's recommended threshold of significance and because grading activities are anticipated to be extensive, construction-generated emissions of criteria air pollutants and precursors could violate or contribute substantially to an existing or projected air quality violation. Also, construction emissions of criteria air pollutants and precursors could expose sensitive receptors to substantial pollutant concentrations, particularly when grading and other ground disturbance activities occurs near land uses that have already been developed (and where people are already living or working) on the SPA. In addition, because the SMAQMD's significance thresholds approximately correlate with reductions from heavy-duty vehicles and reduction requirements for land use project emissions in the SIP, construction-generated emissions could also conflict with air quality planning efforts. This would be a **direct significant** impact. **No indirect** impacts would occur.

Off-Site Elements

Emission levels associated with the construction of each of the proposed off-site elements were modeled separately. The analysis of each off-site element is discussed separately below, followed by a discussion of potential impacts to air quality that may result if construction of multiple off-site elements would occur simultaneously.

Detention Basin

The off-site detention basin would be located in Sacramento County and, therefore, in SMAQMD's jurisdiction. Based on Exhibit 2-9 on page 2-35 of the DEIR/DEIS, construction of the detention basin would involve grading and excavation activity on approximately 3.4 acres of undeveloped land. Maximum daily emissions of NO_x generated by this activity would be approximately 33.6 lb/day, which is less than SMAQMD's recommended threshold of significance of 85 lb/day.

Prairie City Road Interchange and Rowberry Drive Crossing

The Prairie City Road Interchange and Rowberry Drive Overcrossing over U.S. Highway 50 (U.S. 50) would be located in Sacramento County and, therefore, in SMAQMD's jurisdiction. Based on Exhibit 2-9 on page 2-35 of the DEIR/DEIS, construction of these two off-site elements would involve grading and construction activity in areas of approximately 19.3 acres and 18.7 acres, respectively. Maximum daily emissions of NO_x generated by the grading of each of these areas would be approximately 40.9 lb/day. The emissions level estimated for both elements is the same due to their similarities in size, type of improvement, and the types and number of equipment necessary to construct both elements. Thus, the respective maximum daily emissions of NO_x generated by construction of each of these off-site elements would be less than SMAQMD's recommended threshold of significance of 85 lb/day.

Oak Avenue Interchange

The Oak Avenue Interchange would be located in Sacramento County and, therefore, in SMAQMD's jurisdiction. Based on Exhibit 2-9 on page 2-35 of the DEIR/DEIS, construction of this interchange would involve grading and construction activity in an area that is approximately 46.7 acres in size. Maximum daily emissions of NO_x generated by the grading of these areas would be approximately 89.8 lb/day, which exceeds SMAQMD's recommended threshold of significance of 85 lb/day. Therefore, construction-generated NO_x emissions could violate or contribute substantially to an existing or projected air quality violation in the SVAB.

Sewer Force Main Connection to Existing Off-Site Pump Station

The sewer force main connection to the existing off-site pump station north of U.S. 50 would be located in Sacramento County and, therefore, in SMAQMD's jurisdiction. Based on Exhibit 2-9 on page 2-35 of the DEIR/DEIS, the sewer force main connection would be approximately 2,100 feet long and, assuming a corridor width of up to 50 feet, as much as 2.4 acres could be subject to involve grading and excavation activity. Maximum daily emissions of NO_x generated by this activity would be approximately 75.8 lb/day, which is less than SMAQMD's recommended threshold of significance of 85 lb/day.

Roadway Connections into El Dorado County

Two roadway connections would be constructed from the east side of the SPA into El Dorado County. These roadway connections would be located in EDCAQMD's jurisdiction. Based on Exhibit 2-9 on page 2-35 of the DEIR/DEIS, the two roadway connections would have a combined length of 1,500 feet and, assuming a corridor width of up to 40 feet, as much as 1.4 acres could be subject to grading and excavation activity. Maximum daily emissions of NO_x and ROG generated by this activity would be approximately 46.1 lb/day and 5.8 lb/day, respectively, which are less than EDCAQMD's recommended threshold of significance of 82 lb/day.

Summary

The timing of construction of each of the off-site elements is unknown at the time of writing the EIR/EIS. If the construction schedules of multiple off-site elements located in SMAQMD's jurisdiction (i.e., Sacramento County) would overlap with each other, and/or with construction of on-site elements, their combined emissions of NO_x would potentially exceed SMAQMD's mass emission threshold of 85 lb/day. The combined effect of NO_x emissions from multiple sources is additive because NO_x is a precursor to ozone, which is a pollutant of regional concern. Even though NO_x emissions associated with construction of the two roadway connections would occur in El Dorado County, their impact would also be additive because the western portion of El Dorado County is part of the SVAB and the SFNA.

With regard to NO_x emissions associated with construction of on-site elements, implementation of SMAQMD's Basic Construction Emission Control Practices and Enhanced Exhaust Control Practices, as required by Mitigation Measure 3A.2-1a, and payment of an off-site mitigation fee to off-set construction-generated NO_x

emissions, as required by Mitigation Measure 3A.2-1b, would reduce emissions of NO_x associated with construction of the on-site elements to levels that do not exceed SMAQMD's threshold of significance of 85 lb/day.

With regard to NO_x emissions associated with construction of off-site elements, implementation of SMAQMD's Basic Construction Emission Control Practices and Enhanced Exhaust Control Practices, as required by Mitigation Measure 3A.2-1d and Mitigation Measure 3A.2-1f, respectively, and payment of an off-site mitigation fee to off-set construction-generated NO_x emissions, as required by Mitigation Measure 3A.2-1g, would reduce emissions of NO_x associated with construction of the off-site elements in Sacramento County to levels that do not exceed SMAQMD's threshold of significance of 85 lb/day. Consequently, emissions of NO_x associated with the construction of both on-site and off-site elements would be reduced to a **less-than-significant** level.

Finding Regarding PM₁₀ Emissions

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Construction emissions are considered short term and temporary in duration, but have the potential to represent a significant impact with respect to air quality. Respirable particulate matter (PM₁₀) and fine particulate matter (PM_{2.5}) are among the pollutants of greatest concern with respect to construction activities. Particulate emissions from construction activities can lead to adverse health effects and nuisance concerns, such as reduced visibility and soiling of exposed surfaces. Particulate emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Construction emissions of PM₁₀ can vary greatly depending on the level of activity, the specific operations taking place, the number and types of equipment operated, local soil conditions, weather conditions, and the amount of earth disturbance (e.g., site grading, excavation, cut-and-fill).

With respect to construction-generated emissions of PM₁₀, SMAQMD typically recommends that project-level analyses determine the maximum concentration of PM₁₀ emissions by performing air dispersion modeling with the EPA's AERMOD model if the maximum daily acreage of ground disturbance would exceed 15 acres. Given the overall size of the SPA and the likelihood that substantial portions would undergo construction at one time, it is assumed that more than 15 acres of ground disturbance activity would occur in one day. This is particularly the case for the eastern hillside area of the SPA where extensive cut and fill operations would be performed. Thus, it is concluded that ground-disturbing activities associated with site construction would result in concentrations of PM₁₀ that exceed the NAAQS or CAAQS. However, dispersion modeling has not been performed for this program-level analysis because detailed information about grading activities and the locations and occupancy timing of future planned on-site receptors is not known at the time of writing the DEIR/DEIS. A project-level analysis that incorporates specific details of each phase of the selected alternative would be necessary to perform accurate and meaningful dispersion modeling and properly disclose the air quality impacts associated with PM₁₀ emission concentrations. SMAQMD has approved this approach for this analysis because the analysis is being performed at the program-level (Hurley, pers. comm., 2009)

Off-Site Elements

Emission levels associated with the construction of each of the proposed off-site elements were modeled separately. The analysis of each off-site element is discussed separately below, followed by a discussion of potential impacts to air quality that may result if construction of multiple off-site elements would occur simultaneously.

Detention Basin

The off-site detention basin would be located in Sacramento County and, therefore, in SMAQMD's jurisdiction. Based on Exhibit 2-9 on page 2-35 of the DEIR/DEIS, construction of the detention basin would involve grading and excavation activity on approximately 3.4 acres of undeveloped land. With regard to construction-generated PM₁₀ emissions, SMAQMD does not recommend that dispersion modeling be performed to determine whether construction-generated concentrations of PM₁₀ would exceed the CAAQS and NAAQS because the maximum daily disturbed area would not exceed SMAQMD's screening level of 15 acres (SMAQMD 2009a, page 3-13, 3-14). Nonetheless, without implementation of SMAQMD's Basic Construction Emission Control Practices, there is a potential that construction-generated concentrations of PM₁₀ would exceed or substantially contribute to the CAAQS and NAAQS at nearby sensitive receptors.

Prairie City Road Interchange and Rowberry Drive Crossing

The Prairie City Road Interchange and Rowberry Drive Overcrossing over U.S. Highway 50 (U.S. 50) would be located in Sacramento County and, therefore, in SMAQMD's jurisdiction. Based on Exhibit 2-9 on page 2-35 of the DEIR/DEIS, construction of these two off-site elements would involve grading and construction activity in areas of approximately 19.3 acres and 18.7 acres, respectively.

With regard to construction-generated PM₁₀ emissions, SMAQMD recommends that, if the maximum daily disturbed area exceeds 15 acres, dispersion modeling should be performed to determine whether construction-generated concentrations of PM₁₀ would exceed the CAAQS and NAAQS at nearby receptors (SMAQMD 2009a, pages 3-13, 3-14). However, this EIR/EIS contains a program-level analysis; dispersion modeling cannot be performed to support a thorough project-level analysis of these two off-site elements because critical information is not known at the time of writing this EIR/EIS, including detailed parameters about the construction of each off-site element (i.e., equipment types, intensity of earth movement activity, year of construction) and the proximity of future nearby sensitive receptors that may exist at the time the construction is performed, including on-site receptors proposed by the project. Therefore, until a detailed analysis is performed, it is presumed that concentrations of PM₁₀ associated with the construction of both of these improvement projects could potentially exceed or contribute substantially to exceedances of the CAAQS and NAAQS at nearby receptors.

Oak Avenue Interchange

The Oak Avenue Interchange would be located in Sacramento County and, therefore, in SMAQMD's jurisdiction. Based on Exhibit 2-9 on page 2-35 of the DEIR/DEIS, construction of this interchange would involve grading and construction activity in an area that is approximately 46.7 acres in size.

With regard to construction-generated PM₁₀ emissions, SMAQMD recommends that if the maximum daily disturbed area exceeds 15 acres, dispersion modeling should be performed to determine whether construction-generated concentrations of PM₁₀ would exceed the CAAQS and NAAQS at nearby receptors (SMAQMD 2009a, pages 3-13, 3-14). However, the DEIR/DEIS contains a program-level analysis; dispersion modeling cannot currently be performed to support a thorough project-level analysis of the Oak Avenue Interchange element because critical information is not known at the time of writing the DEIR/DEIS, including detailed parameters about the construction of each off-site element (i.e., equipment types, intensity of earth movement activity, year of construction) and the proximity of future nearby sensitive receptors that may exist at the time the construction is performed, including on-site receptors proposed by the project. Thus, until such a project-level analysis is performed, it is presumed that concentrations of PM₁₀ associated with the construction of the Oak Avenue Interchange could potentially exceed or contribute substantially to exceedances of the CAAQS and NAAQS at nearby receptors.

Also, construction emissions of criteria air pollutants and precursors could expose sensitive receptors to substantial pollutant concentrations, particularly when grading and other ground disturbance activities occurs near land uses that have already been developed (and where people are already living or working) on the SPA. In

addition, because the SMAQMD's significance thresholds approximately correlate with reductions from heavy-duty vehicles and reduction requirements for land use project emissions in the SIP, construction-generated emissions could also conflict with air quality planning efforts.

Sewer Force Main Connection to Existing Off-Site Pump Station

The sewer force main connection to the existing off-site pump station north of U.S. 50 would be located in Sacramento County and, therefore, in SMAQMD's jurisdiction. Based on Exhibit 2-9 on page 2-35 of the DEIR/DEIS, the sewer force main connection would be approximately 2,100 feet long and, assuming a corridor width of up to 50 feet, as much as 2.4 acres could be subject to involve grading and excavation activity. With regard to construction-generated PM₁₀ emissions, SMAQMD does not recommend that dispersion modeling be performed to determine whether construction-generated concentrations of PM₁₀ would exceed the CAAQS and NAAQS because the maximum daily disturbed area would not exceed SMAQMD's screening level of 15 acres (SMAQMD 2009a, pages 3-13, 3-14). Nonetheless, without implementation of SMAQMD's Basic Construction Emission Control Practices, there is a potential that construction-generated concentrations of PM₁₀ would exceed the CAAQS and NAAQS at nearby receptors.

Roadway Connections into El Dorado County

Two roadway connections would be constructed from the east side of the SPA into El Dorado County. These roadway connections would be located in EDCAQMD's jurisdiction. Based on Exhibit 2-9 on page 2-35 of the DEIR/DEIS, the two roadway connections would have a combined length of 1,500 feet and, assuming a corridor width of up to 40 feet, as much as 1.4 acres could be subject to grading and excavation activity. With regard to construction-generated PM₁₀ emissions, dispersion modeling was not performed because the maximum daily disturbed area would not exceed EDCAQMD's screening level of 12 acres. Nonetheless, without implementation of ECAQMD-approved fugitive dust control measures, there is a potential that construction-generated concentrations of PM₁₀ would exceed the CAAQS and NAAQS at nearby receptors.

Summary

The timing of construction of each of the off-site elements is unknown at the time of writing the DEIR/DEIS. If the construction schedules of multiple off-site elements located in SMAQMD's jurisdiction (i.e., Sacramento County) would overlap with each other, and/or with construction of on-site elements, their combined emissions of NO_x would potentially exceed SMAQMD's mass emission threshold of 85 lb/day. PM₁₀ is a pollutant of localized concern and PM₁₀ generated by construction of the various off-site elements would not combine to form higher concentrations of PM₁₀ than construction of any single off-site element because the various off-site elements are not located in close proximity to each other. Nonetheless, as discussed above, PM₁₀ emissions generated by grading and ground disturbance activity during construction of all of the off-site elements could exceed or substantially contribute to local exceedances of the CAAQS and NAAQS for PM₁₀, especially if adequate dust control measures are not implemented. As a result, because both NO_x and PM₁₀ emissions associated with the construction of the off-site elements could exceed applicable thresholds this would be considered a **direct, significant** impact. **No indirect** impacts would occur.

With regard to PM₁₀ emission concentrations resulting from construction of off-site elements, implementation of SMAQMD's Basic Construction Emission Control Practices, as required by Mitigation Measure 3A.2-1d, as well as implementation of EDCAQMD-recommended fugitive PM₁₀ dust control measures, would reduce PM₁₀ concentrations generated during the construction of the off-site elements. Nonetheless, resultant PM₁₀ concentrations could potentially exceed or substantially contribute to the CAAQS and NAAQS because the intensity of construction activity and the acreage of ground disturbance that could occur at any one point in time could be substantially high and/or take place in close proximity to existing or future planned sensitive receptors (e.g., residents, schools). Therefore, PM₁₀ emissions associated with construction of the off-site elements would be **significant and unavoidable** unless the results of a detailed project-level analysis, as required by Mitigation

Measure 3A.2-1h, support another impact conclusion. Mitigation Measure 3A.2-1h requires a detailed project-level analysis after project phasing has been determined and tentative maps and improvement plans have been prepared, because at the time this DEIR/DEIS was prepared, site-specific information that would allow detailed dispersion modeling of construction-generated PM₁₀ from construction of the off-site elements in relation to nearby sensitive receptors was not available.

No other feasible mitigation measures are available to reduce PM₁₀ emissions from construction activities to a less-than-significant level because it is technically infeasible to allow construction without resulting in PM₁₀ emissions. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new construction without resulting in PM₁₀ emissions, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to construction emissions of PM₁₀.

Additionally, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties and/or Caltrans; therefore, the City would not have control over their timing or implementation. Therefore, the impacts related to those off-site facilities are considered potentially significant and unavoidable. These impacts would be reduced to a **less-than-significant** level if El Dorado County and/or Caltrans cooperate in their implementation.

IMPACT 3A.2-2 **Generation of Long-Term Operational (Regional) Emissions of ROG and NO_x.** *Operational area- and mobile-source emissions from project implementation would exceed the SMAQMD-recommended threshold of 65 lb/day for ROG and NO_x, and would result in or substantially contribute to emissions concentrations that exceed the NAAQS or CAAQS for ozone. In addition, because of the large increase in emissions associated with project build out and the fact that the project is not within an already approved plan (which means that increased emissions would not already be accounted for in applicable air quality plans), project implementation could conflict with air quality planning efforts in the SVAB.*

Mitigation

Mitigation Measure 3A.2-2: Implement All Measures Prescribed by the Air Quality Mitigation Plan to Reduce Operational Air Pollutant Emissions.

To reduce operational emissions, the project applicant(s) for any particular discretionary development application shall implement all measures prescribed in the SMAQMD-approved *Folsom Plan Area Specific Plan Air Quality Mitigation Plan* (AQMP) (Torrence Planning 2008), a copy of which is included in Appendix C2. The AQMP is intended to improve mobility, reduce vehicle miles traveled, and improve air quality as required by AB 32 and SB 375. The AQMP includes, among others, measures designed to provide bicycle parking at commercial land uses, an integrated pedestrian/bicycle path network, transit stops with shelters, a prohibition against the use of wood-burning fireplaces, energy star roofing materials, electric lawnmowers provided to homeowners at no charge, and on-site transportation alternatives to passenger vehicles (including light rail) that provide connectivity with other local and regional alternative transportation networks.

Implementation: The project applicant(s) for any particular discretionary development application.

Timing: Before issuance of subdivision maps or improvement plans.

Enforcement: City of Folsom Community Development Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Operation of the Proposed Project would result in long-term regional emissions of ROG, NO_x, and PM₁₀ associated with area sources, such as natural gas emissions, landscaping, applications of architectural coatings, in addition to operational vehicle-exhaust emissions. According to the traffic data used to prepare Section 3A.15, “Traffic and Transportation – Land,” of the DEIR/DEIS, full build out of the Proposed Project Alternative would result in approximately 247,000 additional vehicle trips per day and a regional net increase of 612,800 vehicle miles traveled (VMT) per day (Stankiewicz, pers. comm., 2009a).

Operational emissions were modeled using the URBEMIS 2007 Version 9.2.4 computer program (Rimpo and Associates 2008), as recommended by SMAQMD. Model defaults were adjusted to reflect project-specific data where available including the sizes and types of proposed land uses. Modeled operational emissions for the Proposed Project Alternative are presented in Table 3-12 below (Table 3A.2-7 on page 3A.2-44 of the DEIR/DEIS). Refer to Appendix C1 of the DEIR/DEIS for a detailed summary of the URBEMIS modeling assumptions, inputs, and outputs.

Source	Emissions (lb/day) ¹			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Operational Sources ¹				
Mobile-Source Emissions	522	323	1,058	205
Area-Source Emissions	1,539	386	1,375	1,324
Total Unmitigated Operational Emissions	2,061	709	2,433	1,529
SMAQMD Significance Threshold	65	65	— ²	— ²

Notes: CAAQS = California ambient air quality standards; lb/day = pounds per day; µg/m³ = micrograms per cubic meter; ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; SMAQMD = Sacramento Metropolitan Air Quality Management District

See Appendix C1 for modeling assumptions and results.

¹ Operational emissions shown represent the maximum daily emissions during the summertime or wintertime in year 2030. Totals may not add exactly due to rounding.

² SMAQMD has not identified mass emissions thresholds for operational emissions of PM₁₀ or PM_{2.5}. Emission levels are shown for informational purposes only.

Source: Modeling performed by AECOM in 2010

Based on the modeling conducted, and as summarized in Table 3-12 above (Table 3A.2-7 on page 3A.2-44 of the DEIR/DEIS), operation of the Proposed Project Alternative would result in a net increase in unmitigated long-term regional emissions of approximately 2,061 lb/day of ROG, 709 lb/day of NO_x, 2,433 lb/day of PM₁₀, and 1,529 lb/day of PM_{2.5}. Operational area- and mobile-source emissions of NO_x from implementation of the Proposed Project Alternative would exceed the SMAQMD-recommended threshold of 65 lb/day for ROG and NO_x, and would result in or substantially contribute to emissions concentrations that exceed the NAAQS or CAAQS. In addition, because development of the SPA is not included in an existing approved general plan, and operational emissions of ROG, NO_x, PM₁₀, and PM_{2.5} associated with land use development on the site would not already be accounted for in applicable air quality plans, implementation of the Proposed Project Alternative could

conflict with air quality planning efforts in the SVAB. As a result, this long-term **direct** impact is considered **significant**. **No indirect** impacts would occur.

Implementation of all air pollutant reduction measures contained in the SMAQMD-approved *Folsom Plan Area Specific Plan Air Quality Mitigation Plan*, as required by Mitigation Measure 3A.2-2, would reduce ROG and NO_x emissions associated with operation of the project. However, for reasons described in more detail below, the exact reduction achieved by implementation of Mitigation Measure 3A.2-2 cannot be determined for the Proposed Project Alternative. While the AQMP was developed to achieve a 35% reduction in operational NO_x emissions from baseline levels, the baseline levels are not represented by the URBEMIS modeling output summarized in Tables 3A.2-6 through 3A.2-10 of the DEIR/DEIS. For the purposes of developing an AQMP pursuant to SMAQMD's *Guidance for Land Use Emission Reductions* (SMAQMD 2007b) a baseline emissions level is presumed that is based on standard default trip generation rates established by the Institution of Transportation Engineers (ITE). The traffic modeling performed to support the analysis in Section 3A.15, "Traffic and Transportation – Land," of the DEIR/DEIS and the associated modeling of operational emissions summarized in Tables 3A.2-6 through 3A.2-10 of the DEIR/DEIS, did not utilize standard ITE trip generation rates. Instead, the traffic analysis was based on a modified version of the 2008 SACMET regional travel demand forecasting model (Stankiewicz, pers. comm., 2009b). As explained in Section 3A.15, "Traffic and Transportation – Land," of the DEIR/DEIS, a traffic demand forecasting model is a tool that assigns trips generated by the various land uses to the surrounding roadway network based on the locations of trip attractions and productions. The traffic demand forecast model incorporates several types of data, including detailed land use; trip generation characteristics of specific land use types; mode choice propensity based upon user and trip characteristics; roadway, pedestrian, and transit networks; and census information. By incorporating more parameters that are unique to the region and the SPA, the model estimates more precise (and lower) estimates of VMT than using standard default ITE trip generation rates, which in turn results in more precise (and lower) estimates of operational air pollutant emissions. In other words, the traffic modeling already accounts for some of the unique attributes of the proposed land use plans (such as the proximity of residential and commercial land uses to activity centers and to transit service), for which an emissions reduction is also included in the AQMP. Therefore, one would overestimate the reduction achieved by the AQMP by reducing the levels of operational NO_x emissions reported in Tables 3A.2-6 through 3A.2-10 of the DEIR/DEIS by 35%. The actual emission reduction benefit of the AQMP would be some amount less than 35%. Nonetheless, even if operational emissions of ROG and NO_x were 35% lower than the levels reported in Tables 3A.2-6 through 3A.2-10 of the DEIR/DEIS, they would still exceed SMAQMD's significance threshold of 65 lb/day. As a result, this impact would be **significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with operational emissions of ROG and NO_x to a less-than-significant level because it is technically infeasible to allow new development without resulting in ROG and NO_x emissions. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, complete mitigation is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without resulting in ROG or NO_x emissions, complete mitigation of this impact is facially infeasible.

IMPACT **Exposure of Sensitive Receptors to Short- and Long-Term Emissions of Toxic Air Contaminants.**
3A.2-4 *Project implementation would result in exposure of receptors to short- and long-term emissions of TACs from on-site stationary and mobile sources and from off-site mobile sources.*

Mitigation

Mitigation Measure 3A.2-4a: Develop and Implement a Plan to Reduce Exposure of Sensitive Receptors to Construction-Generated Toxic Air Contaminant Emissions.

The project applicant(s) for any particular discretionary development application shall develop a plan to reduce the exposure of sensitive receptors to TACs generated by project construction activity associated

with buildout of the selected alternative. Each plan shall be developed by the project applicant(s) in consultation with SMAQMD. The plan shall be submitted to the City for review and approval before the approval of any grading plans.

The plan may include such measures as scheduling activities when the residences are the least likely to be occupied, requiring equipment to be shut off when not in use, and prohibiting heavy trucks from idling. Applicable measures shall be included in all project plans and specifications for all project phases.

The implementation and enforcement of all measures identified in each plan shall be funded by the project applicant(s) for the respective phase of development.

Implementation: The project applicant(s) for any particular discretionary development application.

Timing: Before the approval of all grading plans by the City and throughout project construction, where applicable, for all project phases.

Enforcement: City of Folsom Community Development Department.

Mitigation Measure 3A.2-4b: Implement Measures to Reduce Exposure of Sensitive Receptors to Operational Emissions of Toxic Air Contaminants.

The following measures shall be implemented to reduce exposure of sensitive receptors to Toxic Air Contaminants.

- ▶ Proposed commercial and industrial land uses that have the potential to emit TACs or host TAC-generating activity (e.g., loading docks) shall be located away from existing and proposed on-site sensitive receptors such that they do not expose sensitive receptors to TAC emissions that exceed an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0.
- ▶ The multi-family residences planned across from the off-site corporation yard near the southwest corner of the SPA shall be set back as far as possible from the boundary of the corporation yard and/or relocated to another area.
- ▶ Where necessary to reduce exposure of sensitive receptors to an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0, proposed commercial and industrial land uses that would host diesel trucks shall incorporate idle reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as, IdleAire, electrification of truck parking, and alternative energy sources for TRUs, to allow diesel engines to be completely turned off.
- ▶ Signs shall be posted in at all loading docks and truck loading areas which indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises in order to reduce idling emissions. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by the California Office of Administrative Law in January 2005.
- ▶ Implement the following additional guidelines, which are recommended in *ARB's Land Use Handbook: A Community Health Perspective* (ARB 2005) and are considered to be advisory and not regulatory:
 - Sensitive receptors, such as residential units and daycare centers, shall not be located in the same building as dry-cleaning operations that use perchloroethylene. Dry-cleaning operations that use

perchloroethylene shall not be located within 300 feet of any sensitive receptor. A setback of 500 feet shall be provided for operations with two or more machines.

- Large gasoline stations (defined as facilities with a throughput of 3.6 million gallons per year or greater) and sensitive land uses shall not be sited within 300 feet of each other. Small gasoline-dispensing facilities (less than 3.6 million gallons of throughput per year) and sensitive land uses shall not be sited within 50 feet of each other.

Implementation: The project applicant(s) of all project phases.

Timing: Before the approval of all grading plans by the SMAQMD and throughout project construction, where applicable, for all project phases.

Enforcement: City of Folsom Community Development Department.

Finding for Emissions from On-Site Operational Mobile Sources

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS

The Proposed Project Alternative would include proposed residences, schools, and parks. Because of the sensitivity of such uses, assessment of compatibility of surrounding land uses with respect to sources of TAC emissions is required.

On-site mobile sources of TACs would primarily be associated with the operation of school buses transporting students to and from the proposed schools, as well as diesel-powered delivery trucks associated with proposed on-site commercial and industrial activities.

Emissions from school buses can vary, depending on various factors, including bus type, age, maintenance, and amount of time spent idling. Health impacts from exhaust exposure include eye and respiratory irritation, enhanced respiratory allergic reactions, asthma exacerbation, increased cancer risk, and immune system degradation. Generally, children are more vulnerable to air pollutants because of higher inhalation rates, narrower airways, and less mature immune systems.

In response to the above issue, the ARB adopted an ATCM as part of the Particulate Matter Risk Reduction Plan to specifically deal with diesel emissions from school buses. This ATCM became effective July 16, 2003. The school bus idling ATCM includes the following requirements:

- (a) The driver of a school bus or vehicle, transit bus, or heavy-duty vehicle (other than a bus) shall manually turn off the bus or vehicle upon arriving at a school and restart no more than 30 seconds before departing. A driver of a school bus or vehicle shall be subject to the same requirement when operating within 100 feet of a school and shall be prohibited from idling more than 5 minutes at each stop beyond schools, such as parking or maintenance facilities, school bus stops, or school activity destinations. A driver of a transit bus or heavy-duty vehicle (other than a bus) shall be prohibited from idling more than 5 minutes at each stop within 100 feet of a school. Idling necessary for health, safety, or operational concerns shall be exempt from these restrictions.
- (b) The motor carrier of the affected bus or vehicle shall ensure that drivers are informed of the idling requirements, track complaints and enforcement actions, and keep track of driver education and tracking activities.

According to ARB, implementation of the above requirements would eliminate unnecessary idling for school buses and other heavy-duty vehicles, protecting children from unhealthful exhaust emissions and thus reducing localized exposure to TACs and other harmful air pollution emissions at and near schools.

On-site operational mobile sources of TAC emissions would also be associated with the operation of diesel-powered delivery trucks at the loading docks and delivery areas of commercial and industrial land uses. Some sensitive land uses within the SPA would be located within 100 feet of commercial or industrial uses (e.g., community commercial, general commercial, regional commercial, industrial/office park, and mixed-use land use types). Operational activities that require the use of diesel-fueled vehicles for extended periods, such as commercial trucking facilities, delivery/distribution areas, or loading docks, could expose nearby sensitive receptors to diesel PM emissions. The diesel PM emissions generated by these uses would be produced primarily at discrete locations on a regular basis. Idling trucks at these locations, including TRUs, could result in the exposure of nearby residents to increased diesel PM levels on a reoccurring basis.

As referenced above, the ARB's *Handbook* recommends avoiding the siting of new commercial trucking facilities that accommodate more than 100 trucks per day, or 40 trucks equipped with transportation refrigeration units (TRUs), within 1,000 feet of sensitive receptors (e.g., residences or schools) (ARB 2005). The number of trucks that would visit the facilities on any given day is not known at this time; however, based on data from similar projects, the types of commercial uses proposed for the SPA would not involve large-scale trucking operations. For the purposes of the Proposed Project Alternative, it is not anticipated that the combination of industrial land uses proposed in the SPA would exceed these screening limits.

In addition to the school bus idling ATCM, ARB also adopted an idling restriction ATCM for large commercial diesel-powered vehicles, which became effective February 1, 2005. In accordance with this measure, affected vehicles are required to limit idling to no longer than 5 minutes under most circumstances. ARB is also evaluating additional ATCMs intended to further reduce TACs associated with commercial operations, including a similar requirement to limit idling of smaller diesel-powered commercial vehicles.

Nonetheless, given that proposed on-site commercial and industrial land uses have not yet been identified and could potentially involve substantial volumes of truck activity occurring in close proximity to nearby sensitive receptors, exposure of nearby on-site receptors to mobile-source TACs associated with commercial and industrial activities is considered a **direct** and **potentially significant** impact. **No indirect** impact would occur.

Further, as stated previously, the ARB guidance document is not regulatory, and the SMAQMD has not established any guidelines for the assessment of such impacts or any applicable thresholds for these types of emissions.

Implementation of Mitigation Measure 3A.2-4b would lessen health-related risks associated with mobile-source TACs under the Proposed Project Alternative and the other four action alternatives. Exposures of sensitive receptors located within 500 feet of a freeway to TACs would be less-than-significant; future exposures of sensitive receptors to TACs from high-traffic volume roadway is discussed in Section 4.1 "Cumulative Impacts" of the DEIR/DEIS. Exposure of receptors to mobile-source TAC emissions therefore is considered to be **less than significant**.

Finding for Other Sources

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS

The exposure of sensitive receptors (e.g., proposed residential units, schools) to TAC emissions from construction activities and from existing and stationary, area, and mobile sources under the Proposed Project Alternative is discussed separately below.

Temporary, Short-Term Emissions from Construction Equipment

Construction of the Proposed Project Alternative would result in short-term emissions of diesel exhaust from on-site heavy-duty equipment. Emissions of particulate exhaust from diesel-fueled engines (diesel PM) were identified as a TAC by ARB in 1998. Construction of the project would result in the generation of diesel PM emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities. According to ARB, the potential cancer risk from the inhalation of diesel PM, which is discussed below, outweighs the potential noncancer health impacts (ARB 2003).

The dose to which the receptors are exposed (a function of concentration and duration of the exposure period) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (Salinas, pers. comm., 2004). The use of mobilized equipment in each area of the SPA would be temporary. In addition, some new residents would occupy the site concurrently with on-site construction activities. Thus, diesel PM from construction activities could also expose on-site residents and schools to levels that exceed applicable standards as some phases of the development plan are built out while construction of other phases continues. Particularly, some residents may be exposed to diesel PM generated by construction activity in all directions (at varying times). Even with the dispersive properties of diesel PM (Zhu et al. 2002), construction activities could expose sensitive receptors to levels of health risk that exceed applicable standards. Therefore, this **direct** impact is considered **potentially significant**. **No indirect** impacts would occur.

Land Use Compatibility with Off-Site Corporation Yard

The City plans to develop a new corporation yard south of White Rock Road near the southwestern corner of the SPA. The corporation yard would be used to stage, store, and maintain equipment used by the City, including diesel-powered trucks and heavy-duty equipment (e.g., mowers). The location of on-site receptors, particularly residences within the SPA that would be zoned for multi-family medium density development near the southwestern corner of the SPA could be exposed to diesel PM emissions generated at the corporation yard. Moreover, because the predominant wind direction in the area and from the south-southwest at approximately 10 mph (ARB 1994), these receptors would be located downwind of the corporation yard. The types of equipment that would be operated at the corporation yard and the frequency and intensity of their operation have not yet been identified. Given that activities at the corporation yard could potentially generate substantial levels of diesel PM exhaust, as well as the close proximity of nearby sensitive receptors, the potential for these on-site receptors to be exposed to high concentration of diesel PM emissions from the corporation yard is a **direct and potentially significant** impact. **No indirect** impact would occur.

Implementation of Mitigation Measure 3A.2-4a would lessen health-related risks associated with the use of off-road diesel powered equipment during construction activity under all action alternatives. However, given that construction activity would occur on the SPA during the 19-year buildout of the project, exposure to construction-generated TAC emissions would not necessarily be reduced to less-than-significant levels. Therefore, the potential exposure of receptors to construction-generated TAC emissions is considered to be **significant and unavoidable**.

Implementation of Mitigation Measure 3A.2-1a, 3A.2-1b, and 3A.2-1f would lessen health-related risks associated with the use of off-road diesel powered equipment during construction activity in El Dorado County. However, given that construction activity would occur on the SPA during the 19-year buildout of the project, exposure to construction-generated TAC emissions would not necessarily be reduced to less-than-significant levels. Therefore, the potential exposure of receptors to construction-generated TAC emissions is considered to be **significant and unavoidable**.

Similarly, increasing the set back distance between on-site residents and the off-site, future planned corporation yard would not necessarily reduce the levels of TAC exposure at these residents to a less-than-significant level. Therefore, the potential exposure of on-site residents to TAC emissions from the corporation yard would be considered **significant and unavoidable**.

Additionally, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties and/or Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Therefore, the impacts related to those off-site facilities are considered potentially significant and unavoidable.

These conclusions have been reached due to the uncertainty about the potential TAC emissions sources associated with on-site commercial and industrial land use activities and the proximity of sensitive receptors to such uses. In addition, there is also uncertainty about the feasibility and effectiveness of extending the setback distances between roadways and receptors and the effectiveness and feasibility of tiered planting of fine-needle tree species. Therefore, this conclusion may change as more detailed information regarding proposed on-site commercial uses becomes available and analyses of individual phases are performed at the project level as part of future CEQA documents prior to approval of subdivision maps or improvement plans.

No other feasible mitigation measures are available to reduce impacts associated with the short-term and long-term exposure of sensitive receptors to TACs from project development to a less-than-significant level because it is technically infeasible to allow new development without generating TACs. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without short-term and long-term exposure of sensitive receptors to TACs, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to short-term and long-term exposure of sensitive receptors to TACs.

IMPACT 3A.2-5 Exposure of Sensitive Receptors to Construction-Generated Emissions of Naturally Occurring Asbestos. Asbestos is a toxic air contaminant. Residents and other receptors located close to construction activity could be exposed to dust from asbestos rock and soils during earth disturbance activities.

Mitigation

Mitigation Measure 3A.2-5: Implement a Site Investigation to Determine the Presence of NOA and, if necessary, Prepare and Implement an Asbestos Dust Control Plan.

A site investigation shall be performed to determine whether and where NOA is present in the soil and rock on the SPA. The site investigation shall include the collection of soil and rock samples by a qualified geologist. If the site investigation determines that NOA is present on the SPA then the project applicant shall prepare an Asbestos Dust Control Plan for approval by SMAQMD as required in Title 17, Section 93105 of the California Code of Regulations, "Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations." The Asbestos Dust Control Plan shall specify measures, such as periodic watering to reduce airborne dust and ceasing construction during high winds. Measures in the Asbestos Dust Control Plan may include but shall not be limited to dust control measures required by Mitigation Measure 3A.2-1a. The project applicant shall submit the plan to the Folsom Community Development Department for review and SMAQMD for review and approval before construction of the first project phase. SMAQMD approval of the plan must be received before any asbestos-containing rock (serpentine) can be disturbed. Upon approval of the Asbestos Dust Control

Plan by SMAQMD, the applicant shall ensure that construction contractors implement the terms of the plan throughout the construction period.

Implementation: The project applicant(s) of all project phases.

Timing: Before the approval of all grading plans by the City and throughout project construction, where applicable, for all project phases.

Enforcement: City of Folsom Community Development Department.

Finding for Elements within the City of Folsom’s Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Grading, blasting, and other forms of ground disturbance during construction would result in fugitive PM₁₀ dust emissions. Some areas of the SPA may contain serpentine or ultramafic rock that is common to the Sierra Nevada foothills. These types of rock contain thin veins of asbestos that can become airborne when disturbed by grading or blasting. According to a report prepared by the California Geological Survey, more than half of the SPA is located in “areas moderately likely to contain NOA” (Higgins and Clinkenbeard 2006). Although geologic conditions are more likely for asbestos formation in particular areas identified by the map, the presence thereof is not certain.

Detailed construction plans for the project have not been developed. During site grading and rock blasting activities, the serpentine soils may be disturbed, potentially exposing residents of the nearby residential neighborhoods in El Dorado County to asbestos during project construction. Also, the site would be developed in phases, so construction activity would be spread out over many years. Construction activities for later phases could adversely affect residential land uses and other receptors that have already been developed in earlier phases of development. Without appropriate controls, sensitive receptors near construction sites could be exposed to localized high levels of re-entrained fugitive PM₁₀ dust, potentially including NOA. As a result, this **direct** impact would be considered **potentially significant**. **No indirect** impacts would occur.

Construction of some of the off-site elements would occur in “areas moderately likely to contain NOA” according to a report prepared by the California Geological Survey about NOA areas in eastern Sacramento County (Higgins and Clinkenbeard 2006), including the Oak Avenue interchange and the Rowberry Drive Overcrossing. The Prairie City road interchange, sewer force main, and off-site detention basin would not be located in “areas moderately likely to contain NOA.”

As with construction of the on-site elements, sensitive receptors near construction sites in “areas moderately likely to contain NOA” could be exposed to localized high levels of re-entrained fugitive PM₁₀ dust, potentially including NOA, without appropriate controls. As a result, this **direct** impact would be considered **potentially significant**. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.2-5 would reduce impacts associated with generation of fugitive dust that potentially contains NOA. If the site investigation determines that NOA is present on the SPA, then implementation of a dust control plan that is approved by the applicable air district (i.e., SMAQMD or EDCAQMD) would reduce impacts related to construction in serpentinite soils. Implementation of these measures would reduce the potentially significant impact associated with exposure to NOA during construction to a **less-than-significant** level.

Finding for Elements Outside the City of Folsom’s Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements (two roadway connections in El Dorado County and detention basin in Sacramento County) fall under the jurisdiction of El Dorado and Sacramento Counties; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.2-5. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.2-5, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.2-6 **Possible Exposure of Sensitive Receptors to Odorous Emissions.** *Temporary, short-term construction and long-term operation of the project could result in the frequent exposure of sensitive receptors to substantial objectionable odor emissions.*

Mitigation

Implement Mitigation Measure 3A.2-1a and Mitigation Measure 3A.2-1f to Control Exposure of Sensitive Receptors to Construction-Related Odorous Emissions.

Mitigation Measure 3A.2-6: Implement Measures to Control Exposure of Sensitive Receptors to Operational Odorous Emissions.

The project applicant(s) for any particular discretionary development application shall implement the following measures:

- ▶ The odor-producing potential of land uses shall be considered when the exact type of facility that would occupy areas zoned for commercial, industrial, or mixed-use land uses is determined. Facilities that have the potential to emit objectionable odors shall be located as far away as feasible from existing and proposed sensitive receptors.
- ▶ The multi-family residences planned across from the off-site corporation yard near the southwest corner of the SPA shall be set back as far as possible from the boundary of the corporation yard and/or relocated to another area. (This measure is also required by Mitigation Measure 3A.2-4b to limit exposure to TAC emissions.)
- ▶ Before the approval of building permits, odor control devices shall be identified to mitigate the exposure of receptors to objectionable odors if a potential odor-producing source is to occupy an area zoned for commercial, industrial, or mixed-use land uses. The identified odor control devices shall be installed before the issuance of certificates of occupancy for the potentially odor-producing use. The odor-producing potential of a source and control devices shall be determined in coordination with SMAQMD and based on the number of complaints associated with existing sources of the same nature.
- ▶ The deeds to all properties located within the SPA that are within one mile of an on- or off-site area zoned or used for agricultural use (including livestock grazing) shall be accompanied by a written disclosure from the transferor, in a form approved by the City of Folsom, advising any transferee of

the potential adverse odor impacts from surrounding agricultural operations, which disclosure shall direct the transferee to contact the County of Sacramento concerning any such property within the County zoned for agricultural uses within one mile of the subject property being transferred.

- ▶ Truck loading docks and delivery areas shall be located as far away as feasible from existing and proposed sensitive receptors.
- ▶ Signs shall be posted at all loading docks and truck loading areas which indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises in order to reduce idling emissions. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by California's Office of Administrative Law in January 2005. (This measure is also required by Mitigation Measure 3A.2-4b to limit TAC emissions.)
- ▶ Proposed commercial and industrial land uses that have the potential to host diesel trucks shall incorporate idle reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as, IdleAire, electrification of truck parking, and alternative energy sources for TRUs, to allow diesel engines to be completely turned off. (This measure is also required by Mitigation Measure 3A.2-4b to limit TAC emissions.)

Implementation: The project applicant(s) of all project phases.

Timing: Before the approval of building permits by the City and throughout project construction, where applicable, for all project phases.

Enforcement: City of Folsom Community Development Department.

Finding for Long-Term Operation of On-Site Land Uses

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

No common sources of nuisance odors, such as wastewater treatment facilities, waste-disposal facilities, or agricultural operations, are proposed as part of the project. While there would be approximately 3–4 wastewater pumping stations located on the SPA, these facilities would have controls that would prevent the release of objectionable odors. In addition, the detention basins that would be located throughout the site would not typically hold storm water long enough for odor-generating anaerobic activity to occur. With regular maintenance and proper design, residential land uses are typically not considered a major source of odors. However, truck deliveries to commercial uses and sewer lift stations could intermittently and temporarily emit diesel odors. Additionally, commercial uses could provide development of convenience uses that may include sources of odorous emissions (e.g., fast-food restaurants) that would be perceived as offensive to some individuals. The operation of such sources could expose a substantial number of proposed on-site receptors to objectionable odorous emissions. As a result, this **direct** impact would be considered **potentially significant**. **No indirect** impacts would occur.

By requiring odor control devices on potential odor-producing sources and by requiring consideration of the odor-producing potential of on-site land uses and their proximity to receptors, implementation of Mitigation Measure 3A.2-6 would reduce the possible exposure of sensitive receptors to odorous emissions associated with operation of on-site land uses to a **less-than-significant** level.

Finding for Short-Term Use of Construction Equipment for On-Site and Off-Site Elements, Land Use Compatibility with Off-Site Corporation Yard, and Land Use Compatibility with Off-Site Agricultural Land Uses

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS

The exposure of sensitive receptors (e.g., existing and proposed residential units, schools, and parks) to odorous emissions from construction and operation of the project is discussed under separate headings below.

Project construction activities associated with the development of on-site land uses could result in odorous emissions from diesel exhaust generated by construction equipment. During some periods of the 19-year buildout of the project intense levels of construction activity could potentially occur in close proximity to existing or future-planned sensitive receptors or construction activity could potentially occur near sensitive receptors for an extended period of time. In particular, a substantial number of people in the existing residential neighborhood that located just east of the SPA in El Dorado Hills could be exposed to odorous diesel exhaust emissions generated by on-site construction activity. The potential for this to occur would be particularly high under the No USACE Permit, Proposed Project Alternative, Resource Impact Minimization Alternative, Centralized Development, and Reduced Hillside Development Alternative because the level of grading in the hilly, eastern end of the SPA would involve a substantial number of construction equipment operating at heavy loads. Because this activity could result in objectionable odors that affect a substantial number of people, this would be considered a **direct, significant** impact.

The City plans to develop a corporation yard south of White Rock Road near the southwestern corner of the SPA. The corporation yard would be used to stage, store, and maintain equipment used by the City, including diesel-powered trucks and heavy-duty equipment (e.g., mowers). The location of on-site receptors, in particular residences within the SPA that would be zoned for multi-family medium density development near the southwestern corner of the SPA could be exposed to odorous exhaust emissions generated by equipment at the corporation yard. Moreover, because the predominant wind direction in the area and from the south-southwest at approximately 10 mph (ARB 1994), these receptors would be located downwind of the corporation yard. The types of equipment that would be operated at the corporation yard and the frequency and intensity of their operation have not yet been identified. Given that equipment at the corporation yard could potentially generate substantial levels of diesel exhaust, as well as the close proximity of nearby sensitive receptors, the potential for these on-site receptors to be frequently exposed to high levels of odorous exhaust emissions from the corporation yard is a **direct and potentially significant** impact. **No indirect** impact would occur.

Land uses developed on the southern side of the SPA could be exposed to odors generated by neighboring agricultural land uses, which are used for livestock grazing. This could occur when some portions of the site are developed and occupied while other portions continue to be used for livestock grazing. Also, receptors developed along the southern portion of the SPA could be exposed to odors generated by agricultural activities that take place just south of White Rock Road. SMAQMD does not have a recommended screening distance for livestock grazing. SMAQMD recommends a screening distance of 1 mile for most odor-generating land uses, including feed lots and dairies (SMAQMD 2009a). Because the project could result in the development of receptors located in close proximity to land in the immediate vicinity that support livestock grazing, this would be a **direct and potentially significant** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.2-1a and Mitigation Measure 3A.2-1f would reduce the mass levels of odorous diesel exhaust during construction of the on-site elements. However, given that construction activity would occur on the SPA during the 19-year buildout of the project, generation of construction-generated diesel exhaust, particularly during periods of intense grading on the eastern, hilly side of the SPA, could expose a substantial number of people to odorous emissions and, therefore, this impact would not be reduced to a less-than-

significant level. Therefore, the potential exposure of a substantial number of people to these objectionable odors is considered to be **significant and unavoidable**.

Increasing the set back distance between on-site residents and the off-site, future planned corporation yard would not necessarily reduce the intensity or frequency of these residents' exposure to odorous exhaust emissions generated at the corporation yard to a less-than-significant level. Therefore, the potential exposure of on-site residents to odorous exhaust emissions from the corporation yard would be considered **significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with odor emissions from construction activities, the off-site corporation yard, and off-site agricultural uses to a less-than-significant level because it is technically infeasible to allow new development without possible impacts related to nearby odorous emissions. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to engage in construction or agricultural activities without potential odor emissions, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is **significant and unavoidable**. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to odorous emissions.

AIR QUALITY – WATER

IMPACT 3B.2-1 **Generation of Construction Emissions of NO_x and PM₁₀.** *Construction of the Off-site Water Facility Alternatives would produce construction-generated emissions of NO_x, an ozone precursor, and fugitive PM₁₀ dust would exceed SMAQMD-recommended thresholds and would substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS. Thus, project-generated, construction-related emissions of criteria air pollutants and precursors could violate or contribute substantially to an existing or projected air quality violation and/or expose sensitive receptors to substantial pollutant concentrations.*

Mitigation

Mitigation Measure 3B.2-1a: Develop and Implement a Construction NO_x Reduction Plan.

Consistent with SMAQMD requirements, the City of Folsom shall provide a plan for demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20% NO_x reduction. Prior to construction, the City's contractor shall submit to the SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction of the Off-site Water Facilities. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted quarterly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the Off-site Water Facilities representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

Implementation: City of Folsom Utilities Department.

- Timing:** Prior to construction of the Off-site Water Facilities.
- Enforcement:**
1. For improvements that would be located within the City of Folsom: City of Folsom Community Development Department and SMAQMD.
 2. For improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department and SMAQMD.
 3. For improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department and SMAQMD.

Mitigation Measure 3B.2-1b: Conduct Visible Emissions Testing and if Non-Compliance, Repair Equipment Immediately.

Controlling visible emissions from off-road diesel powered equipment. The City shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40% opacity (or Ringelmann 2.0) shall be repaired immediately, and the City and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least monthly, and a quarterly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

- Implementation:** City of Folsom Utilities Department.
- Timing:** During construction of all Off-site Water Facilities.
- Enforcement:**
1. For improvements that would be located within the City of Folsom: City of Folsom Community Development Department and SMAQMD.
 2. For improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department and SMAQMD.
 3. For improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department and SMAQMD.

Mitigation Measure 3B.2-1c: Implement Fugitive Dust Control Measures and a Particulate Matter Monitoring Program during Construction.

The City shall implement fugitive dust control measures and a particulate matter monitoring program during construction. The City shall ensure implementation of dust control measures and a particulate matter monitoring program during each phase of construction. Dust control measures may include, but are not limited to, the following:

- ▶ minimize on-site construction vehicle speeds on unpaved surfaces;
- ▶ post speed limits;

- ▶ suspend grading operations when wind is sufficient to generate visible dust clouds;
- ▶ pave, water, use gravel, cover, or spray a dust-control agent on all haul roads;
- ▶ Prohibit no open burning of vegetation during project construction;
- ▶ Chip or deliver vegetative material to waste-to-energy facilities;
- ▶ reestablish vegetation as soon as possible after construction and maintain vegetation consistent with the parameters established in Mitigation Measure 3B.2.1a;
- ▶ clean earthmoving construction equipment with water once daily and clean all haul trucks leaving the site; and
- ▶ water and keep moist exposed earth surfaces, graded areas, storage piles, and haul roads as needed to prevent fugitive dust.

Implementation: City of Folsom Utilities Department.

Timing: During construction of all Off-site Water Facilities.

- Enforcement:**
1. For improvements that would be located within the City of Folsom: City of Folsom Community Development Department and SMAQMD.
 2. For improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department and SMAQMD.
 3. For improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department and SMAQMD.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS

Construction activities associated with the Off-site Water Facilities would occur in two distinct phases: Phase I involves site preparation and earthmoving activities, while Phase II involves installing equipment, concrete, and structural improvements. Site preparation includes activities such as general land clearing and vegetation removal. Earthmoving activities include cut and fill operations, trenching, soil compaction, and grading. General construction includes adding improvements such as roadway surfaces, well and pump structures, and storage and treatment facilities. The emissions generated from these common construction activities include:

- ▶ dust (including PM₁₀ and PM_{2.5}) primarily from fugitive sources such as soil disturbance and vehicle travel over unpaved surfaces;
- ▶ combustion emissions of criteria air pollutants (including ROG, NO_x, PM₁₀) primarily from operation of heavy equipment construction machinery (primarily diesel operated), portable auxiliary equipment and construction worker automobile trips (primarily gasoline operated); and,
- ▶ evaporative emissions (ROG) from asphalt paving and architectural coating applications.

Construction-related fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. In the absence of mitigation, construction activities may result in generating significant quantities of dust, and as a result, local visibility and PM₁₀ concentrations may be adversely affected. In addition, the fugitive dust generated by construction would include not only PM₁₀, but also larger particles, which would fall out of the atmosphere within several hundred feet of the construction area and could result in nuisance-type impacts.

Construction activities would also result in the emission of pollutants of concern (ROG, NO_x, and PM₁₀ and PM_{2.5}) from construction equipment exhaust and construction worker automobile trips. Emission levels for construction activities would vary depending on the number and type of equipment, duration of use, operating schedules, and the number of construction workers. Criteria pollutant emissions of ROG and NO_x from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors during project construction.

For the worst-case day construction scenario, it was assumed that construction of multiple components of the Off-site Water Facilities (e.g., conveyance improvements) could occur simultaneously. The emission estimates for each of the above alternatives is primarily differentiated based on the length of conveyance pipeline construction with all other factors being equal (i.e., worst-case day site preparation for Off-site Water Facility Alternative 1 would be equivalent to the worst-case day site preparation for Off-site Water Facility Alternative 4). Estimated construction-related fugitive dust emissions, as well as exhaust emissions from construction equipment and worker trips are shown in Table 3-13 below (Table 3B.2-1 on page 3B.2-8 of the DEIR/DEIS). As shown in Table 3-13 (Table 3B.2-1 on page 3B.2-8 of the DEIR/DEIS), unmitigated emissions of NO_x would exceed the 85 pounds per day significance threshold specified by the SMAQMD in 2011 or 2012 and, therefore, the associated **direct** impact would be **potentially significant**. **No indirect** impact would result.

Following the application of the prescribed mitigation measures, the City would still be unable to achieve a 20% reduction in NO_x in 2011 or 2012 for the Proposed Off-site Water Facility Alternative. For this reason, temporary and short-term construction-related impacts to local and regional ozone concentrations would remain **significant and unavoidable** under the Proposed Off-site Water Facility Alternative because no feasible mitigation is available to fully reduce the impacts to a less-than-significant level.

No other feasible mitigation measures are available to reduce impacts associated with NO_x and PM₁₀ from project construction to a less-than-significant level because it is technically infeasible to allow construction activities without some NO_x and PM₁₀ emissions. The objectives of the “Water” elements of the project include construction of necessary infrastructure and sufficient water supply for the planned SPA. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow construction without emissions of NO_x and PM₁₀, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to construction emissions of NO_x and PM₁₀.

IMPACT 3B.2-3 **Exposure of Sensitive Receptors to Short- and Long-Term Emissions of Toxic Air Contaminants.**
Implementation of the Off-site Water Facility Alternatives could expose sensitive receptors to short- and long-term emissions of TACs from on-site stationary sources.

Mitigation

Mitigation Measure 3B.2-3a: Cite Pump Siting Buffers Away from Sensitive Receptors.

New pumping stations including back-up diesel generators shall be located more than 200 feet away from sensitive receptors. Electrically-powered pumps shall be used to power new pumps, to the extent practicable.

Implementation: City of Folsom Utilities Department.

Timing: Prior to the approval of grading plans and building permits for all off-site water pumping facilities.

Enforcement:

1. For improvements that would be located within the City of Folsom: City of Folsom Community Development Department and SMAQMD.
2. For improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department and SMAQMD.

Table 3-13 Off-site Water Facilities Construction and Operational Emissions				
Off-site Water Facility Alternative	ROG (lb/day)	NO _x (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Off-site Water Facilities Construction				
No USACE Permit and Proposed Off-site Water Facility Alternative – 2011	25.06	107.18	77.38	21.32
No USACE Permit and Proposed Off-site Water Facility Alternative – 2012	234.3	110.81	27.55	11.29
Significant Emissions	No	Yes	No	No
Off-site Water Facility Alternative 1 – 2011	23.46	103.38	76.98	21.02
Off-site Water Facility Alternative 1 – 2012	232.73	107.01	27.55	10.99
Significant Emissions	No	Yes	No	No
Off-site Water Facility Alternative 1A – 2011	23.26	102.88	76.98	21.02
Off-site Water Facility Alternative 1A – 2012	232.53	106.51	27.55	10.99
Significant Emissions	No	Yes	No	No
Off-site Water Facility Alternative 2 – 2011	14.4	64.6	24.3	8.1
Off-site Water Facility Alternative 2 – 2012	14.4	64.6	24.3	8.1
Significant Emissions	No	No	No	No
Off-site Water Facility Alternative 2A – 2011	20.3	79	25.7	9.4
Off-site Water Facility Alternative 2A – 2012	20.3	79	25.7	9.4
Significant Emissions	No	No	No	No
Off-site Water Facility Alternative 2B – 2011	11	56.1	23.5	7.3

Table 3-13 Off-site Water Facilities Construction and Operational Emissions				
Off-site Water Facility Alternative	ROG (lb/day)	NO_x (lb/day)	PM₁₀ (lb/day)	PM_{2.5} (lb/day)
Off-site Water Facility Alternative 2B– 2012	11	56.1	23.5	7.3
Significant Emissions	No	No	No	No
Off-site Water Facility Alternative 3 – 2011	25.86	109.28	77.58	21.52
Off-site Water Facility Alternative 3 – 2012	235.13	112.91	28.15	11.49
Significant Emissions	No	Yes	No	No
Off-site Water Facility Alternative 3A – 2011	24.36	105.68	77.18	21.22
Off-site Water Facility Alternative 3A – 2012	233.63	109.31	27.75	11.19
Significant Emissions	No	Yes	No	No
Off-site Water Facility Alternative 4 – 2011	26.16	109.98	77.68	21.62
Off-site Water Facility Alternative 4 – 2012	235.43	113.61	25.05	11.59
Significant Emissions	No	Yes	No	No
Off-site Water Facility Alternative 4A – 2011	25.56	108.38	77.48	21.52
Off-site Water Facility Alternative 4A – 2012	234.83	112.01	28.05	11.49
Significant Emissions	No	Yes	No	No
Thresholds for Construction Emission	<i>None</i>	<i>85(1)</i>	<i>150(2)</i>	<i>None</i>
Note: Calculations were completed using URBEMIS 2007 and SMAQMD, 2007 and are included in Appendix M-VI. The emissions listed above are for a worse-case day, where it was assumed that construction of the conveyance components of the Off-site Water Facilities would overlap with construction of the WTP.				

- For improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department and SMAQMD.

Mitigation Measure 3B.2-3b: Conduct Project-Level DPM Screening and Implement Measures to Reduce Annual DPM to Acceptable Concentrations.

Screening-level DPM assessments shall be conducted for diesel-powered pump operations proposed within 200 feet of residences or other sensitive receptors. These analyses should include exact distances between the receptors and operations, and include the actual DPM emissions for the engines proposed. If the analysis shows an annual average DPM concentration from project operations at residences within 200 feet of the DPM source to be greater than 0.024 $\mu\text{g}/\text{m}^3$, the engine location shall be moved to a location where the annual average DPM concentration from project emissions at the residences is less than 0.024 $\mu\text{g}/\text{m}^3$. The acceptable concentration of 0.024 $\mu\text{g}/\text{m}^3$ was determined using the current OEHHA cancer potency factor and methodology for diesel exhaust (OEHHA 2003). If diesel exhaust concentrations at the affected receptor would be below 0.024 $\mu\text{g}/\text{m}^3$, then the cancer health risk would be less than 9.9 cancers in a million population.

Implementation: City of Folsom Utilities Department.

Timing: Prior to the approval of grading plans and building permits for all off-site water pumping facilities.

- Enforcement:**
1. For improvements that would be located within the City of Folsom: City of Folsom Community Development Department and SMAQMD.
 2. For improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department and SMAQMD.
 3. For improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department and SMAQMD.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Construction of the Off-site Water Facility Alternatives would not emit any hazardous air pollutants (HAPs) in any significant quantity other than from large, heavy-duty, diesel-powered equipment exhaust. The OEHHA currently describes the health risk from diesel exhaust entirely in terms of the amount of particulate, or PM₁₀, that is emitted. Currently, the health risk associated with diesel exhaust PM₁₀ or diesel particular matter (DPM) only has a carcinogenic and chronic effect; no short-term acute effect is recognized. Off-site Water Facilities construction would be limited in duration, lasting less than three years total, and therefore, no long term, chronic impact would be expected. Further, over the 3-year construction schedule, constructed-generated diesel PM would not be emitted at any single location along the selected pipeline route for an extended period of time. In recognition of these circumstances combined with dust control mitigation prescribed in Mitigation Measure 3B.4-1c, construction of the Off-site Water Facilities would not expose sensitive receptors to substantial pollutant concentration and the **direct** and **indirect** impact is considered **less than significant**.

Over the longer term, operational emissions associated with the proposed booster pump station(s) would be generated from the use of pumps and emergency generators. This equipment would operated via electricity under normal operating conditions year around and, under certain situations, under diesel power during emergencies. The operation of diesel engines to pump raw/treated water supplies would contribute to increased air emissions in the areas where these facilities are proposed. As indicated in Section 3B.10, "Land Use and Agricultural Resources – Water," residential uses are planned in areas in close proximity to the White Rock WTP and the Folsom Boulevard WTPs. Similarly, based on the ultimate connection point to the Freeport Project, the booster pump under any of the Off-site Water Facility alternatives could be located in close proximity to existing agricultural residences.

The typical significance threshold for health risk exposure to TACs, including diesel emissions, is 10 cases of cancer per 1,000,000 population over a 70-year exposure period. The diesel PM cancer risk is the probability of an individual developing cancer as a result of exposure to diesel PM. The new booster pump and WTP would be developed and operated in areas within the Central Valley where residential uses are planned or rural residences currently exist. The precise locations of these facilities has not yet been determined, but the anticipated general locations are shown in Exhibits 2-25, 2-26, 2-28, 2-29, 2-30, and 2-31 of the DEIR/DEIS.

The Off-site Water Facilities are expected to cause minimal diesel emissions with fewer than 5 diesel truck trips per day and testing of the emergency generator limited to one-hour intervals on a weekly basis. For these reasons, the WTP and pumping facilities are not expected to substantially increase toxic risks to adjacent receptors. Further, a recently completed health risk assessment of comparable sources, but at a higher rated treated/pumping capacity, assessed the potential impact of diesel sources operating within 200 feet of nearby residences on a year-round basis (Environmental Science Associates 2007). The study concluded that the impact of the diesel PM emissions would be less than significant because they resulted in a cancer risk of less than 10 cases in a million population. This finding is largely attributed to the highly dispersive nature of diesel PM once emitted. However,

without a precise facility location for the booster pump and WTP, the City is unable to confirm that these facilities would be located outside a 200-foot-wide buffer and whether DPM emissions would pose conditions that exceed the previously studied impacts. For this reason, the implementation of Mitigation Measures 3B.2-2a and 2b would be required to reduce the **direct** and **indirect** impacts to a **less-than-significant** level.

With implementation of Mitigation Measures 3B.2-3a and 3B.2-3b, air quality impacts to sensitive receptors would be reduced to a **less-than-significant** level because diesel powered pumps and back-up generators would be placed a sufficient distance from sensitive receptors.

BIOLOGICAL RESOURCES – LAND

IMPACT 3A.3-1 **Loss and Degradation of Waters of the U.S., including Wetlands, and Waters of the State.** *Project implementation would result in the placement of fill material into jurisdictional waters of the U.S., including wetlands subject to USACE jurisdiction under the Federal CWA. Wetlands and other waters of the U.S. that would be affected by project implementation include seeps, vernal pools, seasonal wetlands and seasonal wetland swales, drainage channels, ditches, and ponds. Waters of the state would also be filled with project implementation.*

Mitigation

Mitigation Measure 3A.3-1a: Design Stormwater Drainage Plans and Erosion and Sediment Control Plans to Avoid and Minimize Erosion and Runoff to All Wetlands and Other Waters That Are to Remain in the SPA and Use Low Impact Development Features.

To minimize indirect effects on water quality and wetland hydrology, the project applicant(s) for any particular discretionary development application shall include stormwater drainage plans and erosion and sediment control plans in their improvement plans and shall submit these plans to the City Public Works Department for review and approval. For off-site elements within Sacramento County or El Dorado County jurisdiction (e.g., off-site detention basin and off-site roadway connections to El Dorado Hills), plans shall be submitted to the appropriate county planning department. Before approval of these improvement plans, the project applicant(s) for any particular discretionary development application shall obtain a NPDES MS4 Municipal Stormwater Permit and Grading Permit, comply with the City's Grading Ordinance and County drainage and stormwater quality standards, and commit to implementing all measures in their drainage plans and erosion and sediment control plans to avoid and minimize erosion and runoff into Alder Creek and all wetlands and other waters that would remain on-site. Detailed information about stormwater runoff standards and relevant City and County regulation is provided in Chapter 3A.9, "Hydrology and Water Quality," of the DEIR/DEIS.

The project applicant(s) for any particular discretionary development entitlement shall implement stormwater quality treatment controls consistent with the Stormwater Quality Design Manual for Sacramento and South Placer Regions in effect at the time the application is submitted. Appropriate runoff controls such as berms, storm gates, off-stream detention basins, overflow collection areas, filtration systems, and sediment traps shall be implemented to control siltation and the potential discharge of pollutants. Development plans shall incorporate Low Impact Development (LID) features, such as pervious strips, permeable pavements, bioretention ponds, vegetated swales, disconnected rain gutter downspouts, and rain gardens, where appropriate. Use of LID features is recommended by the EPA to minimize impacts on water quality, hydrology, and stream geomorphology and is specified as a method for protecting water quality in the proposed specific plan. In addition, free spanning bridge systems shall be used for all roadway crossings over wetlands and other waters that are retained in the on-site open space. These bridge systems would maintain the natural and restored channels of creeks, including the associated wetlands, and would be designed with sufficient span width and depth to provide for wildlife movement along the creek corridors even during high-flow or flood events, as specified in the 404 permit.

In addition to compliance with City ordinances, the project applicant(s) for any particular discretionary development application shall prepare a Stormwater Pollution Prevention Plan (SWPPP), and implement Best Management Practices (BMPs) that comply with the General Construction Stormwater Permit from the Central Valley RWQCB, to reduce water quality effects during construction. Detailed information about the SWPPP and BMPs are provided in Chapter 3A.9, “Hydrology and Water Quality,” of the DEIR/DEIS.

Each project development shall result in no net change to peak flows into Alder Creek and associated tributaries, or to Buffalo Creek, Carson Creek, and Coyote Creek. The project applicant(s) shall establish a baseline of conditions for drainage on-site. The baseline-flow conditions shall be established for 2-, 5-, and 100-year storm events. These baseline conditions shall be used to develop monitoring standards for the stormwater system on the SPA. The baseline conditions, monitoring standards, and a monitoring program shall be submitted to USACE and the City for their approval. Water quality and detention basins shall be designed and constructed to ensure that the performance standards, which are described in Chapter 3A.9, “Hydrology and Water Quality,” are met and shall be designed as off-stream detention basins. Discharge sites into Alder Creek and associated tributaries, as well as tributaries to Carson Creek, Coyote Creek, and Buffalo Creek, shall be monitored to ensure that preproject conditions are being met. Corrective measures shall be implemented as necessary. The mitigation measures will be satisfied when the monitoring standards are met for 5 consecutive years without undertaking corrective measures to meet the performance standard.

See FEIR/FEIS Appendix S showing that the detention basin in the northeast corner of the SPA has been moved off stream.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase in consultation with the affected oversight agency(ies) (i.e., El Dorado County for the roadway connections, Sacramento County for the detention basin west of Prairie City Road, and Caltrans for the U.S. 50 interchange improvements) such that the performance standards described in Chapter 3A.9, “Hydrology and Water Quality,” are met.

Implementation: Project applicant(s) of all project phases and on-site and off-site elements.

Timing: Before approval of improvement and drainage plans, and on an ongoing basis throughout and after project construction, as required for all project phases.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Public Works Department.
2. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
3. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
4. For the U.S. 50 interchange improvements: Caltrans.
5. U.S. Army Corps of Engineers, Sacramento District.
6. Central Valley Regional Water Quality Control Board.

Mitigation Measure 3A.3-1b: Secure Clean Water Act Section 404 Permit and Implement All Permit Conditions; Ensure No Net Loss of Functions of Wetlands, Other Waters of the U.S., and Waters of the State.

Before the approval of grading and improvement plans and before any groundbreaking activity associated with each distinct discretionary development entitlement, the project applicant(s) for any particular discretionary development application requiring fill of wetlands or other waters of the U.S. or waters of the state shall obtain all necessary permits under Sections 401 and 404 of the CWA or the state's Porter-Cologne Act for the respective phase. For each respective discretionary development entitlement, all permits, regulatory approvals, and permit conditions for effects on wetland habitats shall be secured before implementation of any grading activities within 250 feet of waters of the U.S. or wetland habitats or lesser distance deemed sufficiently protective by a qualified biologist with approval from USFWS, including waters of the state, that potentially support Federally listed species. The project applicant(s) shall commit to replace, restore, or enhance on a "no net loss" basis (in accordance with USACE and the Central Valley RWQCB) the acreage of all wetlands and other waters of the U.S. that would be removed, lost, and/or degraded with implementation of project plans for that development increment. Wetland habitat shall be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE, the Central Valley RWQCB, and the City, as appropriate, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes.

As part of the Section 404 permitting process, a draft wetland mitigation and monitoring plan (MMP) shall be developed for the project on behalf of the project applicant(s). Before any ground-disturbing activities in an area that would adversely affect wetlands and before engaging in mitigation activities associated with each discretionary development entitlement, the project applicant(s) shall submit the draft wetland MMP to USACE, the Central Valley RWQCB, Sacramento County, El Dorado County, and the City for review and approval of those portions of the plan over which they have jurisdiction. The MMP would have to be finalized prior to impacting any wetlands. Once the final MMP is approved and implemented, mitigation monitoring shall continue for a minimum of 5 years from completion of mitigation, or human intervention (including recontouring and grading), or until the performance standards identified in the approved MMP have been met, whichever is longer.

As part of the MMP, the project applicant(s) shall prepare and submit plans for the creation of aquatic habitat in order to adequately offset and replace the aquatic functions and services that would be lost at the SPA, account for the temporal loss of habitat, and contain an adequate margin of safety to reflect anticipated success. Restoration of previously altered and degraded wetlands shall be a priority of the MMP for offsetting losses of aquatic functions on the SPA because it is typically easier to achieve functional success in restored wetlands than in those created from uplands. The MMP must demonstrate how the aquatic functions and values that would be lost through project implementation will be replaced.

The habitat MMP for jurisdictional wetland features shall be consistent with USACE's and EPA's April 10, 2008 Final Rule for Compensatory Mitigation for Losses of Aquatic Resources (33 CFR Parts 325 and 332 and 40 CFR Part 230) and USACE's October 26, 2010 *Memorandum Re: Minimum Level of Documentation Required for Permit Decisions*. According to the Final Rule, mitigation banks should be given preference over other types of mitigation because a lot of the risk and uncertainty regarding mitigation success is alleviated by the fact that mitigation bank wetlands must be established and demonstrating functionality before credits can be sold. The use of mitigation credits also alleviates temporal losses of wetland function while compensatory wetlands are being established. Mitigation banks also tend to be on larger, more ecologically valuable parcels and are subjected to more rigorous scientific study and planning and implementation procedures than typical permittee-responsible mitigation sites (USACE and EPA, 2008). Permittee-responsible on-site mitigation areas can be exposed to long-term negative effects of surrounding development since they tend to be smaller and less buffered than mitigation banks. The Final Rule also establishes a preference for a "watershed approach" in selecting locations for compensatory mitigation project locations, that mitigation selection must be "appropriate

and practicable” and that mitigation banks must address watershed needs based on criteria set forth in the Final Rule. The watershed approach accomplishes this objective by expanding the informational and analytic basis of mitigation project site selection decisions and ensuring that both authorized impacts and mitigation are considered on a watershed scale rather than only project by project. This requires a degree of flexibility so that district engineers can authorize mitigation projects that most effectively address the case-specific circumstances and needs of the watershed, while remaining practicable for the permittee. The SPA includes portions of the Alder Creek, Buffalo Creek, Coyote Creek, and Carson Creek Watersheds. The majority of the SPA is within the Alder Creek Watershed. Alder Creek and Buffalo Creek are part of the Lower American River Watershed. Carson Creek and Coyote Creek are part of the Cosumnes River Watershed. Mitigation credits may be available within the Cosumnes Watershed, but not within the American River Watershed and not within the sub-watersheds of the SPA. Therefore aquatic habitats may need to be restored or created on the SPA and adjacent off-site lands, preferably within the affected watersheds, in order to successfully replace lost functions at the appropriate watershed scale where loss of function would occur. It is not likely feasible to provide compensatory mitigation for all aquatic resource impacts on site. Therefore, a combination of on-site and off-site permittee-responsible mitigation and mitigation banking would likely be necessary to achieve the no-net-loss standard.

The SPA is located within the service areas of several approved mitigation banks (e.g., Bryte Ranch, Clay Station, Fitzgerald Ranch, and Twin City Mitigation Bank). The majority of compensatory mitigation for wetland impacts is proposed to be accomplished at an agency-approved mitigation bank or banks authorized to sell credits to offset impacts in the SPA. The applicants’ biological consultant, ECORP, has identified availability of approximately 31 vernal pool credits and 228 seasonal wetland credits at mitigation banks whose service area includes the SPA. Additional credits may also be available from pending, but not yet approved, mitigation banks. However, availability is subject to change and, as noted above, a combination of mitigation bank credits and permittee-responsible on and off-site mitigation may be necessary to fully offset project impacts on wetlands and other waters of the U.S. If USACE determines that the use of mitigation bank credits is not sufficient mitigation to offset impacts within the SPA, the October 26, 2010 Memorandum Re: Minimum Level of Documentation Required for Permit Decisions requires USACE to specifically demonstrate why the use of bank credits is not acceptable to USACE in accordance with Section 33 CFR 332.3(a)(1).

Compensatory mitigation for losses of stream and intermittent drainage channels shall follow the Final Rule Guidelines, which specify that compensatory mitigation should be achieved through in-kind preservation, restoration, or enhancement. The wetland MMP shall address how to mitigate impacts on vernal pool, seasonal swale, seasonal wetland, seep, marsh, pond, and intermittent and perennial stream habitat, and shall describe specific method(s) to be implemented to avoid and/or mitigate any off-site project-related impacts. The wetland compensation section of the habitat MMP shall include the following:

- ▶ Compensatory mitigation sites and criteria for selecting these mitigation sites. In general, compensatory mitigation sites should meet the following criteria, based on the *Final Rule*:
 - located within the same watershed as the wetland or other waters that would be lost, as appropriate and practicable;
 - located in the most likely position to successfully replace wetland functions lost on the impact site considering watershed-scale features such as aquatic habitat diversity, habitat connectivity, available water sources and hydrologic relationships, land use trends, ecological benefits, and compatibility with adjacent land uses, and the likelihood for success and sustainability;
- ▶ A complete assessment of the existing biological resources in both the on-site preservation areas and off-site compensatory mitigation areas, including wetland functional assessment using the California

Rapid Assessment Method (CRAM) (Collins et al. 2008), or other appropriate wetland assessment protocol as determined through consultation with USACE and the USFWS, to establish baseline conditions;

- ▶ Specific creation and restoration plans for each mitigation site;
- ▶ Use of CRAM to compare compensatory wetlands to the baseline CRAM scores from wetlands in the SPA. The compensatory wetland CRAM scores shall be compared against the highest quality wetland of each type from the SPA;
- ▶ CRAM scores, or other wetland assessment protocol scores, from the compensatory wetlands shall be compared against the highest quality wetland scores for each wetland type to document success of compensatory wetlands in replacing the functions of the affected wetlands to be replaced;
- ▶ Monitoring protocol, including schedule and annual report requirements, and the following elements:
 - ecological performance standards, based on the best available science, that can be assessed in a practicable manner (e.g., performance standards proposed by Barbour et al. 2007). Performance standards must be based on attributes that are objective and verifiable;
 - assessments conducted annually for 5 years after construction or restoration of compensatory wetlands to determine whether these areas are acquiring wetland functions and to plot the performance trajectory of preserved, restored, or created wetlands over time. Assessments results for compensatory wetlands shall also be compared against scores for reference wetlands assessed in the same year;
 - assessments analysis conducted annually for 5 years after any construction adjacent to wetlands preserved in the SPA to determine whether these areas are retaining wetland functions. Assessments results for wetlands preserved on site shall also be compared against scores for reference wetlands assessed in the same year;
 - analysis of assessments data, including assessment of potential stressors, to determine whether any remedial activities may be necessary;
 - corrective measures if performance standards are not met;
 - monitoring of plant communities as performance criteria (annual measure of success, during monitoring period) and success criteria (indicative of achievement of mitigation habitat requirement at end of monitoring period) for hydrologic function have become established and the creation site “matures” over time (the project applicants’ biological consultant has developed a draft monitoring methodology and success criteria that are provided in Appendix D);
 - GIS analysis of compensatory wetlands to demonstrate actual acreage of functioning wetland habitat;
 - adaptive management measures to be applied if performance standards and acreage requirements are not being met;
 - responsible parties for monitoring and preparing reports; and
 - responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.

A final operations and management plan (OMP) for all on- and off-site permittee-sponsored wetland preservation and mitigation areas shall be prepared and submitted to USACE and USFWS for review, comment and preliminary approval prior to the issuance of any permits under Section 404 of the CWA. The plan shall include detailed information on the habitats present within the preservation and mitigation areas, the long-term management and monitoring of these habitats, legal protection for the preservation and mitigation areas (e.g., conservation easement, declaration of restrictions), and funding mechanism information (e.g., endowment). A final OMP for each discretionary development entitlement affecting wetlands must be approved prior to construction.

USACE has determined that the project will require an individual permit. In its final stage and once approved by USACE, the MMP for the project is expected to detail proposed wetland restoration, enhancement, and/or replacement activities that would ensure no net loss of aquatic functions in the project vicinity. Approval and implementation of the wetland MMP shall aim to fully mitigate all unavoidable impacts on jurisdictional waters of the U.S., including jurisdictional wetlands. In addition to USACE approval, approval by the City, Sacramento County, El Dorado County, and the Central Valley RWQCB, as appropriate depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes, will also be required. Approvals from Sacramento County and El Dorado County shall be required for impacts resulting from off-site project elements occurring in these counties, such as the off-site detention basin in Sacramento County and the roadway connections into El Dorado County. To satisfy the requirements of the City and the Central Valley RWQCB, mitigation of impacts on the nonjurisdictional wetlands beyond the jurisdiction of USACE shall be included in the same MMP. All mitigation requirements determined through this process shall be implemented before grading plans are approved. The MMP shall be submitted to USACE and approved prior to the issuance of any permits under Section 404 of the CWA.

Water quality certification pursuant to Section 40 of the record of decision and before issuance of a Section 404 permit. Before construction in any areas containing wetland features, the project applicant(s) shall obtain water quality certification for the project. Any measures required as part of the issuance of water quality certification shall be implemented.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be developed by the project applicant(s) of each applicable project phase in consultation with the affected oversight agency(ies) (i.e., Caltrans, El Dorado and/or Sacramento Counties).

Implementation: Project applicant(s) for each discretionary development entitlement requiring fill of wetlands or other waters of the U.S. or waters of the state.

Timing: Before the approval of grading or improvement plans or any ground-disturbing activities for any project development phase containing wetland features or other waters of the U.S. The MMP must be approved before any impact on wetlands can occur. Mitigation shall be implemented on an ongoing basis throughout and after construction, as required.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
3. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
4. For the U.S. 50 interchange improvements: Caltrans.

5. U.S. Army Corps of Engineers, Sacramento District; Central Valley Regional Water Quality Control Board as appropriate depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes and in compliance with the City's Grading Ordinance (Folsom Municipal Code 14.29), or appropriate county grading ordinance for off-site detention basin and roadway connections from Folsom Heights to El Dorado Hills.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS

Implementation of the Proposed Project Alternative would result in direct impacts from the loss of waters of the U.S. resulting from the placement of fill material into approximately 39.50 acres of Federally jurisdictional waters of the U.S. on-site, including wetlands. This constitutes 47% of the existing waters of the U.S. present in the SPA. Waters of the U.S. that would be filled consist of 2.92 acres of vernal pools, 3.87 acres of seasonal wetland, 17.63 acres of seasonal wetland swale, 0.07 acre of freshwater marsh, 4.48 acres of freshwater seep, 1.17 acres of pond, 3.38 acres of stream channel, 4.47 acres of intermittent drainage channel, 1.43 acres of ditches, and 0.11 acre of willow scrub. In addition, 1.25 out of 1.30 acres of waters that USACE determined to be non-jurisdictional would also be filled by the Proposed Project Alternative. The non-jurisdictional waters in the SPA consist of 0.03 acre of vernal pool, 0.004 acre of seasonal wetland, 0.42 acre of ditch, and 0.85 acre of pond. Though the placement of fill material into these waters does not require a permit from USACE under Section 404 of the CWA, they are considered waters of the state subject to the jurisdiction of the Central Valley RWQCB under the Porter-Cologne Act. The conversion of these waters of the U.S. to uplands from the placement of fill material would result in a complete loss of the functions of the waters of the U.S. In addition to direct impacts resulting from the placement of fill material into Federally jurisdictional waters of the U.S., the Proposed Project Alternative would also result in indirect impacts to 0.29 acres of waters of the U.S. from fragmentation. This would occur as a result of placing fill material into the upstream and downstream portions of the waters of the U.S. proposed to be placed into the open space preserve, as described below. Because the upstream and downstream portions of these preserved waters of the U.S. would be filled, indirect impacts would occur to 0.17 acre of seasonal wetland swale, 0.016 acre of perennial stream channel, 0.09 acre of intermittent drainage, and 0.012 acre of ditch resulting in a loss of/adverse indirect impacts to the functions of these waters. While fragmented stream channels could function to store surface water, recharge groundwater, and provide some habitat values, they would no longer function to convey stormwater through the system, transport sediment, reduce flow velocity, and their nutrient cycling and other water quality functions would be diminished. Many of the features that currently convey seasonal flows could become inundated year round when cut off from other drainage channels.

The Proposed Project Alternative includes 1,050 acres of open space designed to preserve approximately 52% of the wetlands and other waters of the U.S. present in the SPA, including most of Alder Creek. Approximately 6.33 acres of freshwater seep, 1.72 acres of vernal pools, 0.78 acre of seasonal wetland, 7.85 acres of seasonal wetland swale, 13.81 acres of perennial stream channel, 7.25 acres of intermittent drainage channel, 0.55 acre of ditches, 0.14 acre of freshwater marsh, and 5.71 acres of ponds would be preserved within the open space areas. Preserved wetlands and other waters within the designated open space areas would be provided a 25-foot buffer where no project-related ground disturbance would occur. Outside of the 25-foot buffer, an additional 50 feet of no development buffer would be established; however, disturbance associated with contour grading, mitigation planting, trails, benches, and other passive recreational amenities may occur in the outer 50 feet of buffer. The open space design provides a large habitat patch that maintains stream networks and wetland complexes, provides corridors for habitat connectivity both on and off the SPA, and minimizes the perimeter-to-area ratio (i.e., edge effects).

In addition to direct impacts, the Proposed Project Alternative would result in indirect effects on wetlands from increased urbanization and population, including reduction in water quality caused by urban runoff, erosion, and

siltation; intrusion of humans and domestic animals; and introduction of invasive plant species that could result in habitat degradation. On-site wetlands and other waters would be indirectly affected by substantial grading and creation of impervious surfaces proposed for adjacent uplands. All portions of the SPA, with the exception of some oak tree preservation areas and 25-foot buffers around preserved wetlands, would be subject to at least surface-level grading, which could affect wetland hydrology and water quality.

Overall site topography would be substantially altered to achieve level ground for development. These earthmoving activities and resulting gradient changes across the SPA could alter hydrologic patterns and adversely affect wetlands and drainage channels retained in the SPA, as well as off-site wetlands, by altering hydration periods, peak flows, runoff volumes, and runoff durations. Construction of a 1.4-acre on-site detention basin on an intermittent tributary to Carson Creek on the Folsom Heights site could substantially alter water quality and hydrology of Carson Creek and associated wetlands and other waters of the U.S. Construction of new roadways and roadway improvements associated with development of the backbone infrastructure and the on-stream detention basin could disrupt or eliminate hydrologic connectivity that is important to support wetlands and the plant and wildlife species that inhabit them. Although the main channel of Alder Creek would be retained, many intermittent tributaries and seasonal swales directly connected to Alder Creek would be filled. This could adversely affect the hydrology and water quality of the preserved portions of the creek.

The loss and degradation of USACE jurisdictional vernal pools and other wetland habitats and other waters of the U.S. (e.g., ponds and drainage channels) that would occur with project implementation constitutes a substantial adverse effect on Federally jurisdictional waters of the U.S., including wetlands, as defined by Section 404 of the CWA. Construction of the on-stream detention basin is a significant direct and indirect impact. Removal of 1.25 acres non USACE jurisdictional wetlands in the SPA constitutes an adverse effect on waters of the state subject to Central Valley RWQCB jurisdiction. Therefore, both **direct** and **indirect significant** impacts would occur.

Off-Site Elements

Approximately 5.85 acres of waters of the U.S., including wetlands, would be permanently filled by construction of off-site infrastructure outside the project boundary. The off-site project elements that would directly affect potential waters of the U.S. are the detention basin west of Prairie City Road and the interchange improvements to U.S. 50. Affected wetlands and other waters of the U.S. consist of 0.59 acre of vernal pools, 0.25 acre of seasonal wetlands, 0.55 acre of seasonal wetland swales, 1.94 acres of freshwater marsh, 0.04 acre of intermittent drainage channels, 0.01 acre of ditch, and 2.47 acres of perennial stream channel. Indirect impacts on another 0.47 acre of waters of the U.S. could result from construction of the two roadway connections into El Dorado Hills.

The loss and degradation of USACE jurisdictional vernal pools and other wetland habitats and other waters of the U.S. (e.g., drainage channels) that would occur with project implementation constitutes a substantial adverse effect on Federally protected waters of the U.S., including wetlands, as defined by Section 404 of the CWA. Therefore, construction of off-site elements that support project development would result in **direct** and **indirect significant** impacts on waters of the U.S.

Implementation of Mitigation Measures 3A.3-1a and 3A.3-1b would reduce significant impacts on jurisdictional wetlands and other waters of the U.S. and waters of the state under the Proposed Project Alternative, but not necessarily to a less-than-significant level. After a mitigation plan has been accepted by USACE and is implemented as required (including on-site preservation and purchase of credits at a mitigation bank and/or in-lieu fee mitigation), the direct impacts resulting from project implementation could be mitigated by providing “no net loss” of overall wetland acreage resulting from the project, as required in USACE permit conditions. However, USACE requires mitigation resulting in no net loss of wetland functions. Removal of 45.35 acres (39.5 acres on site and 5.85 acres off-site) of waters of the U.S., including stream channels, vernal pools, and other similar wetland habitats is a substantial acreage loss, especially when considered in the context of the regional rate and acreage of habitat losses. Temporal losses would occur unless all impacts could be mitigated through purchase of fully functioning, established, in-kind wetlands from an approved mitigation bank.

Mitigation and Conservation Banks are established through a lengthy review and approval process with the Interagency Review Team (IRT). The IRT is made up of staff members from the EPA, USACE, Fish and Wildlife Service, and California Department of Fish and Game. Other agencies that are included on the IRT on an as needed basis include the Regional Water Quality Control Board and the National Marine Fisheries Service. Through the IRT approval process, each bank is responsible for developing performance and success criteria for their respective bank, including watershed level needs. Once approved this bank is authorized for a phased release of credits based on meeting certain established performance/success criteria occurs. The banks are required to submit annual monitoring reports showing the status of the bank, status of endowment, and performance of habitat. Failure to meet established performance/success criteria will result in either bank closure or inability to release additional credits until performance/success criteria standards are met. Various agencies from the IRT also serve as third party beneficiaries to the banks; thus, they have the ability to enter the bank at any time to monitor the bank status independently of the bank proprietor's monitoring.

The performance/success criteria standards for each bank are typically based on agency approved templates; however, they can be adjusted to reflect site-specific and watershed conditions. The specific performance/success criteria standards for each bank are considered public information; however, this information is currently only available through a Freedom of Information Act (FOIA) petition. There is limited information available for a few banks on USACE's Regional Internet Banking Information Tracking System (RIBITS); however, the site is limited to banks that offer waters of the U.S. credits and has yet to fully integrate information on banks that offer other types of credits.

The lengthy process that bank proprietors have to follow to begin selling credits was designed to essentially eliminate/reduce the potential for credits to fail to meet established success criteria. Additionally, as each bank is closely monitored by the IRT, this further reduces the potential for credits to fail to meet established success criteria.

At this time, there are enough mitigation credits available to fully cover the loss of wetland functions resulting from project implementation; however, it is unknown if sufficient mitigation credits would be available in the future for all phases of the project as the area builds out. Creation and preservation of wetlands within smaller and more fragmented areas surrounded by urban development cannot fully compensate for the whole suite of ecological services provided by larger expanses of interconnected wetland complexes surrounded by open space. Also, if compensatory wetland mitigation could not be provided in the same watershed an overall loss of function up to the subbasin level could result.

Considering the rate of development in Sacramento County, there is a limited amount of undeveloped, unspoken for land that supports existing wetlands that could be preserved, or that is suitable for creation of compensatory aquatic habitats similar to those that would be removed by project implementation. Furthermore, indirect impacts would remain significant and unavoidable for the Proposed Project Alternative because:

- ▶ the amount of aquatic habitat loss and degradation is extensive and contributes to the loss of aquatic habitat in Sacramento County and the larger Central Valley and foothill region,
- ▶ micro watersheds (i.e., the total land area that drains into an individual wetland or other water feature) of aquatic resources retained on the site would, for the most part, not be preserved, alteration of a micro watershed can substantially alter the hydrologic function of an individual wetland,
- ▶ wetland buffers from construction impacts would only be 25 feet in some cases and not more than 75 feet in many others,
- ▶ nearly 50% of the aquatic resources in the SPA would be filled, and
- ▶ the magnitude of topographic modification that would occur across the site with project implementation is considerable.

All of these factors are likely to diminish the water quality, hydrologic, and habitat functions of all wetlands remaining on site and downstream in the project vicinity. Therefore, direct and indirect impacts would remain **significant and unavoidable** for the Proposed Project Alternative. In addition, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation.

The conclusion that direct and indirect impacts would remain significant and unavoidable pursuant to NEPA and CEQA, however, is separate from the ultimate determination the USACE must make in order to issue permits to fill on-site wetlands, which is whether the project would cause “significant degradation of waters of the United States.” (40 CFR 230.10(c).) This subsequent determination has, by the express terms of the regulation, a necessarily broader focus than the individual watershed approach followed in this analysis. Therefore, the significant and unavoidable conclusion in this analysis does not preclude the USACE from issuing fill permits for the project if it finds the project mitigation is sufficient to avoid “significant degradation of the waters of the United States.”

No other feasible mitigation measures are available to reduce impacts associated with the loss and degradation of waters of the U.S. resulting from project development to a less-than-significant level because it is technically infeasible to allow new development without potential loss or degradation of waters of the U.S. The project’s objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without potential loss or degradation of waters of the U.S., mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to loss and degradation of waters of the U.S.

IMPACT 3A.3-2 Loss and Degradation of Habitat for Special-Status Wildlife Species and Potential Direct Take of Individuals. *Project implementation would result in the loss and degradation of habitat for several special-status wildlife species. Take of several listed species, including vernal pool invertebrates, valley elderberry longhorn beetle, and Swainson’s hawk, could also occur.*

Mitigation

Implement Mitigation Measures 3A.3-1a and 3A.3-1b.

Mitigation Measure 3A.3-2a: Avoid Direct Loss of Swainson’s Hawk and Other Raptor Nests.

To mitigate impacts on Swainson’s hawk and other raptors (including burrowing owl), the project applicant(s) of all project phases shall retain a qualified biologist to conduct preconstruction surveys and to identify active nests on and within 0.5 mile of the SPA and active burrows in the SPA. The surveys shall be conducted before the approval of grading and/or improvement plans (as applicable) and no less than 14 days and no more than 30 days before the beginning of construction for all project phases. To the extent feasible, guidelines provided in *Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in the Central Valley* (Swainson’s Hawk Technical Advisory Committee 2000) shall be followed for surveys for Swainson’s hawk. If no nests are found, no further mitigation is required.

If active nests are found, impacts on nesting Swainson’s hawks and other raptors shall be avoided by establishing appropriate buffers around the nests. No project activity shall commence within the buffer area until the young have fledged, the nest is no longer active, or until a qualified biologist has determined in consultation with DFG that reducing the buffer would not result in nest abandonment. DFG guidelines

recommend implementation of 0.25- or 0.5-mile-wide buffers, but the size of the buffer may be adjusted if a qualified biologist and the City, in consultation with DFG, determine that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist during and after construction activities will be required if the activity has potential to adversely affect the nest.

If active burrows are found, a mitigation plan shall be submitted to the City for review and approval before any ground-disturbing activities. The City shall consult with DFG. The mitigation plan may consist of installation of one-way doors on all burrows to allow owls to exit, but not reenter, and construction of artificial burrows within the project vicinity, as needed; however, burrow owl exclusions may only be used if a qualified biologist verifies that the burrow does not contain eggs or dependent young. If active burrows contain eggs and/or young, no construction shall occur within 50 feet of the burrow until young have fledged. Once it is confirmed that there are no owls inside burrows, these burrows may be collapsed.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be developed by the project applicant(s) of each applicable project phase in consultation with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans), such that the performance criteria set forth in DFG's guidelines are determined to be met.

Implementation: Project applicant(s) of all project phases.

Timing: Before the approval of grading and improvement plans, before any ground-disturbing activities, and during project construction as applicable for all project phases.

Enforcement:

1. California Department of Fish and Game.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
4. For the U.S. 50 interchange improvements: Caltrans.
5. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.

Mitigation Measure 3A.3-2b: Prepare and Implement a Swainson's Hawk Mitigation Plan.

To mitigate for the loss of Swainson's hawk foraging habitat, the project applicant(s) of all project phases shall prepare and implement a Swainson's hawk mitigation plan including, but not limited to the requirements described below.

Before the approval of grading and improvement plans or before any ground-disturbing activities, whichever occurs first, the project applicant(s) shall preserve, to the satisfaction of the City or Sacramento County, as appropriate depending on agency jurisdiction, suitable Swainson's hawk foraging habitat to ensure 1:1 mitigation of habitat value for Swainson's hawk foraging habitat lost as a result of the project, as determined by the City, or Sacramento County, after consultation with DFG and a qualified biologist.

The 1:1 habitat value shall be based on Swainson's hawk nesting distribution and an assessment of habitat quality, availability, and use within the City's planning area, or Sacramento County jurisdiction. The mitigation ratio shall be consistent with the 1994 DFG *Swainson's Hawk Guidelines included in the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of*

California, which call for the following mitigation ratios for loss of foraging habitat in these categories: 1:1 if within 1 mile of an active nest site, 0.75:1 if over 1 mile but less than 5 miles, and 0.5:1 if over 5 miles but less than 10 miles from an active nest site. Such mitigation shall be accomplished through credit purchase from an established mitigation bank approved to sell Swainson's hawk foraging habitat credits to mitigate losses in the SPA, if available, or through the transfer of fee title or perpetual conservation easement. The mitigation land shall be located within the known foraging area and within Sacramento County. The City, or Sacramento County if outside City jurisdiction, after consultation with DFG, will determine the appropriateness of the mitigation land.

Before approval of such proposed mitigation, the City, or Sacramento County for the off-site detention basin, shall consult with DFG regarding the appropriateness of the mitigation. If mitigation is accomplished through conservation easement, then such an easement shall ensure the continued management of the land to maintain Swainson's hawk foraging values, including but not limited to ongoing agricultural uses and the maintenance of all existing water rights associated with the land. The conservation easement shall be recordable and shall prohibit any activity that substantially impairs or diminishes the land's capacity as suitable Swainson's hawk habitat.

The project applicant(s) shall transfer said Swainson's hawk mitigation land, through either conservation easement or fee title, to a third-party, nonprofit conservation organization (Conservation Operator), with the City and DFG named as third-party beneficiaries. The Conservation Operator shall be a qualified conservation easement land manager that manages land as its primary function. Additionally, the Conservation Operator shall be a tax-exempt nonprofit conservation organization that meets the criteria of Civil Code Section 815.3(a) and shall be selected or approved by the City or County, after consultation with DFG. The City, or County, after consultation with DFG and the Conservation Operator, shall approve the content and form of the conservation easement. The City, or County, DFG, and the Conservation Operator shall each have the power to enforce the terms of the conservation easement. The Conservation Operator shall monitor the easement in perpetuity to assure compliance with the terms of the easement.

The project applicant(s), after consultation with the City, or County of jurisdiction, DFG, and the Conservation Operator, shall establish an endowment or some other financial mechanism that is sufficient to fund in perpetuity the operation, maintenance, management, and enforcement of the conservation easement. If an endowment is used, either the endowment funds shall be submitted to the City for impacts on lands within the City's jurisdiction or Sacramento County for the off-site detention basin to be distributed to an appropriate third-party nonprofit conservation agency, or they shall be submitted directly to the third-party nonprofit conservation agency in exchange for an agreement to manage and maintain the lands in perpetuity. The Conservation Operator shall not sell, lease, or transfer any interest of any conservation easement or mitigation land it acquires without prior written approval of the City and DFG. Mitigation lands established or acquired for impacts incurred at the off-site detention basin shall require approval from Sacramento County prior to sale or transfer of mitigation lands or conservation easement.

If the Conservation Operator ceases to exist, the duty to hold, administer, manage, maintain, and enforce the interest shall be transferred to another entity acceptable to the City and DFG, or Sacramento County and DFG depending on jurisdiction of the affected habitat. The City Planning Department shall ensure that mitigation habitat established for impacts on habitat within the City's planning area is properly established and is functioning as habitat by reviewing regular monitoring reports prepared by the Conservation Operator of the mitigation site(s). Monitoring of the mitigation site(s) shall continue for the first 10 years after establishment of the easement and shall be funded through the endowment, or other appropriate funding mechanism, established by the project applicant(s). Sacramento County shall review the monitoring reports for impacts on habitat at the off-site detention basin.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., Sacramento County and Caltrans).

Implementation: Project applicant(s) of all project phases.

Timing: Before the approval of grading, improvement, or construction plans and before any ground-disturbing activity in any project development phase that would affect Swainson’s hawk foraging habitat.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
3. For the U.S. 50 interchange improvements: Caltrans.

Mitigation Measure 3A.3-2c: Avoid and Minimize Impacts to Tricolored Blackbird Nesting Colonies.

To avoid and minimize impacts to tricolored blackbird, the project applicant(s) of all project phases shall conduct a preconstruction survey for any project activity that would occur during the tricolored blackbird’s nesting season (March 1–August 31). The preconstruction survey shall be conducted by a qualified biologist before any activity occurring within 500 feet of suitable nesting habitat, including freshwater marsh and areas of riparian scrub vegetation. The survey shall be conducted within 14 days before project activity begins.

If no tricolored blackbird colony is present, no further mitigation is required. If a colony is found, the qualified biologist shall establish a buffer around the nesting colony. No project activity shall commence within the buffer area until a qualified biologist confirms that the colony is no longer active. The size of the buffer shall be determined in consultation with DFG. Buffer size is anticipated to range from 100 to 500 feet, depending on the nature of the project activity, the extent of existing disturbance in the area, and other relevant circumstances.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries (i.e., U.S. 50 interchange improvements) must be developed by the project applicant(s) of each applicable project phase in consultation with the affected oversight agency(ies) (i.e., Caltrans) and must be sufficient to achieve the performance criteria described above.

Implementation: Project applicant(s) of all project phases.

Timing: Before the approval of any ground-disturbing activity within 500 feet of suitable nesting habitat as applicable for all project phases.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the U.S. 50 interchange improvements: Caltrans.

Mitigation Measure 3A.3-2d: Avoid and Minimize Impacts to Special-Status Bat Roosts.

The project applicant of all project phases containing potential bat roosting habitat shall retain a qualified biologist to conduct surveys for roosting bats. Surveys shall be conducted in the fall to determine if the mine shaft or cavities in oak trees to be removed are used as hibernaculum and in spring and/or summer to determine if they are used as maternity or day roosts. Surveys shall consist of evening emergence surveys to note the presence or absence of bats and could consist of visual surveys at the time of emergence. If evidence of bat use is observed, the number and species of bats using the roost shall be determined. Bat detectors may be used to supplement survey efforts. If no bat roosts are found, then no further study shall be required.

If roosts of pallid bat or Townsend's big-eared bats are determined to be present and must be removed, the bats shall be excluded from the roosting site before it is removed. A mitigation program addressing compensation, exclusion methods, and roost removal procedures shall be developed in consultation with DFG before implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave but not reenter), or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). The loss of each roost (if any) will be replaced in consultation with DFG and may include construction and installation of bat boxes suitable to the bat species and colony size excluded from the original roosting site. Roost replacement will be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site, the mine shaft may be removed.

Implementation: Project applicant(s) of all project phases containing potential bat roosting habitat.

Timing: Before the approval of removal or fill of the mine shaft in the SPA.

Enforcement: City of Folsom Community Development Department.

Mitigation Measure 3A.3-2e: Obtain an Incidental Take Permit under Section 10(a) of ESA; Develop and Implement a Habitat Conservation Plan to Compensate for the Loss of Vernal Pool Habitat.

The project applicant(s) for all project phases shall obtain an incidental take permit under Section 10(a) of ESA. No project construction shall proceed in areas supporting potential habitat for Federally listed vernal pool invertebrates, or within adequate buffer areas (250 feet or lesser distance deemed sufficiently protective by a qualified biologist with approval from USFWS), until a BO has been issued by USFWS and the project applicant(s) have abided by conditions in the BO (including all conservation and minimization measures). Conservation and minimization measures are likely to include preparation of supporting documentation describing methods to protect existing vernal pools during and after project construction.

Under the No Federal Action Alternative, interagency consultation under Section 7 of ESA would not occur; therefore, the project applicant(s) would be required to develop a habitat conservation plan to mitigate impacts on Federally listed vernal pool invertebrates. The project applicant(s) shall complete and implement, or participate in, a habitat conservation plan that shall compensate for the loss of acreage, function, and value of affected vernal pool habitat. The habitat conservation plan shall be consistent with the goals of the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (USFWS 2005) and must be approved by USFWS.

The project applicant(s) for all project phases shall ensure that there is sufficient upland habitat within the target areas for creation and restoration of vernal pools and vernal pool complexes to provide ecosystem health. The land used to satisfy this mitigation measure shall be protected through a fee title or conservation easement acceptable to the City and USFWS.

The project applicant(s) for all project phases shall identify the extent of indirectly affected vernal pool and seasonal wetland habitat, either by identifying all such habitat within 250 feet of project construction activities or by providing an alternative technical evaluation in support of a lesser indirect impact distance. If a lesser distance is pursued, this distance shall be approved by USFWS. The project applicant(s) shall preserve 2 wetted acres of vernal pool habitat for each wetted acre of any indirectly affected vernal pool habitat. This mitigation shall occur before the approval of any grading or improvement plans for any project phase that would allow work within 250 feet of such habitat, and before any ground-disturbing activity within 250 feet of the habitat. The project applicant(s) will not be required to complete this mitigation measure for direct or indirect impacts that have already been mitigated to the satisfaction of USFWS through another BO or mitigation plan.

A standard set of BMPs shall be applied to construction occurring in areas within 250 feet of off-site vernal pool habitat, or within any lesser distance deemed adequate by a qualified biologist (with approval from USFWS) to constitute a sufficient buffer from such habitat. Refer to Section 3A.9, "Hydrology and Water Quality - Land" for the details of BMPs to be implemented.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties or Caltrans).

Implementation: Project applicant(s) of all project phases and on-site and off-site elements.

Timing: Before the approval of any grading or improvement plans, before any ground-disturbing activities within 250 feet of said habitat, and on an ongoing basis throughout construction as applicable for all project phases as required by the habitat conservation plan and/or BO.

Enforcement:

1. U.S. Fish and Wildlife Service.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
4. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
5. For the U.S. 50 interchange improvements: Caltrans.

Mitigation Measure 3A.3-2f Obtain an Incidental Take Permit under Section 10(a) of ESA; Develop and Implement a Habitat Conservation Plan to Compensate for the Loss of VELB Habitat.

As long as valley elderberry longhorn beetle remains a species protected under ESA, the project applicant(s) of all project phases containing elderberry shrubs shall obtain an incidental take permit under Section 10(a) of ESA for valley elderberry longhorn beetle. No project construction shall proceed in areas potentially containing valley elderberry longhorn beetle until a take permit has been issued by USFWS, and the project applicant(s) for all project phases have abided by all pertinent conditions in the take

permit relating to the proposed construction, including all conservation and minimization measures. Conservation and minimization measures are likely to include preparation of supporting documentation that describes methods for relocation of existing shrubs and maintaining existing shrubs and other vegetation in a conservation area.

Under the No Federal Action Alternative, interagency consultation under Section 7 of ESA would not occur; therefore, the project applicant(s) would be required to develop a habitat conservation plan to mitigate impacts on valley elderberry longhorn beetle. The project applicant(s) shall complete and implement a habitat conservation plan that will compensate for the loss of valley elderberry longhorn beetle. Relocation of existing elderberry shrubs and planting of new elderberry seedlings shall be implemented on a no-net-loss basis. Detailed information on monitoring success of relocated and planted shrubs and measures to compensate (should success criteria not be met) would also likely be required in the BO. Ratios for mitigation of valley elderberry longhorn beetle habitat will ultimately be determined through the ESA Section 10(a) consultation process with USFWS, but shall be a minimum of “no net loss.”

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries (i.e., U.S. 50 interchange improvements) must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., Caltrans).

Implementation: Project applicant(s) of all project phases potentially containing elderberry shrubs.

Timing: Before the approval of any grading or improvement plans or any ground-disturbing activity within 100 feet of valley elderberry longhorn beetle habitat as applicable for all project phases, and on an ongoing basis as required by the habitat conservation plan and/or BO.

Enforcement:

1. U.S. Fish and Wildlife Service
2. City of Folsom Community Development Department.
3. For the U.S. 50 interchange improvements: Caltrans.

Mitigation Measure 3A.3-2g: Secure Take Authorization for Federally Listed Vernal Pool Invertebrates and Implement All Permit Conditions.

No project construction shall proceed in areas supporting potential habitat for Federally listed vernal pool invertebrates, or within adequate buffer areas (250 feet or lesser distance deemed sufficiently protective by a qualified biologist with approval from USFWS), until a biological opinion (BO) or Not Likely to Adversely Affect (NLAA) letter has been issued by USFWS and the project applicant(s) for any particular discretionary development entitlements affecting such areas have abided by conditions in the BO (including conservation and minimization measures) intended to be completed before on-site construction. Conservation and minimization measures shall include preparation of supporting documentation describing methods to protect existing vernal pools during and after project construction, a detailed monitoring plan, and reporting requirements.

As described under Mitigation Measure 3A.3-1a, an MMP shall be developed that describes details how loss of vernal pool and other wetland habitats shall be offset, including details on creation of habitat, account for the temporal loss of habitat, contain performance standards to ensure success, and outline remedial actions if performance standards are not met.

The project applicant(s) for any particular discretionary development application potentially affecting vernal pool habitat shall complete and implement a habitat MMP that will result in no net loss of acreage, function, and value of affected vernal pool habitat. The final habitat MMP shall be consistent with guidance provided in *Programmatic Formal Endangered Species Act Consultation on Issuance of 404*

Permits for Projects with Relatively Small Effects on Listed Vernal Pool Crustaceans within the Jurisdiction of the Sacramento Field Office, California (USFWS 1996) or shall provide an alternative approach that is acceptable to the City, USACE, and USFWS and accomplishes no net loss of habitat acreage, function, and value.

The project applicant(s) for any particular discretionary development application “potentially affecting vernal pool habitat” shall ensure that there is sufficient upland habitat within the target areas for creation and restoration of vernal pools and vernal pool complexes to provide ecosystem health. This standard shall be accomplished by requiring the project applicant(s) for any discretionary development application affecting vernal pool or seasonal wetland habitat to identify the extent of indirectly affected vernal pool and seasonal wetland habitat, either by identifying all such habitat within 250 feet of project construction activities or by providing an alternative technical evaluation. If a lesser distance is pursued, this distance shall be approved by USFWS. The project applicant(s) shall preserve acreage of vernal pool habitat for each wetted acre of any indirectly affected vernal pool habitat at a ratio approved by USFWS at the conclusion of the Section 7 consultation. This mitigation shall occur before the approval of any grading or improvement plans for any project phase that would allow work within 250 feet of such habitat or lesser distance deemed sufficiently protective by a qualified biologist with approval from USFWS, and before any ground-disturbing activity within 250 feet of the habitat or lesser distance deemed sufficiently protective by a qualified biologist with approval from USFWS. The project applicant(s) will not be required to complete this mitigation measure for direct or indirect impacts that have already been mitigated to the satisfaction of USFWS through another BO or mitigation plan (i.e., if impacts on specific habitat acreage are mitigated by one project phase or element, the project applicant(s) will not be required to mitigate for it again in another phase of the project).

A standard set of BMPs shall be applied to construction occurring in areas within 250 feet of off-site vernal pool habitat, or within any lesser distance deemed adequate by a qualified biologist (with approval from USFWS) to constitute a sufficient buffer from such habitat. Refer to Section 3A.9, “Hydrology and Water Quality - Land” for the details of BMPs to be implemented.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be developed by the project applicant(s) of each applicable project phase in consultation with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans).

Implementation: Project applicant(s) of all project phases.

Timing: Before the approval of any grading or improvement plans, before any ground-disturbing activities within 250 feet of said habitat or lesser distance deemed sufficiently protective by a qualified biologist with approval from USFWS, and on an ongoing basis throughout construction as applicable for all project phases as required by the mitigation plan, BO, and/or BMPs.

Enforcement:

1. U.S. Army Corps of Engineers, Sacramento District; U.S. Fish and Wildlife Service.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
4. For the U.S. 50 interchange improvements: Caltrans.

4. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.

Mitigation Measure 3A.3-2h: Obtain Incidental Take Permit for Impacts on Valley Elderberry Longhorn Beetle and Implement All Permit Conditions.

Before each phase of the project, the project applicant(s) shall have a qualified biologist identify any elderberry shrubs within 100 feet of the project footprint and conduct a survey for valley elderberry longhorn beetle exit holes in stems greater than 1 inch in diameter. If no project activity, including grading or use of herbicides, would occur within 100 feet of an elderberry shrub, then no further mitigation shall be required for valley elderberry longhorn beetle in those areas.

If project activities would occur within 100 feet of any elderberry shrubs, consultation with USFWS under Section 7 will be required. No project construction shall proceed in areas potentially containing valley elderberry longhorn beetle until a BO has been issued by USFWS, and the project applicant(s) of all project phases have abided by all pertinent conditions in the BO relating to the proposed construction, including conservation and minimization measures, intended to be completed before on-site construction. Conservation and minimization measures are likely to include preparation of supporting documentation that describes methods for relocation of existing shrubs and maintaining existing shrubs and other vegetation in a conservation area.

Relocation of existing elderberry shrubs and planting of new elderberry seedlings shall be implemented consistent with the mitigation ratios described in the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999). The 1999 conservation guidelines mitigation ratios are based on whether the affected shrub is located in riparian or non riparian habitat, the size of stems affected, and the presence of beetle exit holes. Compensatory mitigation for elderberry shrubs that would be removed from their current locations would be developed in consultation with USFWS during the Section 7 consultation process. Compensatory mitigation may include planting replacement elderberry seedlings or cuttings and associated native plants within the open space areas of the SPA, planting replacement elderberry seedlings or cuttings and associated native plants at a suitable off-site location, purchasing credits at an approved mitigation bank, or a combination thereof. Relocated and replacement shrubs and associated native plantings shall be placed in conservation areas providing a minimum of 1,800 square feet per transplanted shrub. These conservation areas shall be preserved in perpetuity as habitat for valley elderberry longhorn beetle. The number of elderberry shrubs that would be affected by implementing the project is expected to be low because there are currently a total of less than 10 shrubs known to be present on the SPA. Ratios for mitigation of valley elderberry longhorn beetle habitat will ultimately be determined through the ESA Section 7 consultation process with USFWS, but shall be a minimum of “no net loss.” USFWS uses stem count data, presence or absence of exit holes, and whether the affected elderberry shrubs are located in riparian habitat to determine the number of elderberry seedlings or cuttings and associated riparian vegetation that would need to be planted as compensatory mitigation for affected elderberry longhorn beetle habitat. The final VELB mitigation plan, including transplanting procedures, long-term protection, management of the mitigation areas, and monitoring procedures shall be consistent with the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999).

The population of valley elderberry longhorn beetles, the general condition of the conservation area, and the condition of the elderberry and associated native plantings in the conservation area must be monitored over a period of either ten consecutive years or for seven years over a 15-year period. A minimum survival rate of at least 60% of the elderberry plants and 60% of the associated native plants must be maintained throughout the monitoring period. Within one year of discovering that survival has dropped below 60%, the project applicant(s) shall replace failed plantings to bring survival above this level. Detailed information on monitoring success of relocated and planted shrubs and measures to compensate (should success criteria not be met) would be required in the BO.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries (i.e., U.S. 50 interchange improvements) must be developed by the project applicant(s) of each applicable project phase in consultation with the affected oversight agency(ies) (i.e., Caltrans) and must be sufficient to achieve the performance criteria described above.

Implementation: Project applicant(s) of all project phases.

Timing: Before the approval of any grading or improvement plans or any ground-disturbing activity within 100 feet of valley elderberry longhorn beetle habitat as applicable for all project phases, and on an ongoing basis as required by BO.

Enforcement:

1. U.S. Army Corps of Engineers, Sacramento District; U.S. Fish and Wildlife Service.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For the U.S. 50 interchange improvements: Caltrans.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Development under the Proposed Project Alternative would result in an increase in development and human population that would result in adverse effects on a number of special-status wildlife species. Special-status wildlife listed under ESA that could be substantially affected by the Proposed Project Alternative include vernal pool fairy shrimp, vernal pool tadpole shrimp, conservancy fairy shrimp, and valley elderberry longhorn beetle. Swainson’s hawk, which is listed under CESA as threatened, could also be adversely affected by the Proposed Project Alternative. Impacts on these five listed species would be considered significant and are discussed in detail below. Special-status raptors, western spadefoot, tricolored blackbird, and special-status bats could also be adversely affected, and are discussed further below. Impacts on all other special-status wildlife species are considered less than significant because potential loss of a few individuals is not likely to result in a substantial adverse affect on the population.

Wildlife Associated with Vernal Pools

The SPA contains approximately 5 acres of vernal pools, 5 acres of seasonal wetlands, and 26 acres of seasonal wetland swales that are considered potential habitat for vernal pool fairy shrimp, conservancy fairy shrimp, vernal pool tadpole shrimp, and western spadefoot toad. However, western spadefoot generally require a minimum of three weeks of continuous inundation to complete development from an egg to metamorphosis. Most of the features identified as seasonal wetland swales would be unlikely to support surface water for a minimum of three weeks and are therefore unlikely to provide suitable habitat for successful reproduction of western spadefoot. Vernal pool tadpole shrimp and conservancy fairy shrimp are Federally listed as endangered. Vernal pool fairy shrimp is Federally listed as threatened. Western spadefoot is a California species of special concern. Vernal pool tadpole shrimp have been documented directly adjacent to the southwest corner of the SPA, and vernal pool fairy shrimp have been documented on the Prairie City Road Business Park site within the SPA (CNDDDB 2008, ECORP Consulting 2009b). Western spadefoot are known to occur in Mather Regional Park, more than 5 miles from the SPA.

California tiger salamander is not expected to occur in the SPA. Although there is potentially suitable breeding habitat in some vernal pools, seasonal wetlands, and ponds and suitable uplands in the grasslands on site,

California tiger salamander have not been detected in Sacramento County north of the Cosumnes River (USFWS 2004). In a survey transect that extended along the west side of the Sacramento Valley from Shasta County to Solano County, California tiger salamanders were recorded only at the Jepson Prairie in Solano County (Watts 2008). Surveys of vernal pool habitats on and near the SPA have not incidentally detected California tiger salamander. Given that the closest known population is 15 miles to the south of the SPA and the lack of known populations in the project region, it is unlikely for California tiger salamander to occur in the SPA.

Protocol surveys (two wet-seasons or consecutive wet- and dry-season surveys) for Federally listed vernal pool crustaceans have been conducted on the Carpenter Ranch, Folsom South, Folsom 560, Folsom 138, and Prairie City Road Business Park sites within the SPA and no adults or cysts of vernal pool tadpole shrimp or Conservancy fairy shrimp were detected (MJM Properties 2007a, MJM Properties 2007b, Colliers International 2007a, Gibson and Skordal 2009, ECORP 2009b). However, vernal pool fairy shrimp were detected in two locations within the Prairie City Business Park property at the northwest corner of the SPA during wet-season surveys in 2008-2009 (ECORP 2009b). Federally listed vernal pool crustaceans could occur on the Sacramento Country Day School site or off-site elements where suitable habitat is present (Holloway Rasmussen Molondanof 2005 and The Hodgson Company 2007a). Although surveys over the majority of the SPA in suitable habitat indicate that listed vernal pool crustaceans may be absent from most of the site, vernal pool fairy shrimp is known to occur in at least one watershed, which is connected to other suitable habitats on the site. However, the Prairie City Road Business Park site where vernal pool fairy shrimp were found is downstream from the remainder of the SPA so this species would be unlikely to disperse from this location to other wetlands in the SPA through flowing water.

Focused surveys for western spadefoot were conducted in April 2006 on approximately 40% of the SPA and were not detected (MJM Properties 2006d). The aquatic habitats surveyed were determined to be unsuitable for western spadefoot due to the abundance of predatory bullfrogs. Although habitat conditions may not be suitable for successful reproduction of western spadefoot, the species may be present in vernal pools or other seasonal wetlands in the SPA.

Implementation of the Proposed Project Alternative would permanently remove approximately 25 acres of potential habitat for special-status vernal pool crustaceans and western spadefoot, which includes approximately 3 acres of vernal pools, 4 acres of seasonal wetland, and 18 acres of seasonal wetland swale, as discussed under Impact 3A.3-1 "Loss and Degradation of Jurisdictional Wetlands and Other Waters of the U.S., and Waters of the State." Approximately 2 acres of vernal pools, 1 acre of seasonal wetland, and 8 acres of seasonal wetland swale would be preserved in open space areas. Preserved wetlands within the designated open space areas would be provided with a 25-foot-wide buffer where no project-related ground disturbance would occur. Outside of the 25-foot-wide buffer, an additional 50 feet of "no-development" buffer would be established; however disturbance associated with contour grading, mitigation planting, trails, benches, and other passive recreational amenities may occur in this 50-foot "no development" buffer.

In addition to the direct effect of habitat loss or injury to individuals by filling suitable habitat, vernal pool species could be indirectly affected by project activities that occur adjacent to wetland habitats. Indirect effects include habitat degradation that could result from reduction in water quality caused by urban runoff, erosion, and siltation; intrusion of humans and domestic animals; and introduction of invasive plant species. In addition, the hydrology of the wetland habitats for vernal pool crustaceans and western spadefoot could be altered by substantial grading of the site, including within the open space areas, and creation of impervious surfaces proposed for adjacent uplands. All portions of the SPA, with the exception of 25-foot-wide buffers around preserved wetlands, would be subject to contour grading, which could affect wetland hydrology and water quality. Overall site topography would be substantially altered to achieve level ground for development. These earthmoving activities and resulting gradient changes across the SPA could alter hydrologic patterns and adversely affect wetlands and drainage channels retained in the SPA, as well as off-site wetlands, by altering hydration periods, peak flows, runoff volumes, and runoff durations. Construction of new roadways and roadway improvements associated with development of the backbone infrastructure could disrupt or eliminate hydrologic and biological connectivity that

is important to support wetlands and associated wildlife species. In addition, western spadefoot, if they occur in the SPA, could be indirectly affected by an increase in vehicular traffic on the site, which could result in mortality during dispersal or seasonal movements between aquatic and upland habitats.

Therefore, **direct** and **indirect** impacts to vernal pool fairy shrimp, conservancy fairy shrimp, vernal pool tadpole shrimp, and western spadefoot toad would be **significant**.

Swainson's Hawk and Other Raptors

Swainson's hawk, a species state-listed as threatened, is one of several raptors that are likely to nest and/or forage in the SPA. Two California species of special concern (western burrowing owl and northern harrier) have been documented foraging on the site (MJM Properties 2006b), and are expected to nest on site. White-tailed kite, which is fully protected under the California Fish and Game Code, is also expected to nest and forage on site. One additional California species of special concern, golden eagle, may forage on site outside of the breeding season. All raptors and their nests are protected under Section 3503.5 of the California Fish and Game Code. Common raptors that could nest in the SPA include Cooper's hawk, American kestrel, red-tailed hawk, red-shouldered hawk, western screech-owl, great horned owl, and barn owl.

Implementation of the Proposed Project Alternative would have a substantial adverse effect on nesting and foraging habitat for raptors. Of the approximately 642 acres of existing oak woodland that is considered potential nesting habitat for Swainson's hawk and other tree-nesting raptors, approximately 243 acres (37%) would be removed. If trees are to be removed during the raptor breeding season (February–August), mortality of eggs and chicks could result if an active nest were present. In addition, project construction could disturb active nests near the construction area or in trees not yet removed from the SPA, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. Indirect effects to nesting raptors include increased nest failure due to disruption of essential breeding and foraging behavior resulting from human disturbances in adjacent developed areas and increased nest predation by wildlife species associated with human development, such as crows and raccoons, as well as domestic cats (and dogs for ground-nesting raptors such as burrowing owl and northern harrier). The 2,594 acres of grassland habitat present in the SPA is considered foraging habitat for raptors and could be used for nesting by burrowing owl and northern harrier. The grading, paving, and other ground disturbances in the project footprint could indirectly affect nesting and foraging raptors by reducing the population of the small mammal prey base of many raptors over the entire SPA through conversion of natural vegetation cover. Large raptors generally require large areas of suitable foraging habitat. The remaining grassland in the open space areas would be fragmented by the development, which may cause the habitat to be unsuitable for raptor foraging.

As a consequence of direct loss of nesting and foraging habitat and indirect effects to nest success and foraging habitat quality, implementation of the Proposed Project Alternative could eventually lead to the permanent displacement of some raptors from the SPA. Therefore, the Proposed Project Alternative would result in **significant direct** and **indirect** impacts on Swainson's hawk and other raptors.

Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle is Federally listed as threatened, but has been proposed for delisting. Several elderberry shrubs with stems greater than 1.0 inch in diameter at ground level, which provide potential habitat for valley elderberry longhorn beetle (USFWS 1999), have been documented throughout the SPA (GenCorp 2007d,e; MJM Properties 2006b; Colliers International 2006). Valley elderberry longhorn beetles have been documented within two miles of the site (CNDDDB 2008), and beetle exit holes potentially created by valley elderberry longhorn beetles have been observed in elderberry shrubs adjacent to the SPA (ECORP 2007d).

Implementation of the Proposed Project Alternative could result in the direct or indirect loss of valley elderberry longhorn beetles or their habitat. Six elderberry shrubs have been mapped in the SPA (Exhibit 3A.3-1), but at least one unmapped shrub is known to occur on site (GenCorp 2007d), and additional shrubs may also be present

because thorough, focused surveys have not been conducted. Although a portion of the SPA including one mapped elderberry shrub has been set aside for preservation, at least four elderberry shrubs are known to be located within areas proposed for development, and additional shrubs may also be located within development and/or grading areas. If elderberry shrubs containing valley elderberry longhorn beetle larvae are removed while listed, direct take of this Federally-threatened species would result, which would constitute a significant impact. It is conceivable that over the 20-year buildout period, the species could become delisted. Indirect impacts could also result if the health of elderberry shrubs containing valley elderberry longhorn beetle larvae is adversely affected. Indirect impacts could occur if herbicides or insecticides are used in habitats adjacent to elderberry shrubs, if earthmoving activities disturb elderberry shrub roots, or if the topography and/or hydrology of the surrounding area are altered to the extent that it reduces the soil moisture surrounding the elderberry shrub. Therefore, direct and indirect impacts to valley elderberry longhorn beetle are considered to be significant. If delisting occurs, this **direct** and **indirect** impact would be less than significant, however for purposes of this EIR/EIS, this direct and indirect impact is considered **significant**.

Tricolored Blackbird

Nesting habitat for tricolored blackbird is found in riparian habitat and blackberry brambles along Alder Creek and adjacent to several ponds in the SPA. Tricolored blackbirds nest in colonies of 100s to 10,000s of individuals. Nesting colonies will often occur in the same location over many years, but colonies may also shift locations if nest failure occurs. An abundant insect source near the nesting colony is an important habitat component and nesting colonies are often associated with dairies, feedlots, or wastewater treatment ponds. Although tricolored blackbirds are not known to nest on the site and suitable nesting and foraging habitat is limited, several tricolored blackbird colonies are known from within 5 miles of the SPA (CNDDDB 2008). Disturbance during construction could result in nest abandonment and loss of eggs or young if an active tricolored blackbird nesting colony were to be present during ground-disturbing activities. Due to the potential for large numbers of nesting tricolored blackbirds to be lost, this **direct** impact would be considered **potentially significant**. Because project activities adjacent to potential nesting habitat are not expected to result in the mortality of individuals, chicks, or eggs, **indirect impacts** would be considered **less than significant**.

Special-Status Bats

Several special-status bat species have potential to occur in the SPA, including pallid bat, Townsend's big-eared bat, western mastiff bat, and western red bat. These species may forage over open grassland and woodland areas, as well as riparian areas. Roosting habitat is typically a limiting factor to bat distribution. Western mastiff bat is unlikely to roost on site due to habitat preference to use tall cliffs and rocks, which are absent from the site. Western red bat roosts in tree foliage, especially in cottonwoods, sycamore, and other broad-leaved deciduous riparian trees (Pierson et al. 2004); suitable roosting habitat for western red bat is lacking from the site, as the riparian habitat along Alder Creek mostly consists of willow and blackberry scrub. An abandoned mine shaft is present in the south central portion of the site and would likely be filled or capped due to public safety issues. It is unknown if this mine shaft provides suitable thermal or structural conditions for roosting bats. However, if the mine shaft is used as a day roost, hibernation roost, or maternity colony roost, implementation of the Proposed Project Alternative could result in injury and mortality of pallid bat, Townsend's big-eared bat, or other common bat species. Day roosts are used throughout the spring and summer and maternity colony roosts can be active from approximately early April until mid-October. Hibernation roosts may be used from approximately November to early March. Loss of individual bats would be considered a **potentially significant, direct** impact. There would be **no indirect** impact on special-status bat species.

Off-Site Elements

Wildlife Associated with Vernal Pools

The off-site elements would result in fill of approximately 0.59 acres of vernal pool, 0.25 acres of seasonal wetlands, or 0.55 acres seasonal wetland swales, which are potential habitat for vernal pool fairy shrimp, conservancy fairy shrimp, vernal pool tadpole shrimp, and western spadefoot toad. Construction of the off-site elements that support project development could result in loss of individuals or potential habitat for special-status wildlife associated with vernal pools. Indirect effects could include habitat degradation from runoff, erosion, siltation, or alteration of the hydrologic function of the wetlands. Therefore, **significant direct** and **indirect** impacts would occur.

Swainson's Hawk and Other Raptors

Construction of the off-site elements could result in disturbance to nesting Swainson's hawk or other raptors or direct removal of nest trees. Ground-disturbing activities near active nest trees could result in nest abandonment by the adults and mortality of chicks and eggs. Although the interchange improvements would result in loss of approximately 43 acres of annual grassland, these areas are not likely important raptor foraging areas, as they are adjacent to existing roadways and U.S. 50 and located in hilly terrain. Loss of an active Swainson's hawk or other raptor nest would be considered a **potentially significant direct** and **indirect** impact.

Valley Elderberry Longhorn Beetle

It is unknown if suitable habitat for valley elderberry longhorn beetle would be affected by the off-site elements. However, if elderberry shrubs with stems greater than 1 inch are present in or adjacent to project construction, **significant direct** or **indirect** impacts to valley elderberry longhorn beetle larvae could occur. There are no elderberry shrubs present at the off-site detention basin site or the off-site roadway connections into El Dorado County. Elderberry shrubs are present in the U.S. 50 Prairie City Road interchange improvement footprint.

Tricolored Blackbird

Construction activities for the off-site elements could result in disturbance to tricolored blackbird colonies, which may result in nest abandonment and loss of eggs or young. Due to the potential for large numbers of nesting tricolored blackbirds to be lost, this **direct** impact would be considered **potentially significant**. **Indirect** impacts on tricolored blackbirds from off-site construction would be **less than significant** because they are not expected to result in the mortality of individuals, chicks, or eggs.

Implementation of Mitigation Measures 3A.3-2a, 3A.3-2b, 3A.3-2c, 3A.3-2d, 3A.3-2e, 3A.3-2f, 3A.3-2g, and 3A.3-2h would lessen significant direct and indirect impacts on special-status wildlife resulting from the Proposed Project Alternative; however, this impact would remain **significant and unavoidable** because the direct removal of approximately 2,700 acres and indirect effect to approximately 800 acres of potential habitat for special-status wildlife cannot be fully mitigated. In addition, some of the off-site elements (two roadway connections in El Dorado County, detention basin in Sacramento County, and U.S. 50 interchange improvements) fall under the jurisdiction of El Dorado and Sacramento Counties and Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. The amount of habitat lost could potentially contribute to the decline of Swainson's hawk populations in the region. This decline would constitute a substantial adverse effect under CEQA.

Impacts on special-status wildlife species could be fully mitigated only through a combination of habitat preservation and restoration in the vicinity of the SPA. Parcels of similar habitat quality are currently present in the project vicinity, but these parcels would be of lesser value following development of the project because of the effects of habitat fragmentation and secondary and indirect impacts related to the project. Moreover, there would be a net loss of approximately 3,500 acres of potential habitat for special-status species regardless of the acreage

preserved. Therefore, fully compensating for the impact by preserving existing habitat in the project vicinity is infeasible. The mitigation does include elements of habitat creation and enhancement that would increase the habitat value of preserved lands so that mitigation habitat could be of greater value than habitat lost and degraded, but there is not sufficient undeveloped land in the project vicinity to offset the effects of habitat fragmentation on special-status species, and thus, fully mitigate the impact, or reduce it to a less-than-significant level.

No other feasible mitigation measures are available to reduce impacts associated with potential loss and degradation of habitat resulting from project development to a less-than-significant level because it is technically infeasible to allow new development without potential loss or degradation of habitat. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without potential loss or degradation of habitat, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to loss and degradation of habitat.

IMPACT 3A.3-3 Potential Loss or Degradation of Special-Status Plant Populations and Habitat. *Project implementation could result in direct removal of special-status plants, if they are present, through loss of suitable habitat or degradation of suitable habitat due to site alteration.*

Mitigation

Mitigation Measure 3A.3-3: Conduct Special-Status Plant Surveys; Implement Avoidance and Mitigation Measures or Compensatory Mitigation.

To mitigate for the potential loss or degradation of special-status plant species and habitat, the project applicant(s) for any particular discretionary development application shall adhere to the requirements described below.

- ▶ The project applicant(s) for any particular discretionary development application, including the proposed off-site elements, shall retain a qualified botanist to conduct protocol level preconstruction special-status plant surveys for all potentially occurring species. Preconstruction special-status plant surveys shall not be required for those portions of the SPA that have already been surveyed according to DFG and USFWS guidelines. If no special-status plants are found during focused surveys, the botanist shall document the findings in a letter report to USFWS, DFG, the City of Folsom, Caltrans (for interchange improvements to U.S. 50), El Dorado County (for roadway connections in El Dorado County), and Sacramento County (for the off-site detention basin) and no further mitigation shall be required.
- ▶ If special-status plant populations are found, the project applicant(s) of affected developments shall consult with DFG and USFWS, as appropriate depending on species status, to determine the appropriate mitigation measures for direct and indirect impacts on any special-status plant population that could occur as a result of project implementation. Mitigation measures may include preserving and enhancing existing populations, creation of off-site populations on project mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals.
- ▶ If potential impacts on special-status plant species are likely, a mitigation and monitoring plan shall be developed before the approval of grading plans or any ground-breaking activity within 250 feet of a special-status plant population. The mitigation plan shall be submitted to Caltrans (for interchange improvements to U.S. 50), El Dorado County (for impacts in roadway connections in El Dorado

County), Sacramento County (for impacts in the off-site detention basin footprint), or the City of Folsom (for on-site impacts and all other off-site elements), for review and approval. It shall be submitted concurrently to DFG or USFWS, as appropriate depending on species status, for review and comment. The plan shall require maintaining viable plant populations on-site and shall identify avoidance measures for any existing population(s) to be retained and compensatory measures for any populations directly affected. Possible avoidance measures include fencing populations before construction and exclusion of project activities from the fenced-off areas, and construction monitoring by a qualified botanist to keep construction crews away from the population. The mitigation plan shall also include monitoring and reporting requirements for populations to be preserved on site or protected or enhanced off-site.

- ▶ If relocation efforts are part of the mitigation plan, the plan shall include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements.
- ▶ If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits or other off-site conservation measures, the details of these measures shall be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, and other details, as appropriate to target the preservation on long term viable populations.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., Caltrans, El Dorado and/or Sacramento Counties).

Implementation: Project applicant(s) of all project phases and on- and off-site elements.

Timing: Before approval of grading or improvement plans or any ground disturbing activities, including grubbing or clearing, for any project phase, including off-site elements.

- Enforcement:**
1. U.S. Fish and Wildlife Service, California Department of Fish and Game.
 2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 3. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
 4. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 5. For the U.S. 50 interchange improvements: Caltrans.

Finding for Elements Within the City of Folsom’s Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Eleven special-status plant species have the potential to occur in the SPA and off-site improvement areas in vernal pool, seasonal wetland, freshwater marsh, pond, oak woodland, and grassland habitats. Protocol-level surveys for eight of these species—Ahart’s dwarf rush, Bogg’s Lake hedge-hyssop, dwarf downingia, legenere, pincushion

navarretia, Sacramento Orcutt grass, slender Orcutt grass, and Tuolumne button-celery—were conducted on the Folsom South property by ECORP in spring 2006 (MJM Properties LLC 2006) and no special-status plants were found. Protocol-level surveys were conducted on the Sacramento Country Day School property by Virginia Daines and Susan Saunders in spring 2005. Species targeted during the Country Day School surveys included the species targeted during the Folsom South surveys plus hoary navarretia (*Navarretia eriocephala*), a CNPS watch list species. No special-status plant species were found on the Sacramento Country Day School site. Neither of the surveys included big scale balsamroot, Brandegees clarkia, or Sanford's arrowhead as target species; therefore, these species could have been overlooked, if present during these surveys. Big scale balsamroot and Brandegees clarkia grow in upland habitats that were not focused on during the Folsom South surveys because the target species of those surveys are associated with vernal pools or other wetland habitats. Sanford's arrowhead is an emergent species that grows in shallowly inundated areas such as pond edges or slow-moving stream channels. This species has been documented immediately adjacent to the SPA. It is unlikely that ponds were included in the Folsom South surveys, since species targeted during those surveys do not typically grow in ponds. Suitable habitat for Sanford's arrowhead is not likely present on the Sacramento Country Day School site.

In 2009, ECORP conducted protocol-level surveys at the Hillsborough and Prairie City Business Park properties for all of the target species listed previously, except for big-scale balsamroot. No special-status plant species were found during these surveys.

Protocol-level special-status plant surveys were conducted on the Carpenter Ranch property by Gibson and Skordal during April, May, and June 2009. All of the target species were included in these surveys. No special-status plant species were found during the surveys conducted on Carpenter Ranch.

Special-status plant surveys have not been conducted on any of the other properties comprising the SPA or in any of the off-site improvement areas. Bogg's Lake hedge-hyssop, a species that is state-listed as endangered, has been documented in close proximity to the proposed off-site detention basin near the southwest boundary of the SPA. Potentially suitable habitat for this species is present on the proposed off-site detention basin site and there is high potential for it to be present there. Potentially suitable habitat for special-status plants is also present in the interchange improvement areas and the roadway connections into El Dorado County. In addition, because the project would be constructed in phases over a period of approximately 15 to 20 years, special-status plants could colonize previously surveyed areas before construction begins. Therefore, the possibility that special-status plants are present, or would be present at the beginning of construction, in the SPA or off-site improvement areas cannot be eliminated at this time.

Loss of suitable habitat as a result of project development could result in direct removal or mortality of special-status plants, if they are present. Project development could also result in indirect impacts on special-status plants including impacts caused by pollutants transported by urban runoff and other means, changes in vegetation as a result of changes in land use and management practices, altered hydrology from the construction of adjacent residential development and roadways, habitat fragmentation, and the introduction of invasive species or noxious weeds from surrounding development.

Because project development would result in loss and degradation of habitat that could support special-status plant species, **direct** and **indirect** impacts on special-status plant species are considered **potentially significant**.

Implementation of Mitigation Measure 3A.3-3 would reduce the potentially significant impacts on special-status plant species under the Proposed Project Alternative to a **less-than-significant** level because each phase of development would be required to identify and avoid special-status plant populations or provide compensation for the loss of special-status plants through creation of off-site populations, conservation easements, or other appropriate measures.

Finding for Elements Outside the City of Folsom's Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City's jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements (U.S. 50 interchange improvements, two roadway connections in El Dorado County, and detention basin in Sacramento County) fall under the jurisdiction of Caltrans, El Dorado County, and Sacramento County, respectively. Therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.3-3. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure MM 3A.3-3, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.3-4 **Loss of Sensitive Natural Communities (Not Already Covered under Other Impacts).** *Project implementation would result in loss of riparian habitat, and valley needlegrass grassland that may be present in the SPA and could be removed by project development. These are natural communities considered sensitive by state and local resource agencies and require consideration under CEQA.*

Mitigation

Implement Mitigation Measures 3A.3-1a and 1b.

Mitigation Measure 3A.3-4a: Secure and Implement Section 1602 Streambed Alteration Agreement.

The project applicant(s) for any particular discretionary development application shall obtain a Section 1602 streambed alteration agreement from DFG for all construction activities that would occur in the bed and bank of Alder Creek and other drainage channels and ponds on the SPA. As a condition of issuance of the streambed alteration agreement, the project applicant(s) for any particular discretionary development application affecting riparian habitat shall hire a qualified restoration ecologist to prepare a riparian habitat MMP. The draft MMP shall describe specific method(s) to be implemented to avoid and/or compensate for impacts on the stream channel of Alder Creek and other drainage channels within DFG jurisdiction, and the bed and banks of the on-site ponds. Mitigation measures may include establishment or restoration of riparian habitat within the project's open space areas along preserved stream corridors, riparian habitat restoration off-site, or preservation and enhancement of existing riparian habitat either on or off the SPA. The compensation habitat shall be similar in composition and structure to the habitat to be removed and shall be at ratios adequate to offset the loss of riparian habitat functions and services at the SPA. The riparian habitat compensation section of the habitat MMP shall include the following:

- ▶ compensatory mitigation sites and criteria for selecting these mitigation sites;
- ▶ complete assessment of the existing biological resources in both the on-site and off-site preservation and restoration areas;
- ▶ site-specific management procedures to benefit establishment and maintenance of native riparian plant species, including black willow, arroyo willow, white alder, and Fremont cottonwood;

- ▶ a planting and irrigation program if needed for establishment of native riparian trees and shrubs at strategic locations within each mitigation site (planting and irrigation may not be necessary if preservation of functioning riparian habitat is chosen as mitigation or if restoration can be accomplished without irrigation or planting);
- ▶ in kind reference habitats for comparison with compensatory riparian habitats (using performance and success criteria) to document success;
- ▶ monitoring protocol, including schedule and annual report requirements (compensatory riparian habitats shall be monitored for a minimum period of five years);
- ▶ ecological performance standards, based on the best available science and including specifications for native riparian plant densities, species composition, amount of dead woody vegetation gaps and bare ground, and survivorship; at a minimum, compensatory mitigation planting sites must achieve 80% survival of planted riparian trees and shrubs by the end of the five-year maintenance and monitoring period or dead and dying trees shall be replaced and monitoring continued until 80% survivorship is achieved;
- ▶ corrective measures if performance standards are not met;
- ▶ responsible parties for monitoring and preparing reports; and
- ▶ responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.

Any conditions of issuance of the Streambed Alteration Agreement shall be implemented as part of project construction activities that adversely affect the bed and bank and riparian habitat associated with Alder Creek and other drainage channels and ponds that are within the project area that is subject to DFG jurisdiction. The agreement shall be executed by the project applicant(s) and DFG before the approval of any grading or improvement plans or any construction activities in any project phase that could potentially affect the bed and bank of Alder Creek and other on-site or off-site drainage channels under DFG jurisdiction and their associated freshwater marsh and riparian habitat.

Mitigation for the U.S. 50 interchange improvements must be coordinated by the project applicant(s) of each applicable project phase with the Caltrans.

Implementation: Project applicant(s) of all project phases and the off-site Prairie City Road and Oak Avenue interchange improvements.

Timing: Before the approval of grading or improvement plans or any construction activities (including clearing and grubbing) that affect the bed and bank or riparian and freshwater marsh habitat associated with Alder Creek and other on-site or off-site drainage channels and ponds.

Enforcement:

1. California Department of Fish and Game.
2. City of Folsom Community Development Department.
3. Caltrans for interchange improvements to U.S. 50.

Mitigation Measure 3A.3-4b: Conduct Surveys to Identify and Map Valley Needlegrass Grassland; Implement Avoidance and Minimization Measures or Compensatory Mitigation.

The project applicant(s) of all project phases shall retain a qualified botanist to conduct preconstruction surveys to determine if valley needlegrass grassland is present on the SPA. This could be done concurrently with any special-status plant surveys conducted on site as special-status plant surveys are floristic in nature, i.e. require that all species encountered be identified, and require preparation of a plant community map. If valley needlegrass grassland is not found on the SPA, the botanist shall document the findings in a letter report to the City of Folsom, and no further mitigation shall be required. Valley needlegrass grassland was not found in any of the off-site project elements.

If valley needlegrass grassland is found on the SPA, the location and extent of the community shall be mapped and the acreage of this community type, if any, that would be removed by project implementation shall be calculated. The project applicant(s) for any particular discretionary development application affecting valley needlegrass grassland shall consult with DFG and the City of Folsom to determine appropriate mitigation for removal of valley needlegrass grassland resulting from project implementation. Mitigation measures shall include one or more of the following components sufficient to achieve no net loss of valley needlegrass grassland acreage: establishment of valley needlegrass grassland within project's open space areas currently characterized by annual grassland, establishment of valley needlegrass grassland off-site, or preservation and enhancement of existing valley needlegrass grassland either on or off the SPA. The applicant(s) shall compensate for any loss of valley needlegrass grassland resulting from project implementation at a minimum 1:1 replacement ratio.

Implementation: Project applicant(s) for any particular discretionary development application affecting valley needle grassland.

Timing: Before approval of grading or improvement plans or any ground-disturbing activities, including grubbing or clearing, for any project phase.

Enforcement: 1. California Department of Fish and Game.
2. City of Folsom Community Development Department.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The SPA supports approximately 11 acres of riparian habitat. Implementation of the Proposed Project Alternative would result in removal of approximately 0.70 acre of riparian habitat associated with Alder Creek and its tributaries. Construction of the Prairie City Road and Oak Avenue interchanges would result in removal of an additional 3.3 acres of riparian habitat associated with Alder Creek and tributaries. Construction of the off-site detention basin, the Rowberry Drive Overcrossing, the underground sewer force main, and two off-site roadway connections into El Dorado County would have no impact on riparian habitat. The interchange improvements to U.S. 50 at Prairie City Road would affect riparian habitat.

Potential indirect impacts on riparian habitat include degradation caused by pollutants transported by urban runoff, changes in vegetation as a result of changes in land use and management practices, altered site hydrology from the construction of adjacent residential development and roadways, and the introduction of invasive species or noxious weeds from the surrounding development, and intrusion by humans and domestic animals that could disturb riparian vegetation and reduce habitat values.

The SPA may also support valley needlegrass grassland, a community identified as sensitive by DFG and tracked in the CNDDDB. Although plant communities in the SPA were mapped by ECORP, valley needlegrass grassland blends in with annual grassland and often occurs as small patches in large expanses of annual grassland. For this reason it is easily overlooked unless someone is specifically searching for it and may be present in patches too small to have been identified at the coarse scale that upland habitats were mapped. Valley needlegrass grassland has been identified adjacent to the SPA and could be present in the SPA. If present, valley needlegrass grassland could be removed as a result of project implementation. This community was not found in any of the off-site improvement areas.

The loss and degradation of riparian habitat that would occur with project implementation constitutes an adverse effect on a sensitive natural community regulated by DFG under Section 1602 of the California Fish and Game Code. Therefore, a **direct** and **indirect significant** impact would result.

The loss of valley needlegrass grassland would be an adverse effect on a sensitive natural community. Because it is unknown if this community is present in the SPA, this is considered a **potentially significant direct** impact.

Implementation of the mitigation measures described above would reduce significant impacts on sensitive natural communities under the Proposed Project Alternative, and the off-site Prairie City Road and Oak Avenue interchange elements to a **less-than-significant** level because a mitigation and monitoring plan ensuring adequate compensation for the loss of riparian habitat would have to be developed and implemented as a condition of the streambed alteration permit and because valley needlegrass grassland would be identified and mapped in the SPA and the removed acreage of this community would be compensated through establishment elsewhere or preservation and enhancement of existing acreage of valley needlegrass grassland.

Finding for Elements Outside the City of Folsom's Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City's jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements (U.S. 50 interchange improvements, two roadway connections in El Dorado County, and detention basin in Sacramento County) fall under the jurisdiction of Caltrans, El Dorado County, and Sacramento County, respectively. Therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measures 3A.3-1a, 3A.3-1b, 3A.3-4a, and 3A.3-4b. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measures 3A.3-1a, 3A.3-1b, 3A.3-4a, and 3A.3-4b, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.3-5 **Loss of Blue Oak Woodland and Individual Oak Trees.** *Project implementation would result in the removal of blue oak woodland. In addition, individual oak trees meeting the criteria for protection under Folsom Municipal Code and the Sacramento County Tree Ordinance, but not included within the oak woodland, would also be removed.*

Mitigation

Mitigation Measure 3A.3-5: Conduct Tree Survey, Prepare and Implement an Oak Woodland Mitigation Plan, Replace Native Oak Trees Removed, and Implement Measures to Avoid and Minimize Indirect Impacts on Oak Trees and Oak Woodland Habitat Retained On Site.

The project applicant(s) shall prepare an oak woodland mitigation and monitoring plan. The project applicant(s) of all on- and off-site project phases containing oak woodland habitat or individual trees shall adhere to the requirements described below, which are consistent with those outlined in California Public Resources Code 21083.4.

Pursuant to Sacramento County General Plan policy, the acreage of oak woodland habitat for determining impacts and mitigation requirements was calculated as the oak tree canopy area within stands of oak trees having greater than 10% cover plus a 30-foot-radius buffer measured from the outer edge of the tree canopy. Oak trees located in areas greater than 30 feet from stands meeting the greater than 10% tree canopy cover criterion were considered isolated trees and not part of the blue oak woodland community. Mitigation for impacts on isolated oak trees is discussed separately below.

- ▶ Preserve approximately 399 acres of existing oak woodland habitat in the SPA (this acreage is based on the extent of oak woodland habitat as determined from aerial photograph interpretation; however, following completion of ground verification by a qualified arborist, the actual amount of oak woodland present within impact areas could be slightly greater or lesser than the amount calculated from aerial photograph and, therefore, the amount preserved could also be slightly greater or lesser than 399 acres).
- ▶ Create 243 acres of oak woodland habitat in the SPA by planting a combination of blue oak acorns, seedlings, and trees in the following SPA locations:
 - Non-wooded areas that are adjacent to or contiguous with the existing oak woodland habitat.
 - Preserve and passive open space zones throughout the SPA.
 - Open space areas that are adjacent to existing oak woodlands that will be impacted by project grading (i.e. catch slopes).
 - Other practical locations within the SPA in or adjacent to open space.

Oak Woodlands Mitigation Planting Criteria

The following oak woodland mitigation planting criteria shall be used to create oak woodland habitat:

- A minimum of 55 planting sites per acre (with a total of 70 units, as defined below) will mitigate for one acre of oak woodland impacts. A combination of acorns, seedlings, and various sizes of container trees (#1 container, #5 container, #15 container) or transplanted trees shall be incorporated into the planting design. Mitigation acreage that is planted solely with larger oak trees (no acorns) shall have a minimum of 35 planting sites per acre. The units are defined as follows:
 - One established acorn equals one unit (acorns will be over planted to maximize potential germination).
 - One oak seedling equals one unit.

- One #1 container oak tree equals two units.
 - One #5 container oak tree equals three units.
 - One #15 container oak tree equals four units.
 - One 24-inch boxed oak tree equals six units.
 - One transplanted oak tree equals four units per trunk diameter inch (dbh).
 - Native non oak species characteristic of oak woodlands shall be included in the mitigation planting plan to augment overall habitat values. Each non oak tree species shall represent unit values described above for oak trees, but non oak species shall comprise no more than 10% of the mitigation plantings.
- ▶ Preserve and protect existing off-site oak woodland habitat. Existing, unprotected oak woodland habitat within Sacramento and El Dorado Counties may be secured and placed under conservation easement in lieu of onsite mitigation measures if necessary. The off-site locations would be managed as oak woodland habitat in perpetuity.
 - ▶ Create oak woodlands off site. Plant a combination of blue oak acorns, seedlings, and trees at off-site location(s), if needed to achieve the creation goal of 243 acres of new blue oak woodland habitat. This measure would only be needed if 243 acres of blue oak woodland could not be created in the SPA. Off-site creation shall follow the same guidelines as outlined in the Mitigation Planting Criteria for on-site creation. Off-site tree planting shall occur at sites within Sacramento County that should naturally support blue oak woodland and shall be used to restore former blue oak woodland habitat that has been degraded or removed through human activities. Restoration shall be designed to result in species composition and densities similar to those in the SPA prior to project development. Planted areas shall be placed under conservation easement and managed as oak woodland habitat in perpetuity.
 - ▶ The oak woodland mitigation plan prepared by the project applicant(s) shall include a maintenance and monitoring program for any replacement trees. The program shall include monitoring and reporting requirements, schedule, and success criteria. Replacement oak trees shall be maintained and monitored for a minimum of eight years from the date of planting and irrigation shall be provided to planted trees for the first five years after planting. Any replacement trees that die during the monitoring period shall be replaced in sufficient numbers to achieve 80% survival rate for planted trees by the end of the eight-year maintenance and monitoring period. Dead and dying trees shall be replaced and monitoring continued until 80% survivorship is achieved. Security acceptable to the City and sufficient to cover maintenance and monitoring costs for eight years shall be provided to the City Planning Department. The security will be forfeited if the project applicant or designated responsible party fails to provide maintenance and monitoring and meet the success criteria.

Isolated Oak Tree Mitigation

The project applicant(s) of all on-site project phases containing oak woodland habitat or isolated trees and the off-site Prairie City Road and Oak Avenue interchange improvements to U.S. 50; Rowberry Drive Overcrossing; and the underground sewer force main shall develop a map depicting the tree canopy of all oak trees in the survey area and identifying the acreage of tree canopy that would be preserved and the acreage that would be removed. A tree permit for removal of isolated oak trees (those not located within the delineated boundary of oak woodland habitat) shall be obtained from the City Planning Director. As a condition of the tree removal permit, project applicant(s) shall be required to develop a Planting and Maintenance Agreement. The City's Tree Preservation Code requires compensatory mitigation and the

City and the project applicants have developed a plan, as set forth Section 10 of the Folsom Plan Area Specific Plan (attached to this EIR/EIS as Appendix N) specifically to avoid and minimize adverse effects on isolated oak trees from project development and to provide compensatory mitigation for removal of protected trees in the SPA. In addition to the language contained in the Folsom Plan Area Specific Plan, the following elements shall be included in a protected tree mitigation plan to be developed by the project applicants and agreed upon by the City:

- ▶ Project applicant(s) of projects containing isolated oak trees shall retain a certified arborist or registered professional forester to perform a determinate survey of tree species, size (dbh), condition, and location for all areas of the project site proposed for tree removal and encroachment of development. The condition of individual trees shall be assessed according to the American Society of Consulting Arborists rating system with the following added explanations:
 - 5 = Excellent; No problems – tree has no structural problems, branches are properly spaced and tree characteristics are nearly perfect for the species.
 - 4 = Good; No apparent problems – tree is in good condition and no apparent problems from visual inspection. If potential structural or health problems are tended at this stage, future hazard can be reduced and more serious health problems can be averted.
 - 3 = Fair; Minor problems – There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.
 - 2 = Poor; Major problems – the tree is in poor condition, but the condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, and fertilization. If the recommended actions are completed correctly, hazard can be reduced and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.
 - 1 = Hazardous or non correctable condition – the tree is in extremely poor condition and in non-reversible decline. This rating is assigned to a tree that has structural and/or health problems that no amount of tree care work or effort can change. The issues may or may not be considered a dangerous situation. The tree may also be infested with a disease or pest(s) that is non-controllable at this time and is causing an unacceptable risk of spreading the disease or pests(s) to other trees.
 - 0 = Dead – the tree has no significant signs of life (dead or very close to being dead).

Isolated Oak Tree Mitigation Planting Criteria

- ▶ The determination for whether an isolated tree shall be preserved, removed without compensation, or removed with compensatory mitigation shall be based on the condition and size of the tree as follows:
 - Trees rated 0 or 1 may be removed with no mitigation.
 - Trees rated 2 may be removed at 50% of the normal Folsom Municipal Code mitigation.
 - Trees rated 3, 4, and/or 5 may be removed at the normal Folsom Municipal Code mitigation.
 - Native isolated oaks measuring 24 inches or greater dbh for a single trunk or 40 inches or more for a multi-trunked tree and rated a 3 to 5 shall be retained, unless retaining wall(s) higher than 4

feet tall (from bottom of footing to the top of the wall) would be required to protect the tree(s) from mass grading of the SPA properties.

- Native oaks measuring between 12 and 24 inches dbh and rated a 4 or 5 shall not be removed or mitigated unless wall(s) higher than 4 feet tall (from bottom of footing to the top of the wall) would be required to protect the tree(s) from mass grading of the SPA properties. Trees in this size class but rated 2 or 3 shall not be removed unless unreasonable costs to save the tree(s) (greater than the cost of implementing the isolated oak tree mitigation planting criteria described here) would result.
- Native oaks measuring 5 inches or greater dbh but less than 12 inches dbh shall not be removed unless unreasonable costs to save the tree(s) (greater than the cost of implementing the isolated oak tree mitigation planting criteria described here) would result.
- Native oak trees measuring 1 inch or greater dbh but less than 5 inches dbh may be preserved to receive a Small Tree Preservation Credit (STPC). Any tree that is to be considered for preservation credit shall be evaluated, included in the arborist report, and shall have been found to be rated a 3, 4, or a 5. Credits shall only be accepted if the tree protection zone (TPZ) (i.e., the outer edge of the tree canopy drip line) is protected with fencing in the exact manner that 5 inches dbh and greater trees are protected on a construction site, and the spacing is equal to the proper tree spacing dictated by the Folsom Master Tree List. STPC shall not count if they the tree is in a poor growing space due to its position within the TPZ of another protected tree to be preserved. The City shall accept the preservation of native oak trees in this size class as credit towards the total removed inches based on the following STPC criteria:

Caliper of Tree Preserved	Mitigation Tree Credit Equivalent
1 inch or greater, but less than 2 inches	One #15 container tree or two #5 container trees
2 inches or greater, but less than 3 inches	Two #15 container trees
3 inches or greater, but less than 4 inches	Three #15 container trees
4 inches or greater, but less than 5 inches	Four #15 container trees

- ▶ Folsom Municipal Code requires one of the following be planted as compensation for each diameter inch of protected tree removed:
 - half of a 24-inch box tree,
 - one #15 container tree,
 - two #5 container trees, or
 - \$150 in-lieu payment or other fee set by City Council Resolution.
- ▶ The Planting and Maintenance Agreement shall include a planting plan, planting and irrigation design details, and a weaning schedule for the establishment period. The plan shall include a 5-year establishment period for trees and 8 years for planted acorns with an annual monitoring report that includes corrections needed with proposed work plan, and notice of compliance within 90-days of annual monitoring report. Security in an form acceptable to the City and sufficient to cover maintenance and monitoring costs for eight years shall be provided to the City Planning Department. The security will be forfeited if the project applicant or designated responsible party fails to fulfill the Planting and Maintenance Agreement.
- ▶ To avoid and minimize indirect impacts on protected trees to remain on the SPA, the project applicant(s) of all affected project phases shall install high visibility fencing outside the outer edge of the drip lines of all trees to be retained on the SPA during project construction. The fencing may be installed around groups or stands of trees or whole wooded areas but must be installed so that the

drip lines of all trees are protected. Grading, trenching, equipment or materials storage, parking, paving, irrigation, and landscaping shall be prohibited within the fenced areas (i.e. drip lines of protected trees). If the activities listed cannot be avoided within the drip line of a particular tree, that tree shall be counted as an affected tree and compensatory mitigation shall be provided, or the tree in question shall be monitored for a period of five years and replaced only if the tree appears to be dead or dying within five years of project implementation.

Through a combination of the mitigation options presented above along with the proposed on-site preservation of blue oak woodland habitat in the open space areas, the project applicant(s) can satisfy the mitigation requirements for removal of trees protected under the Folsom Municipal Code while also mitigating the impacts on oak woodland habitat, as determined through consultation with the Sacramento County Planning Department (for County off-site impacts only) and/or the City of Folsom.

Mitigation for the U.S. 50 interchange improvements must be coordinated by the project applicant(s) of each applicable project phase with Caltrans.

Implementation: Project applicant(s) of all project phases and off-site elements affecting blue oak woodland and protected trees.

Timing: Before approval of grading or improvement plans or any ground disturbing activities, including grubbing or clearing, for any project phase containing protected trees or oak woodland.

Enforcement:

1. City of Folsom Community Development Department.
2. Caltrans for interchange improvements to U.S. 50.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS

The Proposed Project Alternative has been designed to retain a substantial portion of the on-site blue oak woodland habitat within designated open space. However, as shown in Table 3-14 (Table 3A.3-5 on page 3A.3-76 of the DEIR/DEIS) below, implementation of the Proposed Project Alternative would still result in the removal or disturbance of 243 acres of blue oak woodland habitat containing 81.6 acres of oak tree canopy, and another 8.4 acres of isolated native oak tree canopy not contiguous with the blue oak woodland habitat (see also Exhibit 3A.3-12 on page 3A.3-89 of the DEIR/DEIS). Tree surveys conducted on the Folsom 138, Folsom South, Carpenter Ranch, and Sacramento Country Day School properties identified a total of 16,605 blue oak trees, 285 interior live oak trees, 114 valley oak trees, and 1 walnut tree meeting criteria for protection under Folsom Municipal Code. Tree surveys were not conducted on all parcels containing trees, but this information provides a general idea of the woodland composition in the SPA.

Development of the Proposed Project Alternative would also involve contour grading, mitigation planting, road and trail development, and creation of impervious surfaces within and immediately adjacent to open space areas containing protected oak trees. These activities could result in indirect impacts affecting oak tree root systems such as trenching, grading, soil compaction, placement of fill, impervious surfaces, irrigation, and landscaping within the drip lines of oak trees, which can lead to root damage ultimately resulting in death of the tree. Additional indirect impacts could result from habitat fragmentation, introduction of invasive species or noxious weeds, vegetation management practices (e.g., clearing for fire control), and intrusion by humans and domestic animals that could disturb oak woodland vegetation and reduce habitat values.

**Table 3-14
Summary of Blue Oak Woodland Impacts and Preservation for Each Project Alternative**

Alternative	Acres of Existing Habitat	Acres of Impact	Acres Preserved	% Preserved
No Project	642.1	Unknown	Unknown	Unknown
No USACE Permit	642.1	130.1	512.1	79
Proposed Project	642.1	243.1	399.1	62
Resource Impact Minimization	642.1	154.7	487.5	75
Centralized Development	642.1	213.5	428.6	66
Reduced Hillside Development	642.1	245.8	396.4	61

Note: The acres of impact and acres and % preserved cannot be determined under the No Project Alternative. Making such estimates would be considered too speculative for meaningful consideration because it cannot be predicted if such development under the Sacramento County General Plan would occur and the location in which it would occur. Development applications would be submitted and processed individually through the County.

Source: ECORP 2009a

Removal of blue oak woodland and individual oak trees and other trees meeting minimum DBH criteria would conflict with local ordinances, specifically Folsom Municipal Code, as would damage to the root zones of protected trees that leads to eventual death of the trees. Furthermore, blue oak woodland is considered a sensitive natural community by DFG and California Public Resources Code 21083.4 requires counties to consider the environmental effects of oak woodland conversion. Therefore, a **direct** and **indirect significant** impact would result.

Off-Site Elements

Development of the interchange improvements to U.S. 50 would result in removal of an additional 598 blue oak trees, 43 valley oak trees, and 61 interior live oak trees meeting criteria for protection under Folsom Municipal Code. Protected trees that would be removed for off-site improvements are as follows: 173 oak trees and 2 street trees at the Prairie City Road Interchange, 527 oak trees at the Oak Avenue interchange, and 3 oak trees at the Rowberry Drive Overcrossing. An additional 32 native oak trees could be removed or damaged during construction of the underground sewer force main.

A total of 39.9 acres of oak woodland habitat would be removed as a result of implementation of the off-site project elements. This acreage consists of 6.5 acres at the Prairie City Road interchange, 31.4 acres at the Oak Avenue interchange, 0.3 acre at the Rowberry Drive Overcrossing, and 1.7 acres at the underground sewer force main.

Construction of the U.S. 50 interchange improvements and the underground sewer alignment would result in removal of blue oak woodland and individual oak trees and other trees meeting minimum dbh criteria, which would conflict with Folsom Municipal Code, as would damage to the root zones of protected trees that leads to eventual death of the trees. Furthermore, blue oak woodland is considered a sensitive natural community by DFG and California Public Resources Code 21083.4 requires counties to consider the environmental effects of oak woodland conversion. Therefore, a **direct** and **indirect significant** impact would occur from construction of the Prairie City Road and Oak Avenue interchanges, Rowberry Drive Overcrossing, and the underground sewer force main.

Implementation of Mitigation Measure 3A.3-5 would reduce significant impacts from loss of blue oak woodland and protected trees under the Proposed Project Alternative and the off-site elements, but not to a less-than-significant level because the loss of individual oak trees and blue oak woodland acreage and function would be

extensive and would contribute substantially to the regional loss of this resource. It is unknown at this time if blue oak woodland habitat acreage having similar tree sizes and densities, species composition, site condition, and landscape context to the blue oak woodland to be removed would be available for purchase and preservation in perpetuity. While preserving oak woodland habitat in the SPA to the maximum extent possible is desirable and valuable, the quality of oak woodland habitat remaining on the site after project development would be diminished because it would be converted from a large, contiguous patch of oak woodland habitat surrounded by undeveloped grasslands to a smaller habitat patch dissected by paved roads and surrounded by urban development. Furthermore, planting replacement trees would result in temporal losses of oak tree resources until the replacement trees reached comparable sizes as the trees to be removed; a process that would take many decades. In addition, the U.S. 50 interchange improvements fall under the jurisdiction of Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Therefore, impacts on blue oak woodland and protected trees would remain **significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with the loss of blue oak woodland or individual oak trees resulting from project development to a less-than-significant level because it is technically infeasible to allow new development without some potential for loss of blue oak woodland or individual oak trees. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without potential loss of blue oak woodland or individual oak trees, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to loss of blue oak woodland or individual oak trees.

BIOLOGICAL RESOURCES – WATER

IMPACT 3B.3-1 **Loss and Degradation of Waters of the U.S., including Wetlands, and Waters of the State.** *Construction of the Off-site Water Facility Alternatives has the potential to result in substantial adverse effects to Federally and state-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to vernal pools and seasonal wetlands) through direct fill or excavation, hydrological interruption, or other indirect impacts. Wetlands, waters of the state, and other waters of the U.S. that would be affected by implementation of the Off-site Water Facility Alternatives include seeps, vernal pools, seasonal wetlands and seasonal wetland swales, drainage channels, ditches, and ponds.*

Mitigation

Implement Mitigation Measure 3A.3-1a.

Mitigation Measure 3B.3-1a: Secure Clean Water Act Section 404 Permit and Implement All Permit Conditions; Ensure No Net Loss of Functions of Wetlands, Other Waters of the U.S., and Waters of the State.

Before the approval of grading and improvement plans and before any groundbreaking activity associated with the Off-site Water Facilities requiring fill of wetlands or other waters of the U.S. or waters of the state, the City shall obtain all necessary permits under Sections 401 and 404 of the CWA or the state's Porter-Cologne Water Quality Control Act for the respective phase. For each respective Off-site Water Facility component, all permits, regulatory approvals, and permit conditions for effects on wetland habitats shall be secured before implementation of any grading activities within 250 feet of waters of the U.S. or wetland habitats, including waters of the state, that potentially support Federally listed species. The City shall commit to replace, restore, or enhance on a "no net loss" basis (in accordance with USACE and the Central Valley RWQCB) the acreage of all wetlands and other waters of the U.S. that would be removed, lost, and/or degraded with implementation of project plans for that phase. Wetland habitat shall

be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE, the Central Valley RWQCB, and the City, as appropriate, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes.

As part of the Section 404 permitting process, a draft wetland mitigation and monitoring plan (MMP) shall be developed for the selected Off-site Water Facility Alternative on behalf of the City. Before any ground-disturbing activities that would adversely affect wetlands and before engaging in mitigation activities associated with each phase of development, the City shall submit the draft wetland MMP to USACE and the Central Valley RWQCB for review and approval of those portions of the plan over which they have jurisdiction. The MMP would have to be approved prior to issuance of a Section 404 permit. Once the final MMP is approved and implemented, mitigation monitoring shall continue for a minimum of 5 years from completion of mitigation, or human intervention (including recontouring and grading), or until the performance standards identified in the approved MMP have been met, whichever is longer.

As part of the MMP, the City shall prepare and submit plans for the creation of aquatic habitat in order to adequately offset and replace the aquatic functions and services that would be lost, account for the temporal loss of habitat, and contain an adequate margin of safety to reflect anticipated success. Restoration of previously altered and degraded wetlands shall be a priority of the MMP for offsetting losses of aquatic functions on the project site because it is typically easier to achieve functional success in restored wetlands than in those created from uplands. The MMP must demonstrate how the aquatic functions and values that would be lost through project implementation will be replaced.

The habitat MMP for jurisdictional wetland features shall be consistent with USACE's and EPA's April 10, 2008 *Final Rule for Compensatory Mitigation for Losses of Aquatic Resources* (33 CFR Parts 325 and 332 and 40 CFR Part 230). According to the *Final Rule*, mitigation banks should be given preference over other types of mitigation because a lot of the risk and uncertainty regarding mitigation success is alleviated by the fact that mitigation bank wetlands must be established and demonstrating functionality before credits can be sold. This also alleviates temporal losses of wetland function while compensatory wetlands are being established. Mitigation banks also tend to be on larger, more ecologically valuable parcels and are subjected to more rigorous scientific study and planning and implementation procedures than typical permittee-responsible mitigation sites (USACE and EPA 2008). It is not likely feasible to provide compensatory mitigation for all aquatic resource impacts on site. Therefore, a combination of on-site and off-site permittee-responsible mitigation and mitigation banking would likely be necessary to achieve the no-net-loss standard.

Compensatory mitigation for losses of stream and intermittent drainage channels shall be achieved through in-kind preservation, restoration, or enhancement, as specified in the *Final Rule* guidelines. The wetland MMP shall address how to mitigate impacts on all aquatic resource types and shall describe specific method(s) to be implemented to avoid and/or mitigate any Off-site Water Facility-related impacts. The wetland compensation section of the habitat MMP shall include all the contents identified in Mitigation Measure 3A.3-1A.

USACE has determined that the Off-site Water Facilities may require an individual permit. In its final stage and once approved by USACE, the MMP for the Off-site Water Facilities is expected to detail proposed wetland restoration, enhancement, and/or replacement activities that would ensure no net loss of aquatic functions in the project vicinity. Approval and implementation of the wetland MMP shall aim to fully mitigate all unavoidable impacts on jurisdictional waters of the U.S., including jurisdictional wetlands. To satisfy the requirements of the City and the Central Valley RWQCB, mitigation of impacts on the non-jurisdictional wetlands beyond the jurisdiction of USACE shall be included in the same MMP. All mitigation requirements determined through this process shall be implemented before grading plans are approved. The MMP shall be submitted to USACE and approved prior to the issuance of any permits under Section 404 of the CWA.

Water quality certification pursuant to Section 401 of the CWA will be required before issuance of the Section 404 permit. Before construction in any areas containing wetland features, the City shall obtain water quality certification for the Off-site Water Facilities. Any measures required as part of the issuance of water quality certification shall be implemented.

Implementation: City of Folsom Utilities Department.

Timing: Before the approval of grading or improvement plans or any ground-disturbing activities for all the Off-site Water Facilities containing wetland features or other waters of the U.S. The MMP must be approved before any impact on wetlands can occur. Mitigation shall be implemented on an ongoing basis throughout and after construction, as required.

Enforcement: U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Game.

Mitigation Measure 3B.3-1b: Maximize Use of Trenchless Technology for Conveyance Pipeline Design.

Following the selection of a Off-site Water Facility Alternative, the City shall design and route the water conveyance pipeline to avoid waters of the U.S. and State, including wetlands and vernal pools, to the maximize extent practical. Where avoidance is not practical, the City shall maximize the use of trenchless technologies (micro-tunneling or jack-and-bore), where feasible.

All trenchless construction crossings will include the preparation of a Frac-Out (or inadvertent return of drilling lubricants) Contingency Plan for tunneling activities that use drilling lubricants (e.g., construction of pipelines using jack-and-bore methods). The purpose of the plan will be to minimize the potential for a frac-out associated with tunneling activities, provide for the timely detection of frac-outs, and ensure an organized, timely, and “minimum-impact” response in the event of a frac-out and release of drilling lubricant (i.e., bentonite). Preparation and implementation of a Frac-Out Contingency Plan will be reflected in contract documents.

Implementation: City of Folsom Utilities Department.

Timing: Prior to and during construction of all Off-site Water Facilities.

Enforcement: U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Regional Water Quality Control Board, California Department of Fish and Game.

Mitigation Measure 3B.3-1c: Restore all Waters Impacted by Trenching and Temporary Construction Staging Areas to Pre-Project Contours and Conditions.

For all water line crossings of waters of the U.S. or waters of the state in which the use of trenchless technologies are not feasible, the City shall ensure that all waters impacted by trenching activities are restored to pre-project contours and conditions. In addition, within 30 days following project construction, the City shall ensure that all temporary construction staging areas within waters of the U.S. or waters of the state are restored to pre-project contours and conditions.

At minimum, the City shall ensure that the following measures are implemented during construction:

- ▶ Conduct trenching and construction activities across drainages during low-flow (e.g., <1 to 2 cfs) or dry periods as feasible;

- ▶ If working in active channels, install cofferdam upstream and downstream of stream crossing to separate construction area from flowing waterway;
- ▶ Place sediment curtains upstream and downstream of the construction zone to prevent sediment disturbed during trenching activities from being transported and deposited outside of the construction zone;
- ▶ Locate spoil sites such that they do not drain directly into the drainages or seasonal wetlands;
- ▶ Store equipment and materials away from the drainages and wetland areas. No debris will be deposited within 250 feet of the drainages and wetland areas;
- ▶ Prepare and implement a revegetation plan to restore vegetation in all temporarily disturbed wetlands and other waters using native species seed mixes and container plant material that are appropriate for existing hydrological conditions.

Before the approval of grading and improvement plans and before any groundbreaking activity associated with the Off-site Water Facilities requiring fill of wetlands or other waters of the U.S. or waters of the state, the City shall submit a wetland mitigation and monitoring plan (MMP) for the restoration of these waters within the selected water alignment to the USACE and Central Valley RWQCB for review and approval of those portions of the plan over which they have jurisdiction. The MMP would have to be approved prior to issuance of a Section 404 permit. Once the final MMP is approved and implemented, mitigation monitoring shall continue for a minimum of 5 years from completion of restoration activities, or human intervention (including recontouring and grading), or until the performance standards identified in the approved MMP have been met, whichever is longer.

At minimum, the MMP shall provide the following information:

- ▶ A description and drawings showing the existing contours (elevation) and existing vegetation of the waters of the U.S. and waters of the state that would be impacted through trenching activities. This information shall include site photographs taken at each impacted water.
- ▶ Methods used to ensure that trenching within waters of the U.S. and waters of the state do not adversely alter existing hydrology, including the draining of the waters (e.g., use of cut-off walls).
- ▶ The methods used to restore the site to the original contour and condition, as well as a plan for the revegetation of the site following installation of the water line.
- ▶ Proposed schedule for restoration activities.

Implementation: City of Folsom Utilities Department.

Timing: Before the approval of grading or improvement plans or any ground-disturbing activities for all the Off-site Water Facilities containing wetland features or other waters of the U.S.

Enforcement:

1. U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Regional Water Quality Control Board, California Department of Fish and Game.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.

3. For improvements within Sacramento County or City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Construction and operations of the Proposed Off-site Water Facility Alternative could involve construction-related, direct and indirect impacts to wetlands and waters of the U.S. within Zone 4 of the “Water” Study Area. A total of approximately 50.7 acres of waters of the U.S., including wetlands and vernal pools, occurs within the 200-foot pipeline corridor under consideration for these alternatives. Based on the hydrological changes anticipated within Zones 1 and 2 as a result of the Proposed Off-site Water Facility Alternative as described in more detail in Section 3B.9, “Hydrology and Water Quality – Water,” these operational changes could affect existing riparian vegetation along the Sacramento River. These separate, interconnected impacts are discussed in more detail under the following subheadings. The analysis of potential wetland impacts for On-site WTP is covered under Section 3A.3, Biological Resources – “Land.”

Implementation of the Proposed Off-site Water Facility Alternative could result in direct and indirect impacts to waters of the U.S. as result of the placement of fill materials or excavation within jurisdictional waters of the U.S., including wetlands within the pipeline corridor for the Proposed Off-site Facility Alternative. In reality, construction of the Off-site Water Facility Alternatives would be expected to affect a corridor of less than 100 feet in width and, to the extent feasible, the City would route the pipeline alignment to avoid waters of the U.S.; especially within the permanent easement. For this reason and to enable preliminary evaluation, the City has evaluated both sides of the corridor under consideration to determine where reductions in direct and indirect wetland impacts could be achieved. The left and right sides of the alignment corridor are defined as the sides of the roadway when facing in the direction of flow (i.e., facing toward the SPA, with the source of water or Freeport Project at the observer’s back).

The 200-foot corridor for the Proposed Off-site Water Facility Alternative contains a total of ±12.9 acres of waters of the U.S., including wetlands and vernal pools. Table 3B.3-4 provides a breakdown of the different wetland types potentially impacted by construction of the conveyance pipeline and WTP under this alternative. As shown in the table, along the left half of the two-hundred-foot corridor up to 0.53 acres of seasonal wetland, 0.96 acres of seasonal wetland swale, 2.01 acres of vernal pools, 0.5 acres of riverine habitat, 1.28 acres of freshwater emergent wetland, and 0.44 acres of freshwater pond could be subject to fill, excavation, or indirect impacts (e.g., sedimentation) during construction. Along the right half of the two-hundred-foot corridor, up to 1.09 acres of seasonal wetland, 1.18 acres of seasonal wetland swale, 3.12 acres of vernal pools, up to 1.09 acres of freshwater emergent wetland, 0.16 acres of riverine habitat, and 0.12 acres of freshwater forested/willow scrub could be subject to fill, excavation, or indirect impacts (e.g., sedimentation) during construction.

The potential for direct and indirect impacts to wetlands and waters of the U.S. exists. A majority of the direct effects would occur in areas where the conveyance alignment deviates outside the actual roadway or right-of-way and intersects with wetlands or other waters of the U.S. Although the City would to the maximum extent practical, route the conveyance pipeline along roadways or within portions of the roadway shoulder not containing wetlands, the possibility for the construction and permanent easement to impact wetlands directly or indirectly is high given the number and frequency of potentially jurisdictional features. Additionally, this alternative travels cross-country, east of the end of Gerber Road and through an area containing vernal pools and riverine channels associated with Laguna Creek. This area contains a wetland preserve area immediately to the south of East Bay Municipal Utility District’s (EBMUD’s) easement for Segment 3 of the Freeport Project.

Based on the preliminary estimates provided in Table 3B.3-4 of the DEIR/DEIS, the potential **direct and indirect** impacts to waters of the U.S., including wetlands, under this alternative could be up to 6.8 acres. Because the City has not yet completed project specific engineering details for this alternative, the actual impacts to waters of the U.S., including wetlands, cannot be determined. Based on these considerations, impacts to wetlands and waters of the U.S. could be **potentially significant**.

Implementation of Mitigation Measures 3B.3-1a, 3B.3-1b, 3B.3-1c, and 3A.3-1a would reduce significant impacts on jurisdictional wetlands and waters of the U.S. and waters of the state under the Off-site Water Facility Alternatives. Presuming the City completes additional routing analysis and prepares a mitigation plan that is acceptable to USACE and implemented as required, the direct and indirect impacts resulting from the Off-site Water Facility Alternatives could be mitigated to a **less-than-significant** level by providing “no net loss” of overall wetland acreage, as required in USACE permit conditions.

IMPACT 3B.3-2 **Loss and Degradation of Habitat for Special-Status Wildlife Species and Potential Direct Take of Individuals.** *The Off-site Water Facility Alternatives have the potential to result in a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status by DFG, NMFS, and USFWS. Impacts could include loss and degradation of habitat for several special-status wildlife species or take of listed species, including vernal pool invertebrates, valley elderberry longhorn beetle, and Swainson’s hawk.*

Mitigation

Mitigation Measure 3B.3-2: Conduct Preconstruction Survey for Western Spadefoot Toad and Northwestern Pond Turtle and if Found, Implement Avoidance and Compensation Measures.

Prior to construction, a qualified biologist retained by the City shall conduct protocol-level surveys for the western spadefoot toad and northwestern pond turtle to determine if these species are currently using water features crossed by the selected alignment. If either of these species is detected, then the City shall consult with the DFG (and USFWS if appropriate) to develop additional minimization measures prior to project construction (if necessary). These additional measures may include timing restrictions for groundwater dewatering activities, construction monitoring, and long-term monitoring.

If temporary fencing is used, it shall take the form of silt fencing and temporary plastic construction fencing placed no closer than 25 feet from the edge of the protected habitat. Protective fencing around vernal pools identified as potential habitat for special-status species shall be constructed in a way that allows western spadefoot toad to access these wetlands.

Impacted western spadefoot toad habitat shall be mitigated and compensated in accordance with USFWS and DFG requirements.

Implementation: City of Folsom Utilities Department.

Timing: Prior to and during construction of all Off-site Water Facilities.

Enforcement:

1. U.S. Fish and Wildlife Service, California Department of Fish and Game.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For improvements within Sacramento County or City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Implement Mitigation Measures 3B.3-1a, 3B.3-1b, 3A.3-1b, 3A.3-2a, 3A.3-2b, 3A.3-2c, 3A.3-2d, 3A.3-2e, 3A.3-2f, 3A.3-2g, and 3A.3-2h.

Finding for Construction Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Twenty-five special-status terrestrial wildlife species were identified as having the potential to occur within 5 miles of Zone 4 of the “Water” Study Area with 16 of these species having a moderate to high potential for occurrence, including vernal pool and conservancy fairy shrimp, Swainson’s hawk, valley elderberry longhorn beetle, and vernal pool tadpole shrimp. Zone 4 of the “Water” Study Area also provides habitat for several species of concern, which include western spadefoot toad, burrowing owl, and pallid bat. Construction of the pipeline alignments, pump stations, and WTPs under these Off-site Water Facility Alternatives may result in direct or indirect impacts to animal species listed in Table 3B.3-5. Table 3B.3-2 presents a detailed accounting of those wildlife species potentially affected by each alternative conveyance alignment and WTP site. Specific impacts to special-status species are addressed below.

Vernal Pool Fairy Shrimp and Vernal Pool Tadpole

Vernal pools, seasonal wetlands, and seasonal wetland swale are documented throughout Zone 4 of the “Water” Study Area, comprising approximately 10.8 acres, 7.8 acres, and 4.9 acres, respectively, and support special-status invertebrates such as vernal pool fairy shrimp and vernal pool tadpole shrimp. Other species may include California linderiella fairy shrimp (*Linderiella occidentalis*) or conservancy fairy shrimp (*Branchinecta conservatio*). As shown in Table 3B.3-5, vernal pool fairy shrimp and vernal pool tadpole shrimp are known to occur in the vicinity of all the Off-site Water Facility Alternatives that cross through Zone 4 of the “Water” Study Area. Depending on the location of the construction (i.e., roadway centerline verses shoulder) construction activities associated with the pipelines and WTPs could result in **significant direct** and **indirect** impacts to vernal pool habitat and, hence, vernal pool crustaceans.

Excavation and trenching activities could directly impact vernal pools, which could result in habitat loss or injury to individuals by filling or excavation within suitable habitat. Direct impacts could be minimized or avoided by constructing the conveyance alignments primarily along and within existing roadways or by using trenchless construction techniques to cross larger vernal pool or wetland features. However, without a more detailed alignment for each of the Off-site Water Facility Alternatives, such a determination is not possible. Temporary dewatering activities during construction could cause mortality of individual wetland species, especially vernal pool crustaceans. (See also discussion of dewatering in Section 3B.17, “Groundwater – Water”). Generally, the USFWS considers disturbance within 250 feet of vernal pool crustacean habitat to be an indirect impact to the species (USFWS 1996). Construction activities associated with pipeline and WTP facilities could result in **significant direct** impacts to vernal pool crustaceans, and may also lead to a cumulative decline of the species over time. **Indirect** impacts may include the temporary degradation of water quality or dewatering of pools during construction and could also be **significant**.

In the absence of complete avoidance, impacts to vernal pool crustaceans species could only be mitigated through a combination of habitat preservation and restoration in the vicinity of the selected Off-site Water Facilities. Given that even following the restoration of the impacted area(s), the take of these species could have already occurred, the City is unable to demonstrate complete avoidance. Therefore, demonstrating full compensation for these impacts by preserving and restoring existing habitats for vernal pool crustaceans in the vicinity of the selected Off-site Water Facility Alternative is infeasible. For this reason, the direct and indirect impacts would remain **significant** and **unavoidable** for those Off-site Water Facility Alternatives unable to demonstrate complete avoidance of “take” of vernal pool species.

No other feasible mitigation measures are available to reduce impacts associated with loss and degradation of habitat resulting from project construction to a less-than-significant level because it is technically infeasible to allow construction activities without some potential for loss and degradation of habitat. The objectives of the “Water” elements of the project include construction of necessary infrastructure and sufficient water supply for the planned SPA. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow construction without potential loss and degradation of habitat, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to loss and degradation of habitat.

Finding for Construction Impacts on Other Species

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Western Spadefoot Toad and Northwestern Pond Turtle

Vernal pools, wetland, and wetland swale habitat occur throughout portions of Zone 4 of the “Water” Study Area and provide suitable habitat for special-status amphibians such as western spadefoot toad. Western pond turtle may occur in drainage ditches, sloughs, and other aquatic features within Zone 4 of the “Water” Study Area where suitable habitat is present. As shown in Table 3B.3-5, the nearest known occurrences of western spadefoot and northwestern pond turtle are within less than 1/4 mile. Construction activities associated with the conveyance pipeline and pump station facilities could result in direct and indirect impacts to vernal pools, wetlands, and creeks, and hence, potential habitat for western spadefoot toad and northwestern pond turtle. This **direct** impact is considered **potentially significant**. **Indirect** impacts may include the temporary degradation of water quality or dewatering of pools during construction and could also be **potentially significant**.

Valley Elderberry Longhorn Beetle

Table 3B.3-5 indicates that occurrences of elderberry shrubs – the exclusive habitat for valley elderberry longhorn beetle – are documented in the northeastern sections of Zone 4 of the “Water” Study Area. The nearest occurrence of these species is less than 50 feet from the centerline of White Rock Road and the planned Easton Valley Parkway (Sacramento County 2008a and 2008b, and ECORP 2009). As a result, construction of the conveyance pipelines within portions of these roadways could result in direct impacts to valley elderberry longhorn beetle.

Direct impacts to elderberry shrubs include damage, pruning, and/or removal of shrubs, potentially resulting from excavation and trenching that would be used to install pipeline across smaller ditches (less than 10 feet in width). Some direct impacts would be minimized by constructing primarily along and within existing roadways and within agricultural lands, and by using trenchless construction techniques to cross larger water bodies. Temporary dewatering activities during construction may cause mortality of individual shrubs, especially if long dewatering periods are required to construct the pipeline facilities. (See also discussion of dewatering in Section 3B.17, “Groundwater – Water”).

Indirect impacts could occur if herbicides or insecticides are used in habitats adjacent to elderberry shrubs, if earthmoving activities disturb elderberry shrub roots, or if the topography and/or hydrology of the surrounding area are altered to the extent that it reduces the soil moisture surrounding the elderberry shrub. USFWS considers disturbance within 100 feet of an elderberry shrub to be a potential direct impact to valley elderberry longhorn beetle (USFWS, 1999). As a result, construction activities associated with the pipelines could result in **significant direct** and **indirect** impacts to valley elderberry longhorn beetle.

Swainson's Hawk and Other Raptors

As provided in Table 3B.3-5 and shown in Exhibit 3B.3-2, there are numerous documented sightings of Swainson's hawk within Zone 4 of the "Water" Study Area. Occurrences of nesting Swainson's hawks are documented within one mile of all the Off-site Water Facility Alternatives and 1/4 mile of the White Rock WTP. Swainson's hawk nests in trees, often within riparian habitats, and forage within cropland, fields, and open lands; hawks may occur within the alignment of each conveyance alignment alternative. Construction of the Off-site Water Facilities may temporarily and/or permanently disturb the nesting of state-threatened Swainson's hawk due to construction noise and disturbance, as well as potential nest site removal or abandonment during the breeding season.

DFG generally considers all disturbance within 1/2-mile of an active nest to be a potential impact to Swainson's hawk. Construction may also affect foraging habitat for Swainson's hawk in the Off-site Water Facilities Study Area (Swainson's Hawk Technical Advisory Committee [SHTAC] 2000). DFG generally considers impacts to suitable foraging habitat within 10 miles of an active nest to be a potential indirect impact to Swainson's hawk (SHTAC 2000). Based on this criterion, all facility siting options have a high likelihood of impacting Swainson's hawk foraging habitat. In addition, the White Rock WTP and conveyance alignment could adversely affect nesting habitat and result in a **potentially significant direct** and **indirect** impacts.

There are also several occurrences of burrowing owl within Zone 4 of the "Water" Study Area. Burrowing owls often occur along the edges of croplands and along drainage ditches and levees where suitable habitat containing burrows occurs. Construction of the Off-site Water Facility Alternatives may temporarily and permanently disturb the nesting of burrowing owl due to construction noise and disturbance, as well as permanent and temporary disturbance of foraging habitat. DFG generally considers all disturbance within 50 meters (160 feet) of an active nest to be a potential impact to burrowing owl (California Burrowing Owl Consortium [CBOC] 1993). Construction may also affect foraging habitat for burrowing owl in Zone 4 of the "Water" Study Area. As a result, each of the Off-site Water Facility Alternatives has a high likelihood to result in a **potentially significant direct** or **indirect** impacts on burrowing owl.

Construction of the Off-site Water Facility Alternatives could also temporarily and permanently disturb the nesting of White-tailed kite, Loggerhead shrike, and Tricolored blackbird, due to construction noise and disturbance, as well as potential nest site removal during the breeding season. Construction may also permanently and temporarily affect foraging habitat for these species within portions of the Zone 4 "Water" Study Area. Although direct impacts could be minimized or avoided by constructing primarily along and within existing roadways and by using trenchless construction techniques to cross larger water bodies, without a detailed alignment, the City is unable to confirm avoidance of impacts to these species. Additionally, DFG generally considers disturbance within 500 feet of a nesting raptor to be an impact and, therefore, construction activities associated with the conveyance pipeline, pump station, and WTP could result in **potentially significant direct** and **indirect** impacts to these species, and may also lead to a cumulative decline of the species over time.

Special-status Bats

Several special-status bat species have potential to occur within zone 4 of the "Water" Study Area, including pallid bat and Townsend's big-eared bat. These species may forage over open grassland and woodland areas, as well as riparian areas. In addition, several small bridge crossings are present within Zone 4, which could provide suitable roosting habitat. At this time, it is unknown if these bridge structures provide suitable thermal or structural conditions for roosting bats. However, if one or more of these structures is used as a day roost, hibernation roost, or maternity colony roost, implementation of the Off-site Water Facility Alternatives could result in injury and mortality of pallid bat, Townsend's big-eared bat, or other common bat species. Day roosts are used throughout the spring and summer and maternity colony roosts can be active from approximately early April until mid-October. Hibernation roosts may be used from approximately November to early March. Loss of individual bats would be considered a **potentially significant, direct** impact. **Indirect** impact on special-status bat species could also be **potentially significant**.

The mitigation measure identified above would lessen significant direct and indirect impacts on special-status wildlife resulting from the Proposed Off-site Water Facility Alternative. Given the linear nature of the Off-site Water Facility Alternatives and their orientation towards existing built-environments, fully compensating for direct and indirect impacts within the overall Zone 4 portion of the “Water” Study Area is considered feasible for most species potentially impacted by the alternatives under consideration. Based on the combination of preconstruction surveys, habitat preservation, and restoration measures proposed by the City, impacts to special-status wildlife species, with the exception of vernal pool crustaceans, would be avoided or minimized to a **less-than-significant** level.

IMPACT 3B.3-3 **Potential Loss or Degradation of Special-Status Plant Populations and Habitat.** *Implementation of the Off-site Water Facility Alternatives could result in direct removal of special-status plants, if they are present, through loss of suitable habitat or degradation of suitable habitat due to site alteration.*

Mitigation

Implement Mitigation Measure 3A.3-3: Conduct Special-Status Plant Surveys; Implement Avoidance and Mitigation Measures or Compensatory Mitigation.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Seventeen special-status plant species have the potential to occur within Zone 4 of the “Water” Study Area in vernal pool, seasonal wetland, freshwater marsh, pond, oak woodland, and grassland habitats. Seven of these species—Ahart’s dwarf rush, Bogg’s Lake hedge-hyssop, dwarf downingia, legenera, Sacramento Orcutt grass, slender Orcutt grass, and Tuolumne button-celery—were determined to have a moderate to high potential to occur within Zone 4. Construction of the Off-site Water Facility Alternatives could adversely affect these species and their habitats by incidentally taking a species, potentially jeopardizing the viability of a population, disturbing habitat, or disruption of reproductive activities.

As provided in Table 3B.3-6, construction of the conveyance pipeline and WTPs may result in direct or indirect impacts to several special-status plant species. Certain grasslands and seasonal wetlands within and in the vicinity of Zone 4 of the “Water” Study Area are known to or may potentially provide habitat for numerous special-status plant species, including Boggs Lake hedge-hyssop, Ahart’s dwarf rush, slender Orcutt grass, Sacramento Orcutt grass, and Sanford’s arrowhead. As shown in Table 3B.3-6, the Off-site Water Facility Alternative alignments each contain suitable habitats for special-status plants. Therefore, each of the Off-site Water Facilities alignments and WTPs could directly or indirectly impact the habitat of one or more of these special status species, or individual plants that may inhabit areas.

Loss of suitable habitat as a result of the Off-site Water Facility Alternatives could result in direct removal or mortality of special-status plants, if they are present. Construction activities could also result in indirect impacts on special-status plants including impacts caused by sedimentation, changes in vegetation as a result of changes in land use and management practices, altered hydrology, habitat fragmentation, and the introduction of invasive species or noxious weeds from surrounding development. Because implementation of all Off-site Water Facility Alternatives could result in loss and degradation of habitat that could support special-status plant species, **direct and indirect** impacts on special-status plant species are considered **potentially significant**.

Implementation of Mitigation Measure 3A.3-3 would reduce the potentially significant impacts on special-status plant species under the Off-site Water Facility Alternatives to a **less-than-significant** level because each facility component would be required to identify and avoid special-status plant populations or provide compensation for

the loss of special-status plants through creation of off-site populations, conservation easements, or other appropriate measures.

IMPACT 3B.3-4 **Loss of Sensitive Natural Communities (Not Already Covered under Other Impacts).** *Construction and operation of the Off-site Water Facility Alternatives has the potential to have a substantial adverse effect on local riparian and woodland habitats. These are natural communities considered sensitive by state and local resource agencies and require consideration under CEQA.*

Mitigation

Implement Mitigation Measures 3B.3-1a, 3B.3-1b, 3A.3-1b, and 3A.3-4a.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Table 3B.3-7 provides a breakdown of the different plant communities included within the 200-foot construction corridor for these alternatives along with an additional breakdown of the acreages within the 100-foot to the right and left of the alignment. The left and right sides of the alignment corridor are defined as the sides of the roadway when facing in the direction of flow (i.e., facing toward the SPA, with the source of water or Freeport Project at the observer's back). As provided in Table 3B.3-7, these Off-site Water Facility Alternatives contain up to 0.7 acres of marsh, 0.5 acres of oak-dominated woodland, and 0.3 acres of elderberry savanna total within each alignment corridor. In addition, it is important to note that although Table 3B.3-7 does not reflect any riparian habitat for these alternatives, these estimates conflict with the riparian acreages provided in Table 3B.3-4 for these alternatives. This is due to the fact that data from the National Wetlands Inventory (2009) was used in deriving the habitat estimates for Table 3B.3-4, but not for the estimates in Table 3B.3-7. For this reason, a worst-case estimate is being used for potential riparian impacts under these alternatives using the estimates provided in Table 3B.3-4 of approximately 0.6 acres total. Implementation of these Off-site Water Facility Alternatives could result in disturbance and/or removal of these natural communities at several locations along the conveyance alignments and WTP sites. Riparian areas potentially affected by these alternatives include Buffalo Creek, Morrison Creek, and Laguna Creek.

Given uncertainties regarding the timing of construction, precise location of the conveyance alignment, and other roadway improvement projects proposed within eastern Sacramento County, it is possible that construction could extend into areas adjacent to the roadways thereby requiring the crossing of these water features and their associated riparian corridors. Trenchless or in-channel construction techniques may be used to cross smaller drainages with trenchless construction potentially occurring at larger waterway crossings such as Morrison, Buffalo, and Laguna Creeks. As engineering design progresses, the City anticipates completing additional routing analysis before finalizing the method for each crossing in consultation with DFG, the Central Valley RWQCB, and USFWS, as appropriate. Similarly, the placement of the WTP under these alternatives has not been determined for the approximately 68-acre White Rock WTP and, therefore, the exact acreage of affected riparian habitat cannot be quantified at this time. For these reasons and based on the program-level of this analysis, the City concludes that up to 0.5 acres of riparian habitat (see Table 3B.3-4), 0.6 acres of marsh, 0.5 acres of oak-dominated woodland, and 0.3 acres of elderberry savanna could be directly impacted under these alternatives if impacts are limited to one side of the alignment corridor.

Dewatering of trenches or smaller ditches could temporarily affect riparian vegetation, depending on the length of time necessary to install the pipeline and the season of construction. Indirect impacts to riparian vegetation, such as fuel spills and/or disturbance of roots, may also occur under unanticipated circumstances thereby resulting in adverse impacts to riparian resources. The potential impacts of constructing these alternatives could include the

direct loss of these acreages from facility footprints, construction-related disturbance, and indirect water quality impacts. For this reason, **direct** and **indirect** impacts resulting from construction would be **potentially significant**. *[Similar]*

As provided in Table 3B.9-3, of Section 3B.9, Hydrology and Water Quality - Water,” the operation of the Off-site Water Facility Alternatives would involve negligible changes to existing flows within Zone 2 of the “Water” Study Area and downstream locations within the Delta. Based on these findings, neither the operations of the Off-site Water Facilities nor the assignment of water supplies from NCMWC in the Sacramento River basin would have substantial adverse effects on riparian habitat or other sensitive natural communities along the Sacramento River as a result of substantial changes in water levels or diversion of flow. No new groundwater pumping would be required within NCMWC’s service area and, therefore, no changes to surface water hydrology within wetlands and other sensitive wetland features within the NCMWC’s service area is anticipated. For these reasons, **direct** and **indirect** impacts to sensitive communities from long-term operation of the Off-site Water Facilities would be **less than significant**. *[Similar]*

Implementation of Mitigation Measures 3A.3-1a, 3B.3-1a, 3B.3-1b, and 3A.3-1b would reduce significant impacts on sensitive natural communities under the Off-site Water Facility Alternatives to a **less-than-significant** level because a mitigation and monitoring plan ensuring adequate compensation for the loss of riparian habitat would have to be developed and implemented as a condition of the streambed alteration permit.

IMPACT 3B.3-5 **Loss of Individual Oak Trees.** *Implementation of the Off-site Water Facility Alternatives could result in the removal of oak woodland and individual oak trees meeting the criteria for protection under Folsom Municipal Code and the Sacramento County Tree Ordinance.*

Mitigation

Implement Mitigation Measure 3A.3-5: Conduct Tree Survey, Prepare and Implement an Oak Woodland Mitigation Plan, Replace Native Oak Trees Removed, and Implement Measures to Avoid and Minimize Indirect Impacts on Oak Trees Retained On-site.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Because construction of Off-site Water Facilities components could require the removal of trees, including oak species, the County of Sacramento may require a permit for the pruning or removal of protected trees within its jurisdiction. Therefore, this **direct** and **indirect** impact is considered **potentially significant**. *[Similar]*

With the implementation of Mitigation Measure 3A.3-5, appropriate compensation measures would be implemented through the preparation and implementation of an oak tree replacement plan to reduce potential impacts to riparian habitats and other sensitive natural communities. Compliance with the prescribed mitigation would ensure that these impacts are reduced to a **less-than-significant** level with no corresponding net reduction in the numbers of protected trees.

CLIMATE CHANGE – LAND

IMPACT 3A.4-1 **Generation of Temporary, Short-Term Construction-Related GHG Emissions.** *Project-related construction activities associated with development of the project and off-site elements would result in increased generation of GHG emissions. These emissions would be temporary and short-term and would decline over time as new regulations are developed that address medium- and heavy-duty on-road vehicles and off-road equipment under the mandate of AB 32.*

Mitigation

Implement Mitigation Measures 3A.2-1a and 3A.2-1b.

Mitigation Measure 3A.4-1: Implement Additional Measures to Control Construction-Generated GHG Emissions.

To further reduce construction-generated GHG emissions, the project applicant(s) any particular discretionary development application shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by SMAQMD at the time individual portions of the site undergo construction. Such measures may reduce GHG exhaust emissions from the use of on-site equipment, worker commute trips, and truck trips carrying materials and equipment to and from the SPA, as well as GHG emissions embodied in the materials selected for construction (e.g., concrete). Other measures may pertain to the materials used in construction. Prior to releasing each request for bid to contractors for the construction of each discretionary development entitlement, the project applicant(s) shall obtain the most current list of GHG reduction measures that are recommended by SMAQMD and stipulate that these measures be implemented in the respective request for bid as well as the subsequent construction contract with the selected primary contractor. The project applicant(s) for any particular discretionary development application may submit to the City and SMAQMD a report that substantiates why specific measures are considered infeasible for construction of that particular development phase and/or at that point in time. The report, including the substantiation for not implementing particular GHG reduction measures, shall be approved by the City, in consultation with SMAQMD prior to the release of a request for bid by the project applicant(s) for seeking a primary contractor to manage the construction of each development project. By requiring that the list of feasible measures be established prior to the selection of a primary contractor, this measure requires that the ability of a contractor to effectively implement the selected GHG reduction measures be inherent to the selection process.

SMAQMD's recommended measures for reducing construction-related GHG emissions at the time of writing this EIR/EIS are listed below and the project applicant(s) shall, at a minimum, be required to implement the following:

- ▶ Improve fuel efficiency from construction equipment:
 - reduce unnecessary idling (modify work practices, install auxiliary power for driver comfort);
 - perform equipment maintenance (inspections, detect failures early, corrections);
 - train equipment operators in proper use of equipment;
 - use the proper size of equipment for the job; and
 - use equipment with new technologies (repowered engines, electric drive trains).
- ▶ Use alternative fuels for electricity generators and welders at construction sites such as propane or solar, or use electrical power.
- ▶ Use an ARB-approved low-carbon fuel, such as biodiesel or renewable diesel for construction equipment. (Emissions of oxides of nitrogen [NO_x] emissions from the use of low carbon fuel must

be reviewed and increases mitigated.) Additional information about low-carbon fuels is available from ARB's Low Carbon Fuel Standard Program (ARB 2009b).

- ▶ Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.
- ▶ Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones.
- ▶ Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75% by weight).
- ▶ Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials, and based on volume for roadway, parking lot, sidewalk and curb materials).
- ▶ Minimize the amount of concrete used for paved surfaces or use a low carbon concrete option.
- ▶ Produce concrete on-site if determined to be less emissive than transporting ready mix.
- ▶ Use EPA-certified SmartWay trucks for deliveries and equipment transport. Additional information about the SmartWay Transport Partnership Program is available from ARB's Heavy-Duty Vehicle Greenhouse Gas Measure (ARB 2009c) and EPA (EPA 2009).
- ▶ Develop a plan in consultation with SMAQMD to efficiently use water for adequate dust control. This may consist of the use of non-potable water from a local source.

In addition to SMAQMD-recommended measures, construction activity shall comply with all applicable rules and regulations established by SMAQMD and ARB.

Implementation: Project applicant(s) during all discretionary development project and on-site and off-site elements.

Timing: Before approval of small-lot final maps and building permits for all discretionary development project, including all on- and off-site elements and implementation throughout project construction.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For all on- and off-site project-related activities within the City of Folsom and Sacramento County.
3. For the two roadway extensions into El Dorado Hills: El Dorado County Development Services Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Heavy-duty off-road equipment, materials transport, and worker commutes during construction of the Proposed Project Alternative would result in exhaust emissions of GHGs. Exact project-specific data (e.g., construction equipment types and number requirements) were not available at the time of this analysis.

GHG emissions generated by construction would be primarily in the form of carbon dioxide (CO₂). Although emissions of other GHGs, such as CH₄ and N₂O, are important with respect to global climate change, the emission levels of these other GHGs from on- and off-road vehicles used during construction are relatively small compared with CO₂ emissions, even when factoring in the relatively larger global warming potential of CH₄ and N₂O.

Accordingly, total construction emissions for the 19-year buildout period associated with implementation of the Proposed Project Alternative were estimated using the URBEMIS 2007 Version 9.2.4 computer program (Rimpo and Associates 2008). URBEMIS is designed to model construction emissions for land use development projects based on building size, land use and type, and disturbed acreage and allows for the input of project-specific information. Construction-generated GHG emissions were modeled based on general information provided in the project description described in Chapter 2, “Alternatives,” of the DEIR/DEIS, and default SMAQMD-recommended settings and parameters attributable to the proposed land use types and site location. In short, modeling was conducted using the same assumptions for estimating construction-generated emissions of criteria air pollutants and precursors, which are listed in the discussion under Impact 3A.2-1 of Section 3A.2, “Air Quality – Land,” of the DEIR/DEIS.

Development of the SPA would occur over a very large area (approximately 3,510 acres) and construction would require substantial amounts of earthwork and grading. However, a detailed schedule describing the timing and location of construction activities under the Proposed Project Alternative is not available at the time of writing the DEIR/DEIS. Construction of the site is anticipated to commence in 2011 and last until approximately 2030. Given that exhaust emission rates of the construction equipment fleet in the state are expected to decrease over time due to ARB- and SMAQMD-lead efforts, annual construction emissions were estimated using the earliest calendar when construction would begin (i.e., 2011) in order to generate conservative estimates. It is anticipated, however, that in later years, advancements in engine technology, retrofits, and turnover in the equipment fleet would result in increased fuel efficiency, potentially more alternatively fueled equipment, and lower levels of GHG emissions. Also, the URBEMIS model does not account for reductions in CO₂ emission rates that would affect future construction activity due to the regulatory environment that is expected to evolve under AB 32. For instance, ARB’s Scoping Plan identifies the need to expand efficiency strategies and low carbon fuels for heavy-duty and off-road vehicles (ARB 2008).

Estimated GHG emissions from construction during the 19-year buildout of the Proposed Project Alternative would be approximately 50,456 metric tons of CO₂. This value accounts only for exhaust emissions of GHGs that would be generated by heavy-duty equipment, haul trucks, and vehicle trips, however. Additional GHG emissions would also be “embodied” in the materials selected for construction and the level of embodied GHG emission can vary substantially according to which materials are selected. This is particularly the case for construction of buildings and infrastructure that involve high quantities of cement, which is a key ingredient of concrete, given that ARB has identified cement production as an energy-intensive, GHG-intensive industry (ARB 2008, page 31). In fact, ARB has included cement plants as separate emissions sector in its demand-based GHG inventory for the state (ARB 2008, pg. 13). Construction-generated exhaust emissions would be temporary and short-term in that they would only occur during the buildout period; they would not continue on an ongoing basis year after year throughout the operational life of the development, as is the case with large stationary-source facilities or the operation of most land use developments. In addition, the regulatory environment that continues to evolve under the mandate of AB 32 is expected to reduce some of the GHG emissions from construction activity. ARB’s Scoping Plan does not directly discuss GHG emissions generated by construction activity; however, it does recommend measures for improving the efficiency of medium- and heavy-duty on-road vehicles (1.4 MMT CO₂e) and expended efficiency strategies for off-road vehicles (e.g., forklifts, bulldozers). In addition, existing programs for air quality improvement in California, including the *Diesel Risk Reduction Plan* and the *2007 State Implementation Plan*, will result in the accelerated phase-in of cleaner technology for virtually all of California’s

diesel engine fleets, including construction equipment (ARB 2008). Measures implemented under these plans are likely to result in future fleets of construction equipment that are more GHG-efficient than existing fleets. For these reasons, levels of GHG emissions associated with construction activity are expected to decrease over time as new regulations are developed under the mandate of AB 32.

Nonetheless, due to the intensity and duration of construction activities under the Proposed Project Alternative, construction-generated GHG emission levels would make an incremental contribution to GHGs that cause climate change. It is presumed that this level of construction-generated GHG emissions would be substantial compared to other construction projects in the region and in the state, particularly given the large size of the project (approximately 3,510 acres) and the intense level of grading that would occur on the hilly, eastern side of the SPA.

Although the construction-generated emissions would be temporary and short-term, and although a new regime of regulations is expected to come into place under AB 32 and existing regulatory efforts will help reduce GHG emissions generated by construction activity throughout the state, given the information available today, GHG emissions associated with construction of the Proposed Project Alternative would result in a cumulatively considerable incremental contribution to this **significant** cumulative impact.

Off-Site Elements

GHG emissions associated with the construction of the off-site elements were estimated using the URBEMIS 2007 Version 9.2.4 computer program (Rimpo and Associates 2008) and SMAQMD's Road Construction Emissions Model (SMAQMD 2009b). Although the model was developed by SMAQMD, it is also recommended by EDCAQMD and other air districts in the state for estimating emissions generated by construction projects that are linear in nature. While construction-generated emissions of criteria air pollutants are evaluated according to maximum daily emission levels (as discussed under Impact 3A.2-1 in Section 3A.2, "Air Quality – Land," of the DEIR/DEIS), GHG emission levels from construction activity are typically evaluated according to their annual level or the total level that would be emitted during project construction. However, annual or total levels of GHG emissions associated with construction of the off-site elements could not be accurately estimated due to the lack of information concerning the construction schedule, types and quantities of equipment involved, and types and quantities of construction materials used. Nonetheless, maximum daily GHG emission levels were estimated for each off-site element using these two models. While URBEMIS is designed to model construction emissions for land use development projects, the Road Construction Emissions Model (SMAQMD 2009b) is designed to estimate emissions from heavy-duty construction equipment, haul trucks, and worker commute trips and fugitive particulate matter (PM) dust associated with linear construction projects. For all the elements, it was estimated that the most emission-intensive phase of construction would consist of grading, excavation, and other earth-movement activities, as is typically the case for most construction projects. Because detailed information about the construction of the off-site elements was not available at the time of this analysis, the following conservative projections were used in the modeling:

- ▶ the entire site could potentially be graded on a single day, regardless of project size; and
- ▶ each off-site element could potentially be constructed as early as the year 2011. This is a conservative assumption because equipment exhaust emissions from subsequent years are anticipated to be lower as new regulations and emissions technologies for off-road equipment come into place.

Emission levels associated with the construction of each of the proposed off-site elements were modeled separately. Model inputs include conservative estimates about size (i.e., dimensions and acreage) of the construction area associated with each off-site element based on the map in Exhibit 2-9 on page 2-35 of the DEIR/DEIS and default parameters (i.e., equipment types and numbers) from the applicable model. Table 3A.4-2 on page 3A.4-21 of the DEIR/DEIS summarizes the modeled worst-case daily GHG emission levels associated with construction of each off-site element. Refer to Appendix C1 of the DEIR/DEIS for a detailed summary of the modeling assumptions, inputs, and outputs.

The estimated GHG emission levels do not include embodied GHG emissions, which are associated with the types and quantities of materials (e.g., concrete) used to construct each off-site element. Thus, in the discussion of each off-site element below, embodied emissions are addressed qualitatively.

Prairie City Road Interchange, Rowberry Drive Overcrossing, Oak Avenue Interchange, and Roadway Extensions

Estimated maximum daily exhaust GHG emission levels associated with the construction of the Prairie City Road Interchange, Rowberry Drive overcrossing, Oak Avenue Interchange, and two roadway extensions into El Dorado County are also shown in Table 3A.4-2 on page 3A.4-21 of the DEIR/DEIS. The emission levels shown in Table 3A.4-2 in the DEIR/DEIS for these off-site elements generally correlate with the size (i.e., acreage) of each element because it is estimated that the entire area of each off-site element would be graded in a single day. It is important to note that these estimates of maximum daily emission levels do not necessarily serve as strong indicators of the total level of GHG emissions that would result from construction of these off-site elements. There is the potential, however, that the total level of GHG-emitting equipment, the number of workers, and/or the length of time to build these off-site elements could be substantial. In addition, levels of embodied GHG emissions associated with construction of these off-site elements could be high because they could involve high quantities of concrete, asphalt, and/or other energy-intensive construction materials. Given that detailed parameters about the construction of these infrastructure improvements are not known at the time of writing the DEIR/DEIS, it is assumed that GHG emissions associated with construction of these elements could result in cumulatively considerable incremental contributions to climate change. This would be a **significant** cumulative impact.

Implementation of Mitigation Measure 3A.2-1a and Mitigation Measure 3A.2-1b would reduce construction vehicle emissions to the degree feasible, by requiring all SMAQMD-recommended measures that are applicable to the project such as the use of certain engines, following specific criteria, and other requirements. By reducing emissions of criteria air pollutants, GHG emissions also would be reduced. Implementation of Mitigation Measure 3A.4-1 would result in additional reductions in GHG emissions associated with construction activity. Mitigation Measures 3A.2-1a, 3A.2-1b, and 3A.4-1 are programmatic in that they recognize that emission control technologies will continue to evolve and the feasibility of more GHG reductions will likely increase over the 19-year buildout period of the project. They also recognize that a framework for understanding GHG emissions embodied in construction materials (e.g., concrete) may continue to evolve such that embodied emissions can be reduced through project-level mitigation. However, the extent to which feasible technologies and GHG reduction measures will continue to be developed is not known at the time of writing the DEIR/DEIS. Therefore, this analysis concludes that these reductions would not be sufficient to fully reduce the construction-generated GHGs to the extent that they would not be cumulatively considerable. The regulatory changes that are likely under AB 32 and other legislation may result in additional, more substantial reductions in emissions through the use of low carbon fuels or off-road engine standards. Because of the uncertainty with respect to GHG reductions from regulations that have not yet been developed, and because the GHGs generated by construction of the Prairie City Road Interchange, Rowberry Drive overcrossing, Oak Avenue Interchange, and Roadway Connections to El Dorado County could be considerable, the incremental contribution of GHG emissions from project-related construction would be cumulatively considerable and **significant and unavoidable**.

This significance determination is based according to the program-level analysis presented above. However, an alternate impact conclusion for each of these four off-site elements may be supported by a project-level analysis that is based on detailed project-specific parameters (i.e., schedule, equipment, materials) used to estimate the total GHG emissions level associated with construction of the element and/or conducted in accordance with new guidance provided by ARB or the respective air district (i.e., SMAQMD or EDCAQMD). However, for purposes of this analysis and because additional detail is currently unavailable, a project-level significance determination cannot be made with reasonable accuracy.

No other feasible mitigation measures are available to reduce impacts associated with temporary, short-term construction-related GHG emissions resulting from project development to a less-than-significant level because it

is technically infeasible to allow new development without some amount of temporary, short-term construction-related GHG emissions. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without temporary, short-term construction-related GHG emissions, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to temporary, short-term construction-related GHG emissions.

IMPACT 3A.4-2 **Generation of Long-Term Operational GHG Emissions.** *Operation of the project over the long term would result in increased generation of GHGs, which would contribute considerably to cumulative GHG emissions.*

Mitigation

Implement Mitigation Measure 3A.2-2.

Mitigation Measure 3A.4-2a: Implement Additional Measures to Reduce Operational GHG Emissions.

Each increment of new development within the project site requiring a discretionary approval (e.g., proposed tentative subdivision map, conditional use permit), shall be subject to a project-specific environmental review (which could support an applicable exemption, negative or mitigated negative declaration or project-specific EIR) and will require that GHG emissions from operation of each phase of development, including supporting roadway and infrastructure improvements that are part of the selected action alternative, will be reduced by an amount sufficient to achieve the 2020-based threshold of significance of 4.36 CO₂e/SP/year for development that would become operational on or before the year 2020, and the 2030-based threshold of significance of 2.86 CO₂e/SP/year for development that would become operational on or before the year 2030.

The above-stated thresholds of significance may be subject to change if SMAQMD approves its own GHG significance thresholds, in which case, SMAQMD-adopted thresholds will be used. The amount of GHG reduction required to achieve the applicable significance thresholds will furthermore depend on existing and future regulatory measures including those developed under AB 32).

For each increment of new discretionary development, the City shall submit to the project applicant(s) a list of potentially feasible GHG reduction measures to be considered in the development design. The City's list of potentially feasible GHG reduction measures shall reflect the current state of the regulatory environment, available incentives, and thresholds of significance that may be developed by SMAQMD, which will evolve under the mandate of AB 32 and Executive Order S-3-05. If the project applicant(s) asserts it cannot meet the 2020-based goal, then the report shall also demonstrate why measures not selected are considered infeasible. The City shall review and ensure inclusion of the design features in the Proposed Project Alternative before applicant(s) can receive the City's discretionary approval for the any increment of development. In determining what measures should appropriately be imposed by the City under the circumstances, the City shall consider the following factors:

- ▶ the extent to which rates of GHG emissions generated by motor vehicles traveling to, from, and within the SPA are projected to decrease over time as a result of regulations, policies, and/or plans that have already been adopted or may be adopted in the future by ARB or other public agency pursuant to AB 32, or by EPA;

- ▶ the extent to which mobile-source GHG emissions, which at the time of writing this EIR/EIS comprise a substantial portion of the state’s GHG inventory, can also be reduced through design measures that result in trip reductions and reductions in trip length;
- ▶ the extent to which GHG emissions emitted by the mix of power generation operated by SMUD, the electrical utility that will serve the SPA, are projected to decrease pursuant to the Renewables Portfolio Standard required by SB 1078 and SB 107, as well as any future regulations, policies, and/or plans adopted by the federal and state governments that reduce GHG emissions from power generation;
- ▶ the extent to which any stationary sources of GHG emissions that would be operated on a proposed land use (e.g., industrial) are already subject to regulations, policies, and/or plans that reduce GHG emissions, particularly any future regulations that will be developed as part of ARB’s implementation of AB 32, or other pertinent regulations on stationary sources that have the indirect effect of reducing GHG emissions;
- ▶ the extent to which other mitigation measures imposed on the project to reduce other air pollutant emissions may also reduce GHG emissions;
- ▶ the extent to which the feasibility of existing GHG reduction technologies may change in the future, and to which innovation in GHG reduction technologies will continue, effecting cost-benefit analyses that determine economic feasibility; and
- ▶ whether the total costs of proposed mitigation for GHG emissions, together with other mitigation measures required for the proposed development, are so great that a reasonably prudent property owner would not proceed with the project in the face of such costs.

In considering how much, and what kind of, mitigation is necessary in light of these factors, the City shall consider the following list of options, though the list is not intended to be exhaustive, as GHG emission reduction strategies and their respective feasibility are likely to evolve over time. These measures are derived from multiple sources including the Mitigation Measure Summary in Appendix B of the California Air Pollution Control Officer’s Association (CAPCOA) white paper, CEQA & Climate Change (CAPCOA 2009a); CAPCOA’s Model Policies for Greenhouse Gases in General Plans (CAPCOA 2009b); and the California Attorney General’s Office publication, The California Environmental Quality Act: Addressing Global Warming Impacts at the Local Agency Level (California Attorney General’s Office 2008).

Energy Efficiency

- ▶ Include clean alternative energy features to promote energy self-sufficiency (e.g., photovoltaic cells, solar thermal electricity systems, small wind turbines).
- ▶ Design buildings to meet CEC Tier II requirements (e.g., exceeding the requirements of the Title 24 [as of 2007] by 35%).
- ▶ Site buildings to take advantage of shade and prevailing winds and design landscaping and sun screens to reduce energy use.
- ▶ Install efficient lighting in all buildings (including residential). Also install lighting control systems, where practical. Use daylight as an integral part of lighting systems in all buildings.
- ▶ Install light-colored “cool” pavements, and strategically located shade trees along all bicycle and pedestrian routes.

Water Conservation and Efficiency

- ▶ With the exception of ornamental shade trees, use water-efficient landscapes with native, drought-resistant species in all public area and commercial landscaping. Use water-efficient turf in parks and other turf-dependant spaces.
- ▶ Install the infrastructure to use reclaimed water for landscape irrigation and/or washing cars.
- ▶ Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
- ▶ Design buildings and lots to be water-efficient. Only install water-efficient fixtures and appliances.
- ▶ Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff. Prohibit businesses from using pressure washers for cleaning driveways, parking lots, sidewalks, and street surfaces. These restrictions should be included in the Covenants, Conditions, and Restrictions of the community.
- ▶ Provide education about water conservation and available programs and incentives.
- ▶ To reduce stormwater runoff, which typically bogs down wastewater treatment systems and increases their energy consumption, construct driveways to single-family detached residences and parking lots and driveways of multifamily residential uses with pervious surfaces. Possible designs include Hollywood drives (two concrete strips with vegetation or aggregate in between) and/or the use of porous concrete, porous asphalt, turf blocks, or pervious pavers.

Solid Waste Measures

- ▶ Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- ▶ Provide interior and exterior storage areas for recyclables and green waste at all buildings.
- ▶ Provide adequate recycling containers in public areas, including parks, school grounds, golf courses, and pedestrian zones in areas of mixed-use development.
- ▶ Provide education and publicity about reducing waste and available recycling services.

Transportation and Motor Vehicles

- ▶ Promote ride-sharing programs and employment centers (e.g., by designating a certain %age of parking spaces for ride-sharing vehicles, designating adequate passenger loading and unloading zones and waiting areas for ride-share vehicles, and providing a Web site or message board for coordinating ride-sharing).
- ▶ Provide the necessary facilities and infrastructure in all land use types to encourage the use of low- or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).
- ▶ At industrial and commercial land uses, all forklifts, “yard trucks,” or vehicles that are predominately used on-site at non-residential land uses shall be electric-powered or powered by biofuels (such as biodiesel [B100]) that are produced from waste products, or shall use other technologies that do not rely on direct fossil fuel consumption.

- Implementation:** The project applicant(s) for any particular discretionary development.
- Timing:** Before approval of final maps and building permits for all project phases, including all on- and off-site elements.
- Enforcement:** City of Folsom Community Development Department.

Mitigation Measure 3A.4-2b: Participate in and Implement an Urban and Community Forestry Program and/or Off-Site Tree Program to Off-Set Loss of On-Site Trees.

The trees on the project site contain sequestered carbon and would continue to provide future carbon sequestration during their growing life. For all harvestable trees that are subject to removal, the project applicant(s) for any particular discretionary development application shall participate in and provide necessary funding for urban and community forestry program (such as the UrbanWood program managed by the Urban Forest Ecosystems Institute [Urban Forest Ecosystems Institute 2009]) to ensure that wood with an equivalent carbon sequestration value to that of all harvestable removed trees is harvested for an end-use that would retain its carbon sequestration (e.g., furniture building, cabinet making). For all nonharvestable trees that are subject to removal, the project applicant(s) shall develop and fund an off-site tree program that includes a level of tree planting that, at a minimum, increases carbon sequestration by an amount equivalent to what would have been sequestered by the blue oak woodland during its lifetime. This program shall be funded by the project applicant(s) of each development phase and reviewed for comment by an independent Certified Arborist unaffiliated with the project applicant(s) and shall be coordinated with the requirements of Mitigation Measure 3.3-5, as stated in Section 3A.3, “Biological Resources - Land.” Final approval of the program shall be provided by the City. Components of the program may include, but not be limited to, providing urban tree canopy in the City of Folsom, or reforestation in suitable areas outside the City. Reforestation in natural habitat areas outside the City of Folsom would simultaneously mitigate the loss of oak woodland habitat while planting trees within the urban forest canopy would not. The California Urban Forestry Greenhouse Gas Reporting Protocol shall be used to assess this mitigation program (CCAR 2008). All unused vegetation and tree material shall be mulched for use in landscaping on the project site, shipped to the nearest composting facility, or shipped to a landfill that is equipped with a methane collection system, or combusted in a biomass power plant. Tree and vegetative material should not be burned on- or off-site unless used as fuel in a biomass power plant.

- Implementation:** The project applicant(s) for any particular discretionary development application.
- Timing:** Before approval of final maps and/or building permits for all project phases requiring discretionary approval, including all on- and off-site elements.
- Enforcement:** The City of Folsom Community Development Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

GHG emissions would be generated throughout the operational life of the Proposed Project Alternative. Operational emissions would be generated by area-, mobile-, and stationary-sources. Area-source emissions would be associated with activities such as combustion of natural gas for space and water heating, maintenance of landscaping and grounds, waste disposal, and other sources. Mobile-source emissions of GHGs would include project-generated vehicle trips for residents, employees, and visitors. In addition, increases in stationary-source emissions could occur at off-site utility providers from electricity generation that would supply power to the

proposed land uses. Thus, the GHG's associated with the consumption of electricity in the SPA is considered an indirect source. On-site consumption of water would also result in indirect GHG emissions because of the electricity consumption associated with the off-site conveyance, distribution, and treatment of that water. In addition, mobile and area source GHG emissions would be generated as a result of the operation and maintenance of on-site water treatment and conveyance facilities.

GHG emissions generated by operation of the proposed land uses under the Proposed Project Alternative would be primarily in the form of CO₂. Although emissions of other GHGs, such as CH₄ and N₂O, are important with respect to global climate change, the emissions levels of these other GHGs from the sources considered for this project are relatively small compared with CO₂ emissions, even when factoring in the relatively larger global warming potential of CH₄ and N₂O.

At the time of writing the DEIR/DEIS emission factors and calculation methods for GHGs from development projects have not been formally adopted for use by the state, SMAQMD, or EDCAQMD. However, SMAQMD's Guide to Air Quality Assessment in Sacramento County does recommend that direct and indirect emissions of GHGs from a project be quantified and disclosed in the respective CEQA document, including area- and mobile-source emissions, and indirect emissions from in-state energy production and water consumption (SMAQMD 2009a, page 6-6). Direct operational CO₂ emissions were calculated using URBEMIS 2007, Version 9.2.4 (Rimpo and Associates 2008). Indirect operational emissions associated with electricity consumption were estimated according to methodologies of the CCAR's General Reporting Protocol (CCAR 2009). Indirect operational emissions associated with water consumption were estimated using information provided by the CEC (CEC 2007) as well as CCAR's General Reporting Protocol (CCAR 2009). The Proposed Project Alternative and four action alternatives would also result in the loss blue oak woodland and individual oak trees, which are a form of carbon storage and sequester carbon from the atmosphere; however, the loss in trees is not quantified for this analysis. The loss blue oak woodland and individual oak trees is discussed further in Section 3A.3, "Biological Resources – Land."

A summary of the operational GHG emissions were estimated for full buildout of the Proposed Project Alternative and four action alternatives, in the Year 2030 and are presented in Table 3A.4-1 of the DEIR/DEIS. The annual operational emissions level under the Proposed Project Alternative and four action alternatives was estimated using the best available methodologies and emission factors available at the time of writing this EIR/EIS. However, for many operational GHG emission sources GHG emission rates for future years are not yet developed, in part, because regulations continue to evolve under the mandate of AB 32. The URBEMIS model, as well as other GHG estimation protocols, do not yet account for the impact reductions of the future regulatory environment and future technological improvements that will result in GHG efficiencies. Thus, this analysis uses the emissions estimates modeled for full buildout as a proxy for evaluating GHG emissions associated with operation of the Proposed Project Alternative and four action alternatives.

Estimated GHG emissions associated with operation of the land uses proposed under the Proposed Project Alternative would total approximately 291,049 annual metric tons. At full buildout the size of the residential population accommodated by the Proposed Project Alternative would be approximately 24,335 residents and the number of jobs supported by these action alternatives would be approximately 13,209. When estimated CO₂e emissions are normalized with respect to service population, the average annual efficiency rate of operations under full buildout of the Proposed Project Alternative would be 7.8 metric tons CO₂e/SP/year.

However, in many respects the annual CO₂e/SP values for the Proposed Project Alternative are representative of the Proposed Project Alternative's GHG efficiency under a business-as-usual scenario and are higher than what would likely occur. First, the level of mobile-source emissions, which was estimated to be 34-38% of the total operational emissions (depending on which action alternative is selected), is overstated because it is based on the VMT estimated by the traffic study, which is conservative. The total VMT estimated by the traffic study includes all trips associated with the Proposed Project Alternative, including trips that originate or terminate outside the project area. Many of these are trips would occur with or without the project, but in order to be conservative, the traffic study attributes all of them to the project's land uses. Moreover, the estimated level of mobile-source

emissions also includes some emissions associated with trips that would merely replace trips that already take place elsewhere in the Sacramento region. For instance, the VMT estimate includes mobile-source emissions associated with workers who would commute to the SPA from outside the area, even though these trips may be replacing the workers' existing commutes to other locations. This point is particularly pertinent to the proposed mix of land use types, because the project includes a large regional employment center (i.e., the regional shopping mall) that is out of proportion with the amount of housing proposed and thus would draw in worker commute trips from outside areas.

The location of a large regional employment center in this location is consistent with the Sacramento Area Council of Governments (SACOG) Sacramento Region Blueprint, which is intended to reduce overall VMT and GHG emissions in the region.

Furthermore, the VMT estimate accounts for only some (not all) of the trip reduction features that would be part of the project design under the Proposed Project Alternative and four action alternatives. The Proposed Project Alternative and each of the other four action alternatives include some "smart growth" concepts, such as a mix of uses configured for convenient bike and pedestrian access, an extensive network of bike and pedestrian connections and integration of transit infrastructure. The transportation model used in the traffic analysis functions at a regional scale, so all the nuances of the land use planning under the Proposed Project Alternative and each of the other four action alternatives are not necessarily reflected in their respective estimates of net VMT. By the same token, the Proposed Project Alternative, which is consistent with the SACOG Sacramento Region Blueprint, can only go so far in balancing land uses while remaining consistent with the direction from the SACOG Sacramento Region Blueprint to create a large regional employment center in this location – which results in a disproportionately high number of jobs in the SPA. This increases VMT compared to a fully integrated land use plan that has a balanced jobs/housing ratio. In addition, the emissions rates used to estimate mobile-source GHG emissions do not account for GHG reductions that would result from the Low Carbon Fuel Standard, which was adopted as a discrete early-action measure of AB 32, or the CAA waiver that California received from EPA allowing the state to adopt more stringent fuel efficiency standards for passenger vehicles and light trucks (AB 1493, which is discussed in the "Regulatory Framework" section above).

With regard to the other largest category of operational GHG emissions shown in Table 3A.4-1, indirect GHG emissions related to the consumption of fossil fuel-based electricity, these estimated emissions do not account for reductions that will result from future regulatory changes under AB 32. The estimate of these emissions is not discounted to reflect the alternative-energy mandate of SB 107, which requires the Sacramento Municipal Utility District (SMUD) and other electric utilities to provide at least 20% of its electricity supply from renewable sources by 2010 and 30% by 2020; this mandate would be fully implemented before full buildout of the Proposed Project Alternative and other four action alternatives. Because SMUD is still procuring enough renewable energy to meet this goal, the estimated rate of GHG emissions from electricity is expected to decrease between now and 2010. In addition, SB 1368 requires more stringent emissions performance standards for new power plants, both in-state and out-of-state, that will supply electricity to California consumers. Thus, implementation of SB 1368 will also reduce GHG emissions associated with electricity consumption.

Further reductions are also expected from other regulatory measures that will be developed under the mandate of AB 32, as identified and recommended in ARB's Scoping Plan (ARB 2008). In general, the Scoping Plan focuses on achieving the state's GHG reduction goals with regulations that improve the efficiency of motor vehicles and the production (and consumption) of electricity. Thus, even with the implementation of no project-specific mitigation, the rate of GHG emissions from development under the Proposed Project Alternative and other four action alternatives are projected to decrease in subsequent years as the regulatory environment progresses under AB 32. Additionally, new technology improvements may become available or the feasibility of existing technologies may improve. Nonetheless, a complete picture of the future regulatory environment is unknown at this time. GHG reduction measures promulgated under the AB 32 mandate may not be sufficient to cause future development to achieve ARB's recommended 30% reduction from business-as-usual emissions levels projected for 2020 (as discussed in the Scoping Plan) or the CO₂e/SP/year goals for the years 2020 or 2030 discussed above.

Also worth consideration is that, for the moment, the total annual GHG emissions level associated with operation of the Proposed Project Alternative and the other four action alternatives would exceed 25,000 metric tons of CO₂ per year throughout their operational life, which is the mandatory reporting level for stationary sources as part of implementation of AB 32. In comparison to this reporting level, the amount of operational GHG emissions of the Proposed Project Alternative and the other four action alternatives would be considered substantial.

Because the total GHG emissions associated with project operations under the Proposed Project Alternative and other four action alternatives would be considered substantial, and due to the uncertainty about to what degree future regulations developed through implementation of AB 32 would help enable achievement of the CO₂e/SP/year thresholds for the years 2020 or 2030, the Proposed Project Alternative would result in a cumulatively considerable contribution to a **significant** cumulative impact related to long-term operational generation of GHGs.

By acknowledging that the regulatory environment will continue to progress and that new GHG reduction technologies will continue to be innovated over time, Mitigation Measure 3A.4-2 requires the implementation of project-specific mitigation measures that are appropriate and feasible during each phase or increment of project development. Although Mitigation Measure 3A.4-2 would require the implementation of all feasible GHG reduction measures known at this time, it is unknown at the time of writing this EIR/EIS whether the selected project-specific measures during each project phase, in combination with the GHG reductions realized from the regulatory environment that exists at that time, would result in attainment of the applicable CO₂e/SP goal.

As the preceding discussion suggests, much of the difficulty in achieving the applicable CO₂e/SP goal through measures imposed by the City reflects the reality that the vast majority of GHG emissions associated with the Proposed Project Alternative would be attributable to the combustion of fossil fuels, either in motor vehicles or in electricity-generating power plants. The state, it is clear, must make significant strides in changing the make-up of transportation fuels and power plant fuels if it is to achieve compliance with AB 32. Based on the Scoping Plan adopted by ARB on December 11, 2008, however, it is reasonable to expect that the state should be able to make such strides through regulations and policies adopted pursuant to AB 32. Given the long period of time needed for build-out of the project, these regulations and policies should be effective in reducing GHG emissions from vehicles and power plants during the period of time in which the City approves the vast majority of project-level development entitlements needed for development pursuant to, and consistent with, the Proposed Project Alternative. As these regulations and policies gradually become effective, the task of achieving the applicable CO₂e/SP goal should become comparatively easier. However, the precise level of reductions is difficult to calculate for all phases of development, and therefore would be speculative at this time. As a precaution, this EIR/EIS concludes that the Proposed Project Alternative's incremental contribution to long-term operational GHG emissions is **cumulatively considerable** and **significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with long-term operational GHG emissions to a less-than-significant level because it is technically infeasible to allow development activities without some GHG emissions. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without GHG emissions, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to long-term operational GHG emissions.

CLIMATE CHANGE – WATER

IMPACT 3B.4-1 **Generation of Short- and Long-term Increases in Greenhouse Gases.** *Construction and operation of the Off-site Water Facility Alternatives would result in a net increase in greenhouse gas emissions, which would contribute considerably to cumulative GHG emissions.*

Mitigation

Mitigation Measure 3B.4-1a: Implement GHG Reduction Measures during Construction.

The bid specifications for construction of the Off-site Water Facilities shall require that bidders demonstrate how they will comply with each of the following measures during all construction and demolition activities:

- 1) Construction vehicles and equipment will be properly maintained at all times in accordance with manufacturer's specifications, including proper tuning and timing of engines. Equipment maintenance records and equipment design specification data sheets shall be kept on-site during construction and demolition activities and subject to inspection by the SMAQMD.
- 2) Operators will turn off all construction vehicles and equipment and all delivery vehicles when not in use, and not allow idling for more than 5 minutes or for such other more restrictive time as may be required in law or regulation.
- 3) On-site construction vehicles and equipment will use ARB-certified biodiesel fuel if available (a minimum of B20, or 20 % of biodiesel) except for those with warranties that would be voided if B20 biodiesel fuel were used. Prior to issuance of grading or demolition permits, the contractor shall provide documentation to the City that verifies whether any equipment is exempt; that a biodiesel supply has been secured; and that the construction contractor is aware that the use of biodiesel is required.
- 4) A City-approved Solid Waste Diversion and Recycling Plan (or such other documentation to the satisfaction of the City) will be in place for the Off-site Water Facilities that demonstrates the diversion from landfills and recycling of all nonhazardous, salvageable and re-useable wood, metal, plastic and paper products during construction and demolition activities. The Plan or other documentation shall include the name of the waste hauler, their assumed destination for all waste and recycled materials, and the procedures that will be followed to ensure implementation of this measure.

Implementation: City of Folsom Utilities Department.

Timing: Prior to the approval of grading plans and building permits for all off-site water facilities.

Enforcement:

1. For improvements that would be located within the City of Folsom: City of Folsom Community Development Department and SMAQMD.
2. For improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department and SMAQMD.
3. For improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department and SMAQMD.

Mitigation Measure 3B.4-1b: Prepare and Implement an Off-site Water Facilities Climate Action Plan.

Prior to operation, the City shall have in place a Off-site Water Facilities Climate Action Plan and Greenhouse Reduction Strategy (Plan) that has been adopted by the City following an opportunity for review and recommendation by the SMAQMD. At a minimum, the Plan shall include:

- ▶ **Designation of Person Responsible for Implementation.** The Plan shall designate the name and contact information of the person(s) responsible for ensuring continuous and on-going implementation of the Plan.
- ▶ **GHG Inventory and Reduction Target.** The City shall prepare a complete GHG Inventory for the Off-site Water Facilities components within one year following occupancy and a GHG reduction target based on State guidance.
- ▶ **Off-site Water Facilities Design Features.** The Off-site Water Facilities shall include design features to reduce operational GHG emissions, as well as an estimate of the reduction in GHG emissions that is expected to result from each facility. Initial measures that may be considered include, but are not limited to:
 - Design all conditioned occupancies with “cool roofs” using products certified by the Cool Roof Rating Council, and other exposed roof surfaces coated with “cool paints”;
 - Design all conditioned occupancies to take advantage of shade through the planting of deciduous canopy-type trees and/or prevailing winds to reduce energy use;
 - Make maximum use of EnergyStar-qualified energy efficient appliances, heating and cooling systems, office equipment and lighting products;
 - Install a photovoltaic array (solar panels) or other source of renewable energy generation on-site, or otherwise acquire energy that has been generated by renewable sources to meet a portion of the electricity needs of the Off-site Water Facilities;
 - In an effort to reduce GHG emissions from transportation sources, the bid specifications for the Off-site Water Facilities should require that bidders demonstrate that they have given preference to local sources of building materials or offer evidence to support why such local sources have not been used.

Implementation: City of Folsom Utilities Department.

Timing: Prior to the approval of grading plans and building permits for all off-site water facilities.

Enforcement:

1. For improvements that would be located within the City of Folsom: City of Folsom Community Development Department and SMAQMD.
2. For improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department and SMAQMD.
3. For improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department and SMAQMD.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

At minimum, the Off-site Water Facilities improvements would be required to comply with Title 24 energy efficiency standards (2007), to the extent applicable; however, the extent to which these standards would help the individual improvements in achieving the goals outlined in AB 32 is unknown. In response to this uncertainty and to provide clarification to lead agencies for assessing GHG impacts, ARB and local air districts have begun developing thresholds of significance for common project types that, collectively, are responsible for substantial GHG emissions. As part of updating its CEQA Guidelines, BAAQMD has proposed a threshold of 10,000 metric tons of CO₂ equivalent per year (MTCO₂e/yr) for operational increases in GHG emissions from stationary sources and a separate threshold of 1,100 MTCO₂e/yr for operational sources other than stationary sources (i.e., mobile vehicle trips). However, no construction threshold is currently proposed by BAAQMD. Nevertheless, at the State-level, ARB is considering the inclusion of mandatory performance standards for construction-related GHGs.

The Off-site Water Facilities would emit GHGs during construction from combustion of fuels in worker vehicles and material product delivery and removal accessing the site as well as the off-road construction equipment. Off- and on-road construction GHG emissions were calculated using URBEMIS2007 for the WTP and SMAQMD's Roadway Construction Model (2007) for linear pipeline construction. These models cover the CO₂ emission estimates for the readily quantifiable construction sources, but do not cover the quantities of indirect CO₂ emissions that go into the manufacturing/processing of steel pipe, construction aggregate, etc. In the absence of an significance threshold for construction-related CO₂-emissions, but in acknowledging that the State is considering mandatory performance measures for construction, without the inclusion of any performance measures for construction, the resulting CO₂ emissions would be greater than if no performance measures were incorporated. Based on these considerations, short-term emissions of CO₂ resulting from the construction of the Off-site Water Facility Alternatives could result **potentially significant direct** and **indirect** impacts.

Following construction, the operation of the Off-site Water Facilities is expected to contribute to regional GHG emissions over the long-term. The primary sources of GHG emissions would be associated with daily vehicle trips to and from the WTP along with indirect emissions from new electrical loads associated with the booster pump station, water treatment operations, and distribution of treated water to users within the Folsom SPA. Based on the methodology employed in Section 3A.2.3, quantification of GHG for the Off-site Water Facilities was focused to the CO₂ outputs generated for off-site conveyance pumping, water treatment (On- or Off-site), distribution pumping within the Folsom SPA, and mobile sources. To estimate emissions generated from these sources, emission factors derived from the California Climate Action Registry Power/Utility Protocol Public Reports (as of September 2008)⁷ were used in combination with the base electrical usage requirements for the booster pumping station, 1,700 HP, and 1,406 kWh/MG for treatment and local distribution pumping (including those facilities within the Folsom SPA) (ICF International 2008). Assuming the most-conservative operational scenario in which the booster pumping station is operated 24 hours a day, 7 days a week, at an average of 6.5 mgd, Table 3B.4-1 on page 3B.4-5 of the DEIR/DEIS provides the GHG emissions in MTCO₂e/year for each of the Off-site Water Facility Alternatives. The GHG estimates calculated for each of the Off-site Water Facility Alternatives is substantially higher than the applied threshold for stationary sources as proposed by BAAQMD and, therefore, this **indirect** impact is considered **significant**. As shown in Table 3B.4-1 on page 3B.4-5 of the DEIR/DEIS, non-stationary sources of GHGs would not be significant.

⁷ Offsite electricity generation emissions are based on SMUD's utility specific verified electricity CO₂ Emissions factors for 2006. These calculations, presented in Appendix M-VI of the DEIR/DEIS, are estimates of expected GHG emissions from carbon dioxide, methane, and nitrous oxide generation, the combination of which are representative of CO₂ equivalent emissions.

Given the overwhelming scope of global climate change, it is not anticipated that a single public infrastructure project would have an individually discernable effect on global climate change (e.g., that any increase in global temperature or rise in sea level could be attributed to the emissions resulting from one single development project). Rather, it is more appropriate to conclude that the GHG emissions generated by the Off-site Water Facilities would combine with emissions across the state, nation, and globe to cumulatively contribute to global climate change. Based on the nature and size of the Off-site Water Facilities components, without mitigation, the construction and operation of the Off-site Water Facilities could contribute to the State's inability to reach the emission reduction limits/standards set forth by the State of California by Executive Order S-3-05 and AB 32. For these reasons, the construction and operation of the Off-site Water Facility Alternatives could result in a substantial contribution to global climate change and the **direct** and **indirect** impacts are considered **potentially significant**.

With implementation of the measures listed above, Off-Site Water Facility construction-related impacts to global climate change from GHG emissions would be reduced to the extent feasible through the inclusion of mandatory performance standards for Off-Site Water Facility construction. However, given the quantities of GHGs indirectly produced by all the Off-site Water Facility Alternatives greatly exceeds the applied operational threshold of 10,000 MTCO₂e/yr for stationary sources, and the range of feasible mitigation measures available for reducing these emissions, the City does not expect that it would be able to reduce these emissions to a less-than-significant level. For this reason, this impact is considered **significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with short-term and long-term GHG emissions to a less-than-significant level because it is technically infeasible to allow construction and development activities without some GHG emissions. The objectives of the "Water" elements of the project include construction of necessary infrastructure and sufficient water supply for the planned SPA. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow construction and development without the potential for some GHG emissions, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to short-term and long-term GHG emissions.

CULTURAL RESOURCES – LAND

IMPACT 3A.5-1 **Possible Destruction of or Damage to Known Prehistoric and Historic-Era Cultural Resources from Ground-Disturbance or Other Construction-Related Activities.** *Construction activities during project implementation could result in the destruction of or damage to known prehistoric and historic-era cultural resources that are potentially eligible for or listed on the CRHR or NRHP.*

Mitigation

Mitigation Measure 3A.5-1a: Comply with the Programmatic Agreement.

The PA for the proposed project is incorporated by reference. The PA provides a management framework for identifying historic properties, determining adverse effects, and resolving those adverse effects as required under Section 106 of the NHPA. This document is incorporated by reference. The PA is available for public inspection and review at the California Office of Historic Preservation 1725 23rd Street Sacramento, CA 95816.

Implementation: USACE (or designee) and the project applicant(s) of all project phases (as directed by USACE).

Timing: The PA shall be prepared and executed (signed) prior to issuance of any Federal permit or authorization for any aspect or component of the specific plan project.

Enforcement: USACE and the project applicant(s) of all project phases (as directed by USACE), with oversight by the SHPO.

Mitigation Measure 3A.5-1b: Perform an Inventory and Evaluation of Cultural Resources for the California Register of Historic Places, Minimize or Avoid Damage or Destruction, and Perform Treatment Where Damage or Destruction Cannot be Avoided.

Management of cultural resources eligible for or listed on the CRHR under CEQA mirrors management steps required under Section 106. These steps may be combined with deliverables and management steps performed for Section 106 provided that management documents prepared for the PA also clearly reference the CRHR listing criteria and significance thresholds that apply under CEQA. Prior to ground-disturbing work for each individual development phase or off-site element, the applicable oversight agency (City of Folsom, El Dorado County, Sacramento County, or Caltrans), or the project applicant(s) of all project phases, with applicable agency oversight, shall perform the following actions:

- ▶ Retain the services of a qualified archaeologist to perform an inventory of cultural resources within each individual development phase or off-site element subject to approval under CEQA. Identified resources shall be evaluated for listing on the CRHR. The inventory report shall also identify locations that are sensitive for undiscovered cultural resources based upon the location of known resources, geomorphology, and topography. The inventory report shall specify the location of monitoring of ground-disturbing work in these areas by a qualified archaeologist, and monitoring in the vicinity of identified resources that may be damaged by construction, if appropriate. The identification of sensitive locations subject to monitoring during construction of each individual development phase shall be performed in concert with monitoring activities performed under the PA to minimize the potential for conflicting requirements.
- ▶ For each resource that is determined eligible for the CRHR, the applicable agency or the project applicant(s) for any particular discretionary development (under the agency's direction) shall obtain the services of a qualified archaeologist who shall determine if implementation of the individual project development would result in damage or destruction of "significant" (under CEQA) cultural resources. These findings shall be reviewed by the applicable agency for consistency with the significance thresholds and treatment measures provided in this EIR/EIS.
- ▶ Where possible, the project shall be configured or redesigned to avoid impacts on eligible or listed resources. Alternatively, these resources may be preserved in place if possible, as suggested under California Public Resources Code Section 21083.2. Avoidance of historic properties is required under certain circumstances under the Public Resource Code and 36 CFR Part 800.
- ▶ Where impacts cannot be avoided, the applicable agency or the project applicant(s) of all project phases (under the applicable agency's direction) shall prepare and implement treatment measures that are determined to be necessary by a qualified archaeologist. These measures may consist of data recovery excavations for resources that are eligible for listing because of the data they contain (which may contribute to research). Alternatively, for historical architectural, engineered, or landscape features, treatment measures may consist of a preparation of interpretive, narrative, or photographic documentation. These measures shall be reviewed by the applicable oversight agency for consistency with the significance thresholds and standards provided in this EIR/EIS.
- ▶ To support the evaluation and treatment required under this mitigation measure, the archaeologist retained by either the applicable oversight agency or the project applicant(s) of all project phases shall prepare an appropriate prehistoric and historic context that identifies relevant prehistoric, ethnographic, and historic themes and research questions against which to determine the significance of identified resources and appropriate treatment.

- ▶ These steps and documents may be combined with the phasing of management and documents prepared pursuant to the PA to minimize the potential for inconsistency and duplicative management efforts.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans).

Implementation: The applicable oversight agency and the project applicant(s) (at the agency’s direction) of all project phases.

Timing: Before issuance of building permits and ground-disturbing activities.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
 3. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 4. For the U.S. 50 interchange improvements: Caltrans.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

The SPA and areas where off-site elements would be constructed contain numerous identified prehistoric and historic-era cultural resources as documented in Appendix E2 of the DEIR/DEIS. While the densest concentration of resources occurs in the northwest corner of the SPA, documented prehistoric and historic cultural resources occur throughout the SPA. Many of these resources have not been specifically evaluated for eligibility for listing on the NRHP or the CRHR, but the quality and range of identified resources as described in Appendix E2 of the DEIR/DEIS suggests that many of these resources are likely eligible for listing in these registers. Construction that would be implemented as part of the Proposed Project Alternative would likely result in direct adverse impacts to these resources. These **direct** impacts are considered **significant**. **No indirect** impacts would occur.

Implementation of Mitigation Measures 3A.5-1a and 3A.5-1b would substantially reduce the level of direct impacts on identified cultural resources under the Proposed Project Alternative, but not to a less-than-significant level. Because this potential impact would not be fully reduced and because it would not be feasible to avoid all direct impacts to identified resources, ground-disturbing work could still result in direct impacts to cultural resources, some of which are likely to be eligible for listing on the CRHR and NRHP. Additionally, some of the off-site elements (two roadway connections in El Dorado County and detention basin in Sacramento County) fall under the jurisdiction of El Dorado and Sacramento Counties; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Even if the affected county(ies) cooperate in allowing and enforcing the mitigation, the impacts to the off-site elements would not be fully reduced to a less-than-significant level. Therefore, under all alternatives, impacts to identified cultural resources are considered **potentially significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with possible damage or destruction of known cultural resources from project construction to a less-than-significant level because it is

technically infeasible to allow construction activities without some potential to damage cultural resources. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without some potential to damage cultural resources, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to damage or destruction of known cultural resources.

IMPACT **Possible Destruction of or Damage to Previously Undiscovered Cultural Resources from Ground-**
3A.5-2 **Disturbance or Other Construction-Related Activities.** *Construction activities during project*
implementation could result in the destruction of or damage to "significant" (under CEQA) undiscovered
cultural resources.

Mitigation

Mitigation Measure 3A.5-2: Conduct Construction Personnel Education, Conduct On-Site Monitoring if Required, Stop Work if Cultural Resources are Discovered, Assess the Significance of the Find, and Perform Treatment or Avoidance as Required.

To reduce potential impacts to previously undiscovered cultural resources, the project applicant(s) of all project phases shall do the following:

- ▶ Before the start of ground-disturbing activities, the project applicant(s) of all project phases shall retain a qualified archaeologist to conduct training for construction workers as necessary based upon the sensitivity of the project APE, to educate them about the possibility of encountering buried cultural resources, and inform them of the proper procedures should cultural resources be encountered.
- ▶ As a result of the work conducted for Mitigation Measures 3A.5-1a and 3A.5-1b, if the archaeologist determines that any portion of the SPA or the off-site elements should be monitored for potential discovery of as-yet-unknown cultural resources, the project applicant(s) of all project phases shall implement such monitoring in the locations specified by the archaeologist. USACE should review and approve any recommendations by archaeologists with respect to monitoring.
- ▶ Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, or architectural remains be encountered during any construction activities, work shall be suspended in the vicinity of the find and the appropriate oversight agency(ies) (identified below) shall be notified immediately. The appropriate oversight agency(ies) shall retain a qualified archaeologist who shall conduct a field investigation of the specific site and shall assess the significance of the find by evaluating the resource for eligibility for listing on the CRHR and the NRHP. If the resource is eligible for listing on the CRHR or NRHP and it would be subject to disturbance or destruction, the actions required in Mitigation Measures 3A.5-1a and 3A.5-1b shall be implemented. The oversight agency shall be responsible for approval of recommended mitigation if it is determined to be feasible in light of the approved land uses, and shall implement the approved mitigation before resuming construction activities at the archaeological site.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans).

- Implementation:** Project applicant(s) of all project phases.
- Timing:** Before and during ground-disturbing activities.
- Enforcement:**
1. For actions taken to satisfy the requirements of Section 106: the SHPO and USACE.
 2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 3. For the two roadway connections off-site into El Dorado Hills: El Dorado County Development Services Department.
 4. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 5. For the U.S. 50 interchange improvements: Caltrans.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

The density of documented resources within the SPA and in the vicinity of the off-site elements suggests that the entire project footprint is also sensitive for previously unidentified and currently unknown cultural resources. These resources may be obscured by surface vegetation or thin overlying strata of culturally sterile soils, with little surface manifestation; thus, it is unlikely that a surface inventory effort would not identify all cultural resources that could be disturbed or destroyed by ground-disturbing construction activities associated with the Proposed Project Alternative. If these resources were determined to be “significant” under CEQA, disturbance or destruction would be a significant impact. Therefore, **direct** impacts to previously undiscovered cultural resources are considered **potentially significant**. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.5-2, and Mitigation Measures 3A.5-1a and 3A.5-1b if required, would reduce the potentially significant impacts from possible damage or destruction of previously unknown cultural resources under the Proposed Project Alternative, but not to a less-than-significant level. Although construction worker personnel training would be conducted, construction monitoring would occur (if determined to be necessary by the qualified archaeologist), and evaluation and treatment of resources after they are discovered as required under Section 106 and CEQA would occur, the potential remains that “significant” (under CEQA) cultural deposits could be disturbed during construction and other ground-disturbing activities before they can be identified and protected under all action alternatives. Additionally, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, or Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Even if the affected county(ies)/Caltrans cooperate in allowing and enforcing the mitigation, the impacts to the off-site elements would not be fully reduced to a less-than-significant level. Therefore, under all of the action alternatives, potential impacts to previously unknown cultural resources are considered **potentially significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with possible damage or destruction of previously undiscovered cultural resources to a less-than-significant level because it is technically infeasible to allow construction activities without risk of damage to previously undiscovered cultural resources. The project’s objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow

construction activities without the risk of damage to previously undiscovered cultural resources, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to previously undiscovered cultural resources.

IMPACT **Possible Destruction of or Damage to Interred Human Remains during Construction.** *Ground-*
3A.5-3 *disturbing activities could inadvertently disinter and/or destroy buried human skeletal remains.*

Mitigation

Mitigation Measure 3A.5-3: Suspend Ground-Disturbing Activities if Human Remains are Encountered and Comply with California Health and Safety Code Procedures.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, including those associated with off-site elements, the project applicant(s) of all project phases shall immediately halt all ground-disturbing activities in the area of the find and notify the applicable county coroner and a professional archaeologist skilled in osteological analysis to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or public lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]).

After the coroner’s findings are complete, the project applicant(s), an archaeologist, and the NAHC-designated MLD shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting on notification of a discovery of Native American human remains are identified in Section 5097.9 of the California Public Resources Code.

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

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

The project applicant(s) or its authorized representative of all project phases shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify an MLD or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The project applicant(s) or its authorized representative may also reinter the remains in a location not subject to

further disturbance if it rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the landowner. Ground disturbance in the zone of suspended activity shall not recommence without authorization from the archaeologist.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans).

Implementation: Project applicant(s) of all project phases.

Timing: Upon the discovery of suspected human remains.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the two roadway connections in El Dorado Hills: El Dorado County Development Services Department.
 3. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 4. For the U.S. 50 interchange improvements: Caltrans.

Finding for Elements within the City of Folsom’s Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Under the five action alternatives, while no documented prehistoric or historic burial sites occur within the SPA or in the vicinity of the off-site elements, the density and number of identified resources suggests that there is at least the potential that interred human remains exist in the project footprint. Ground-disturbing activities associated with Proposed Project Alternative may inadvertently disinter or destroy these remains. Therefore, this **direct** impact is considered **potentially significant**. No indirect impacts would occur.

Implementation of Mitigation Measure 3A.5-3 would reduce the potentially significant impact associated with the possible destruction of human remains under the Proposed Project Alternative to a **less-than-significant** level by immediately suspending work in the vicinity of the discovery and complying with state laws requiring contact with the applicable county coroner and a professional archaeologist to determine the nature of the find, and subsequent contact with the NAHC and appropriate treatment if the remains are determined to be those of a Native American.

Finding for Elements Outside the City of Folsom’s Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties; therefore, the City of Folsom would

not have control or authority over timing or implementation of Mitigation Measure 3A.5-3. If the agency(ies) with jurisdiction over these off-site elements would implement Mitigation Measure 3A.5-3, this potential impact would be mitigated to a less-than-significant level.

CULTURAL RESOURCES – WATER

IMPACT **Possible Destruction of or Damage to Known Prehistoric and Historic-Era Cultural Resources from 3B.5-1 Ground-Disturbance or Other Construction-Related Activities.** *Construction activities associated with the Off-site Water Facility Alternatives could result in the destruction of or damage to known prehistoric and historic-era cultural resources that are potentially eligible for or listed on the CRHR or NRHP.*

Mitigation

Implement Mitigation Measure 3A.5-1a: Comply with the Programmatic Agreement.

Implement Mitigation Measure 3A.5-1b: Perform an Inventory and Evaluation of Cultural Resources for the California Register of Historic Places, Minimize or Avoid Damage or Destruction, and Perform Treatment Where Damage or Destruction Cannot be Avoided.

Implementation: City of Folsom Utilities Department.

Timing: Prior to completion of final design and start of construction.

Enforcement: 1. For actions taken to satisfy the requirements of Section 106: the SHPO and USACE.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For off-site improvements within unincorporated Sacramento County and the City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS

Portions of the historic alignment of White Rock Road are listed as a historical resource and are located within or immediately adjacent to the conveyance alignment for these alternatives. This historical roadway is potentially subject to disturbance as a result of Off-site Water Facilities construction; especially if constructed within the roadway. However, the County is currently planning to realign and widen portions White Rock Road within Zone 4 of the “Water” Study Area, which is further described in the White Rock Road Widening EIR and incorporated by reference into the EIR/EIS. Based on this circumstance, it is possible that installation of the conveyance portion of these Off-site Water Facility Alternatives could occur concurrently with the widening project thereby minimizing potential impacts to this historical resource. However, in addition to White Rock Road, other historic-era resources have also been identified on portions of the White Rock WTP site and in close proximity to White Rock Road (see Appendix M–VI of the DEIR/DEIS). In addition, the On-Site WTP is located in an area potentially containing historical resources. As a result, construction-related direct impacts to these previously-documented resources could be **potentially significant**. **No indirect** impacts would result.

Construction-related excavation for the conveyance pipeline and other above-ground facilities under these alternatives carries the potential to adversely affect previously recorded archaeological sites. As a result, potential construction-related impacts to these previously documented archaeological resources could be potentially significant if these resources qualify as unique archaeological resource or historical resources within the meaning of CEQA or historic properties within the meaning of Section 106 of the NHPA.

Implementation of Mitigation Measures 3A.5-1a and 3A.5-1b would substantially reduce the level of direct impacts on identified cultural resources under the Proposed Off-site Water Facility Alternative, but not to a less-than-significant level. Because this potential impact would not be fully reduced and because it would not be feasible to avoid all direct impacts to identified resources, ground-disturbing work could still result in direct impacts to historic and cultural resources. Additionally, portions of the off-site water facilities fall under the jurisdiction of Sacramento County and the City of Rancho Cordova; therefore, neither the City nor the project applicant(s) would have control over timing or implementation of mitigation measures. Even if the affected jurisdictions cooperate in allowing and enforcing the mitigation, the impacts would not be fully reduced to a less-than-significant level. Therefore, under all alternatives, impacts to identified cultural resources are considered **potentially significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with possible damage or destruction of known cultural resources from project construction to a less-than-significant level because it is technically infeasible to allow construction activities without some potential to damage cultural resources. The objectives of the “Water” elements of the project include construction of necessary infrastructure and sufficient water supply for the planned SPA. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the “Water” portion of the proposed project. Thus, because it is impossible to allow construction activities without some potential to damage cultural resources, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, “Statement of Overriding Considerations,” the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to damage or destruction of known cultural resources.

IMPACT 3B.5-2 Possible Destruction of or Damage to Previously Undiscovered Cultural Resources from Ground-Disturbance or Other Construction-Related Activities. *Construction activities during project implementation could result in the destruction of or damage to “significant” (under CEQA) undiscovered cultural resources.*

Mitigation

Implement Mitigation Measure 3A.5-2: Conduct Construction Personnel Education, Conduct On-Site Monitoring if Required, Stop Work if Cultural Resources are Discovered, Assess the Significance of the Find, and Perform Treatment or Avoidance as Required.

Implementation: City of Folsom Utilities Department.

Timing: Prior to completion of final design and start of construction.

Enforcement:

1. For actions taken to satisfy the requirements of Section 106: the SHPO and USACE.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For off-site improvements within unincorporated Sacramento County and the City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Although the Off-site Water Facilities conveyance routes would generally be constructed within existing roadway right-of-way, this design feature would not completely avoid the potential for encountering previously unidentified archaeological resources. A similar situation could exist for the pump station and WTP sites. Given that traditional survey methods are constrained along roadways due to the presence of pavement, thick annual grasslands along roadway shoulders and WTP sites and the presence of fill materials, buried or previously unidentified resources can be easily obscured. As a result, construction could inadvertently unearth and damage previously unidentified archaeological resources that could qualify as unique archaeological resources or historical resources under CEQA or historic properties within the meaning of Section 106. For the above reasons, this direct impact could be **potentially significant**. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.5-2 would substantially reduce the level of direct impacts on previously unknown cultural resources under Proposed Off-site Water Facility Alternative, but not to a less-than-significant level. Because this potential impact would not be fully reduced and because it would not be feasible to avoid all direct impacts to resources, ground-disturbing work could still result in direct impacts to historic and cultural resources. Additionally, portions of the off-site water facilities fall under the jurisdiction of Sacramento County and the City of Rancho Cordova; therefore, neither the City nor the project applicant(s) would have control over timing or implementation of mitigation measures. Even if the affected jurisdictions cooperate in allowing and enforcing the mitigation, the impacts would not be fully reduced to a less-than-significant level. Therefore, under all alternatives, impacts to identified cultural resources are considered **potentially significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with possible damage or destruction of previously undiscovered cultural resources from project construction to a less-than-significant level because it is technically infeasible to allow construction activities without some potential to damage cultural resources. The objectives of the “Water” elements of the project include construction of necessary infrastructure and sufficient water supply for the planned SPA. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the “Water” portion of the proposed project. Thus, because it is impossible to allow construction activities without some potential to damage previously unknown cultural resources, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to damage or destruction of previously unknown cultural resources.

IMPACT **Possible Destruction of or Damage to Interred Human Remains during Construction.** *Ground-disturbing*
3B.5-3 *activities could inadvertently disinter and/or destroy buried human skeletal remains.*

Mitigation

Mitigation Measure 3A.5-3: Suspend Ground-Disturbing Activities if Human Remains are Encountered and Comply with California Health and Safety Code Procedures.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, including those associated with off-site elements, the project applicant(s) of all project phases shall immediately halt all ground-disturbing activities in the area of the find and notify the applicable county coroner and a professional archaeologist skilled in osteological analysis to determine the nature of the remains. The coroner is required to examine all discoveries of human remains

within 48 hours of receiving notice of a discovery on private or public lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]).

After the coroner's findings are complete, the project applicant(s), an archaeologist, and the NAHC-designated MLD shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting on notification of a discovery of Native American human remains are identified in Section 5097.9 of the California Public Resources Code.

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

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

The project applicant(s) or its authorized representative of all project phases shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify an MLD or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The project applicant(s) or its authorized representative may also reinter the remains in a location not subject to further disturbance if it rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the landowner. Ground disturbance in the zone of suspended activity shall not recommence without authorization from the archaeologist.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans).

Implementation: City of Folsom Utilities Department.

Timing: Before issuance of building permits and ground-disturbing activities.

Enforcement:

1. For actions taken to satisfy the requirements of Section 106: the SHPO and USACE.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.

3. For off-site improvements within unincorporated Sacramento County and the City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

While no evidence exists to indicate that human burials occurred within the Off-site Water Facilities Study Area, the Off-site Water Facilities alignments may cross areas that could contain buried prehistoric or historic-era human remains that may not be identified in preconstruction inventories required above. Unidentified buried human remains that were not identified during field investigations could be inadvertently unearthed during construction-related activities, which could result in damage to these remains. Damage would be considered a **direct significant** impact. **No indirect** impacts would occur.

With the application of the proposed mitigation, disturbances to previously undocumented human interments would be minimized. In addition and specifically in the case of the discovery of Native American human remains, as long as the MLD and the property owner can reach an agreement as to the ultimate treatment and disposition of the remains, this impact would be reduced to a **less-than-significant** level.

GEOLOGY, SOILS, MINERALS, AND PALEONTOLOGICAL RESOURCES – LAND

IMPACT **Possible Risks to People and Structures Caused by Strong Seismic Ground Shaking.** *The SPA is*
3A.7-1 *located in an area of generally low seismic activity; however, structures in the SPA could be subject to*
seismic ground shaking from an earthquake along active faults in Lake Tahoe.

Mitigation

Mitigation Measure 3A.7-1a: Prepare Site-Specific Geotechnical Report per CBC Requirements and Implement Appropriate Recommendations.

Before building permits are issued and construction activities begin any project development phase, the project applicant(s) of each project phase shall hire a licensed geotechnical engineer to prepare a final geotechnical subsurface investigation report for the on- and off-site facilities, which shall be submitted for review and approval to the appropriate City or county department (identified below). The final geotechnical engineering report shall address and make recommendations on the following:

- ▶ site preparation;
- ▶ soil bearing capacity;
- ▶ appropriate sources and types of fill;
- ▶ potential need for soil amendments;
- ▶ road, pavement, and parking areas;
- ▶ structural foundations, including retaining-wall design;
- ▶ grading practices;
- ▶ soil corrosion of concrete and steel;
- ▶ erosion/winterization;
- ▶ seismic ground shaking;
- ▶ liquefaction; and
- ▶ expansive/unstable soils.

In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the project applicant(s) of each project phase. Special recommendations contained in the geotechnical engineering report shall be noted on the grading plans and implemented as appropriate before construction begins. Design and construction of all new project development shall be in accordance with the CBC. The project applicant(s) shall provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the geotechnical report.

Mitigation Measure 3A.7-1b: Monitor Earthwork during Earthmoving Activities.

All earthwork shall be monitored by a qualified geotechnical or soils engineer retained by the project applicant(s) of each project phase. The geotechnical or soils engineer shall provide oversight during all excavation, placement of fill, and disposal of materials removed from and deposited on both on- and off-site construction areas.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans).

Implementation: Project applicant(s) of all project phases.

Timing: Before issuance of building permits and ground-disturbing activities.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the two off-site roadway connections from Folsom Heights into El Dorado Hills: El Dorado County Public Works Department.
 3. For the off-site detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 4. For the U.S. 50 interchange improvements: Caltrans.

Finding for Elements within the City of Folsom’s Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The SPA and off-site elements are not located within a known fault zone, or within or adjacent to any faults known to be active during Holocene time. Other faults that have been zoned as “active” by the CGS are located in the Coast Range or in the vicinity of Lake Tahoe. However, geotechnical reports have only been prepared for five of the properties within the SPA. Three of those reports evaluated the site using the older CBC criteria (before 2008). As stated in the “Regulatory Framework” discussion within Section 3A.7 of the DEIR/DEIS, the 2007 CBC (adopted in 2008) replaced the previous “seismic zones” (assigned a number from 1 to 4, where 4 required the most earthquake-resistant design) with new Seismic Design Categories A–F (where F requires the most

earthquake-resistant design) for structures designed for a project site. Chapter 16 of the CBC specifies exactly how each seismic design category is to be determined on a site-specific basis through the site-specific soil characteristics and proximity to potential seismic hazards. Therefore, because structures in the SPA could be subject to seismic ground shaking, because geotechnical reports have not been prepared for the entire SPA, and because three of the extant reports do not conform to the current CBC criteria, the potential for damage from strong seismic ground shaking is considered a **direct, potentially significant** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measures 3A.7-1a and 3A.7-1b would reduce the potentially significant impact of possible damage to people and structures from strong seismic ground shaking under the Proposed Project Alternative to a **less-than-significant** level by requiring that the design recommendations of a geotechnical engineer to reduce damage from seismic events be incorporated into buildings, structures, and infrastructure as required by the CBC, and that a geotechnical or soils engineer provide on-site monitoring to ensure that earthwork is being performed as specified in the plans.

Finding for Elements Outside the City of Folsom’s Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measures 3A.7-1a and 3A.7-1b. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measures 3A.7-1a and 3A.7-1b, which would mitigate this potential impact to a less than significant level.

IMPACT **Construction-Related Erosion.** *Construction activities during project implementation would involve grading and movement of earth in soils subject to wind and water erosion hazard and on steep slopes.*
3A.7-3

Mitigation

Implement Mitigation Measure 3A.9-1: Acquire Appropriate Regulatory Permits and Prepare and Implement SWPPP and BMPs.

Mitigation Measure 3A.7-3: Prepare and Implement the Appropriate Grading and Erosion Control Plan.

Before grading permits are issued, the project applicant(s) of each project phase that would be located within the City of Folsom shall retain a California Registered Civil Engineer to prepare a grading and erosion control plan. The grading and erosion control plan shall be submitted to the City Public Works Department before issuance of grading permits for all new development. The plan shall be consistent with the City’s Grading Ordinance, the City’s Hillside Development Guidelines, and the state’s NPDES permit, and shall include the site-specific grading associated with development for all project phases.

For the two off-site roadways into El Dorado Hills, the project applicant(s) of that phase shall retain a California Registered Civil Engineer to prepare a grading and erosion control plan. The grading and erosion control plan shall be submitted to the El Dorado County Public Works

Department and the El Dorado Hills Community Service District before issuance of grading permits for roadway construction in El Dorado Hills. The plan shall be consistent with El Dorado County's Grading, Erosion, and Sediment Control Ordinance and the state's NPDES permit, and shall include the site-specific grading associated with roadway development.

For the off-site detention basin west of Prairie City Road, the project applicant(s) of that phase shall retain a California Registered Civil Engineer to prepare a grading and erosion control plan. The grading and erosion control plan shall be submitted to the Sacramento County Public Works Department before issuance of a grading permit. The plan shall be consistent with Sacramento County's Grading, Erosion, and Sediment Control Ordinance and the state's NPDES permit, and shall include the site-specific grading associated with construction of the detention basin.

The plans referenced above shall include the location, implementation schedule, and maintenance schedule of all erosion and sediment control measures, a description of measures designed to control dust and stabilize the construction-site road and entrance, and a description of the location and methods of storage and disposal of construction materials. Erosion and sediment control measures could include the use of detention basins, berms, swales, wattles, and silt fencing, and covering or watering of stockpiled soils to reduce wind erosion. Stabilization on steep slopes could include construction of retaining walls and reseeding with vegetation after construction. Stabilization of construction entrances to minimize trackout (control dust) is commonly achieved by installing filter fabric and crushed rock to a depth of approximately 1 foot. The project applicant(s) shall ensure that the construction contractor is responsible for securing a source of transportation and deposition of excavated materials.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties).

Implementation of Mitigation Measure 3A.9-1 (discussed in Section 3A.9, "Hydrology and Water Quality – Land") would also help reduce erosion-related impacts.

Implementation: Project applicant(s) of all project phases.

Timing: Before the start of construction activities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the two off-site roadway connections from Folsom Heights into El Dorado Hills: El Dorado County Public Works Department.
3. For the off-site detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Project implementation would involve intensive grading and construction activities for infrastructure and building and road foundations over more than 3,500 acres of varied terrain, ranging from relatively flat, to gently rolling, to steeply sloped (in the eastern portion of the SPA). Construction activities would occur in soils that have moderate wind and water erosion hazard potential. Conducting these activities would result in the temporary disturbance of soil and would expose disturbed areas to winter storm events. Rain of sufficient intensity could dislodge soil particles from the soil surface. If the storm is large enough to generate runoff, localized erosion could occur. On the steeper eastern slopes, severe erosion could occur as a result of project development. In addition, soil disturbance during the summer as a result of construction activities could result in soil loss because of wind erosion. Therefore, **direct** impacts associated with construction-related erosion are **potentially significant**. **Indirect** impacts from soil erosion, such as sediment transport and potential loss of aquatic habitat, are evaluated in Sections 3A.3, “Biological Resources – Land,” and 3A.9, “Hydrology and Water Quality – Land,” respectively, of the DEIR/DEIS. Implementation of Mitigation Measure 3A.7-3 along with Mitigation Measure 3A.9-1 would reduce potentially significant construction-related erosion impacts under the Proposed Project Alternative to a **less-than-significant** level because grading and erosion control plans with specific erosion and sediment control measures such as those suggested above or listed in Mitigation Measure 3A.9-1 would be prepared, approved by the appropriate City or county department, and implemented.

Finding for Elements Outside the City of Folsom’s Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measures 3A.7-3 and 3A.9-1. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measures 3A.7-3 and 3A.9-1, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.7-4 Potential Geologic Hazards Related to Construction in Bedrock and Rock Outcrops, and Unstable Soils. *Development in the eastern portion of the SPA would occur in steep slopes underlain by bedrock at shallow depths and rock outcrops that could result in geologic hazards during construction.*

Mitigation

Implement Mitigation Measure 3A.7-1a.

Mitigation Measure 3A.7-4: Prepare a Seismic Refraction Survey and Obtain Appropriate Permits for all On-Site and Off-Site Elements East of Old Placerville Road.

Before the start of all construction activities east of Old Placerville Road, the project applicant(s) for any discretionary development application shall retain a licensed geotechnical engineer to perform a seismic refraction survey. Project-related excavation activities shall be carried out as recommend by the geotechnical engineer. Excavation may include the use of heavy-duty equipment such as large bulldozers or large excavators, and may include blasting. Appropriate permits for blasting operations shall be obtained from the relevant City or county jurisdiction prior to the start of any blasting activities.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties).

Implementation: Project applicant(s) of all project phases for on-site and off-site elements east of Old Placerville Road.

Timing: Before or during earthmoving activities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the two off-site roadway connections from Folsom Heights into El Dorado Hills: El Dorado County Public Works Department.

Finding for Elements Within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Based on a review of the Conceptual Grading Plans prepared by MacKay & Soms (2008), several areas of steep slopes would need to be created, ranging from approximately 16% to 32%. The *Folsom Plan Area Specific Plan* Section A.4 establishes grading standards for the SPA. The SPA consists of two distinct topographic areas: The eastern region includes all of the property east of Placerville Road and consists of hilly terrain located where the lower foothills of the Sierra Nevada join the Sacramento Valley floor. Elevations vary from 440 feet above mean sea level at the valley floor (along Placerville Road), to 800 feet above mean sea level in the foothills adjacent to the existing communication towers. The hilltop terrain is plateau-like and extends in a gentle slope from U.S. 50 to White Rock Road. On the east side of this area, the topography slopes gradually from the plateau to the El Dorado County line. Existing slopes range from 5%, to small areas in excess of 30%. The majority of slopes in this area average 15%.

The topography of the western region of the SPA consists of gently rolling terrain located on the valley floor between Placerville Road on the east, U.S. 50 on the north, White Rock Road on the south, and Prairie City Road on the east. The majority of slopes in this zone range between 0% and 15%; however, isolated steeper slopes exist along the edges of Alder Creek tributaries and existing seasonal drainages in the western sections of this zone.

Development of the SPA would entail the use of conventional, contour, and landform grading, as described below:

- ▶ Conventional grading is characterized by uniform slope gradients with angular slope intersections and pad configurations that are rectangular. In the SPA, conventional grading would be mostly associated with non-hillside commercial building pads, homebuilding sites, school sites, municipal uses, parks, and other areas where uniform site grading is the primary consideration.
- ▶ Contour grading slopes are curvilinear in plan rather than linear as in conventional grading. Transition zones and slope intersections generally have some rounding applied and the resultant pad configurations are mildly curvilinear. In the SPA, contour grading would most likely occur in hillside-graded slope transition areas as well as highly visible areas where visual aesthetics are an important consideration.
- ▶ Landform grading replicates the irregular shapes of natural stable slopes. Landform-graded slopes are characterized by a continuous series of concave and convex forms interspersed with swales and berms that

blend into the existing slopes, and thus the resultant pad configurations are irregular. In the SPA, landform grading would most likely occur in hillside areas where the natural blending of slopes is important, including transitions to oak woodlands, natural drainages, and open space.

The specific policies that would govern grading in the SPA, as fully detailed in Section A4 of *Folsom Plan Area Specific Plan*, have been designed to comply with the City's Hillside Grading Ordinance. In some cases, policies in the Ordinance have been refined for use specifically within the SPA. As stated in Folsom Municipal Code Section 17.37.010:

The purpose of the SP, specific plan district is to provide a vehicle for implementing the city's general plan on an area-specific basis. A specific plan prepared in accordance with the standards set forth in this chapter is intended to serve as a regulatory document, consistent with the General Plan. In the event there is an inconsistency or conflict between an adopted specific plan and comparable regulations of this code, the specific plan will prevail.

In other words, if there is an inconsistency or conflict between the specific plan and other provisions of the Folsom Municipal Code, the specific plan governs.

The eastern foothills of the SPA are underlain by the Copper Hill Volcanics, which consist of weathered and fractured metavolcanic rocks. Rock outcroppings are present throughout the eastern slopes. Based on a review of the *Preliminary Geotechnical Engineering Report* prepared by Wallace Kuhl & Associates (2005), the SPA soils are generally stable and suitable for the proposed hillside grading; however, the geotechnical engineer recommended that a seismic refraction survey be performed for the Folsom Heights property to determine which areas can be graded using a large bulldozer/excavator, and which areas may require blasting in order to excavate the materials.

Potential geologic hazards from construction in bedrock/rock outcroppings within the eastern foothills are considered a **direct, potentially significant** impact.

Implementation of Mitigation Measures 3A.7-1a and 3A.7-4 would reduce potential geologic hazards from construction in bedrock/rock outcroppings under the Proposed Project Alternative to a **less-than-significant** level because a seismic refraction survey would be performed to determine which areas of the eastern foothills required blasting and which could be excavated using conventional methods, and appropriate permits would be obtained for blasting activities.

Finding for Elements Outside the City of Folsom's Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City's jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measures 3A.7-1a and 3A.7-4. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measures 3A.7-1a and 3A.7-4, which would mitigate this potential impact to a less than significant level.

IMPACT **Potential Geologic Hazards Related to Seasonal Subsurface Water Flows from Surface Infiltration.**
3A.7-5 SPA excavation is not expected to encounter groundwater, but seasonal subsurface flows due to surface infiltration, as well as surface infiltration from shallow wells, could adversely affect some of the building foundations in the SPA.

Mitigation

Mitigation Measure 3A.7-5: Divert Seasonal Water Flows Away from Building Foundations.

The project applicant(s) of all project phases shall either install subdrains (which typically consist of perforated pipe and gravel, surrounded by nonwoven geotextile fabric), or take such other actions as recommended by the geotechnical or civil engineer for the project that would serve to divert seasonal flows caused by surface infiltration, water seepage, and perched water during the winter months away from building foundations.

Implementation: Project applicant(s) of all project phases.

Timing: Before and during earthmoving activities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the two roadway connections in El Dorado Hills: El Dorado County Public Works Department.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

According to the results from test pits excavated by Wallace Kuhl & Associates (2004, 2005, 2008) and Youngdahl Consulting (2003), groundwater was not encountered in any test pit to a maximum of 9.5 feet bgs. However, infiltrated seasonal runoff, and water from several shallow wells in the eastern foothills, can be expected to flow underneath the SPA along the soil/bedrock interface, which may create or increase shallow seasonal groundwater conditions. Furthermore, perched groundwater conditions during the winter months and water seepage conditions may be encountered throughout the SPA. Without proper design techniques, such as installation of French drains, this could result in adverse impacts to building foundations constructed at or near the interface of soil and rock. Therefore, this **indirect** impact is considered **potentially significant**. **No direct** impact would occur.

Implementation of Mitigation Measures 3A.7-5 and would reduce the potential impacts from seasonal subsurface water flows, flows from existing shallow wells, water seepage, and perched winter shallow groundwater conditions under the Proposed Project Alternative to a **less-than-significant** level because subsurface drains, or another methodology recommended by the project geotechnical engineer (and approved by the relevant City or county department), would be installed to channel seasonal water flows away from building foundations.

Finding for Elements Outside the City of Folsom's Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and

not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City's jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.7-5. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.7-5, which would mitigate this potential impact to a less than significant level.

IMPACT **Potential Damage to Structures and Infrastructure from Construction in Expansive Soils.** *Portions of*
3A.7-6 *the SPA are underlain by soils that have a moderate to high potential for expansion when wet and may result*
damage to structures.

Mitigation

Implement Mitigation Measures 3A.7-1a and 3A.7-1b.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Expansive soils shrink and swell as a result of moisture change. These volume changes can result in damage over time to building foundations, underground utilities, and other subsurface facilities and infrastructure if they are not designed and constructed appropriately to resist the damage associated with changing soil conditions. Volume changes of expansive soils also can result in the consolidation of soft clays following the lowering of the water table or the placement of fill. Placing buildings or constructing infrastructure on or in unstable soils can result in structural failure. Most of the on- and off-site project elements consist of soils with a moderate to high shrink-swell potential, indicating the soils are expansive. Soil expansion, including volume changes during seasonal fluctuations in moisture content, could adversely affect road surfaces, interior slabs-on-grade, landscaping hardscapes, and underground pipelines. Therefore, this **direct** impact is considered **potentially significant**. No **indirect** impacts would occur.

Implementation of Mitigation Measures 3A.7-1a and 3A.7-1b would reduce the potentially significant impact of damage to people and structures from construction in expansive soils under the Proposed Project Alternative to a **less-than-significant** level by requiring that the design recommendations of a geotechnical engineer to reduce damage from expansive soils be incorporated into buildings, structures, and infrastructure as required by the CBC, and that a geotechnical or soils engineer provide on-site monitoring to ensure that earthwork is being performed as specified in the plans.

Finding for Elements Outside the City of Folsom's Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City's jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this

potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measures 3A.7-1a and 3A.7-1b. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measures 3A.7-1a and 3A.7-1b, which would mitigate this potential impact to a less than significant level.

IMPACT **Possible Loss of Mineral Resources–Kaolin Clay.** *The SPA is located within the Sacramento-Fairfield*
3A.7-9 *Production-Consumption Region designated by CDMG and may contain a deposit of kaolin clay.*

Mitigation

Mitigation Measure 3A.7-9: Conduct Soil Sampling in Areas of the SPA Designated as MRZ-3 for Kaolin Clay and if Found, Delineate its Location and Notify Lead Agency and the California Division of Mines and Geology.

The project applicant(s) of all applicable project phases shall retain a licensed geotechnical or soils engineer to analyze soil core samples that shall be extracted from that portion of the SPA zoned MRZ-3 for kaolin clay, as shown on Exhibit 3A.7-3. In the event that kaolin clay is discovered, the City of Folsom, Sacramento County, and CDMG shall be notified. In addition, the approximate horizontal and vertical extent of available kaolin clay shall be delineated by the geotechnical or soils engineer.

Implementation: Project applicant(s) of all project phases in the Ione Formation.

Timing: Before issuance of building permits for development within the Ione Formation as shown in Exhibit 3A.7-1.

Enforcement: City of Folsom Community Development Department, Sacramento County Planning and Community Development Department, California Division of Mines and Geology.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS

The western edge of the SPA is zoned MRZ-3 for kaolin clay. This classification was applied by CDMG because that area roughly corresponds to the location of the Ione Formation in the SPA. The Ione Formation is known to contain kaolin clay in other locations in northern California. None of the five geotechnical reports prepared for the SPA included an investigation of this area. Therefore, it is currently unknown whether or not an economically valuable deposit of kaolin clay is present. If it were present, the deposit would be unavailable for mining following project implementation, because urban development is planned throughout the area where the Ione Formation occurs in the SPA. Because the potential presence of this valuable mineral resource cannot be ruled out at this time, and because the resource would be lost as a result of project implementation, this **direct** impact is considered **potentially significant**. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.7-9 would provide data that would allow the project applicant(s) and the lead agencies to determine whether or not economically valuable mineral resources are present in the MRZ-3 kaolin clay area of the SPA. However, if economically valuable mineral resources were found to be present, they would be covered over as a result of SPA development with urban land uses, and would no longer be available for mining. Therefore, this impact is considered **potentially significant** and **unavoidable**, because there are no feasible mitigation measures available to avoid or reduce this impact to a less-than-significant level.

No other feasible mitigation measures are available to reduce impacts associated with potential loss of mineral resources to a less-than-significant level because it is technically infeasible to allow construction activities without precluding future mining activities in the area. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without precluding future mining of potential mineral resources, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to loss of mineral resources.

IMPACT 3A.7-10 **Possible Damage of or Destruction to of Previously Unknown Unique Paleontological Resources during Construction-Related Activities.** *Portions of the SPA and the off-site detention basin are underlain by paleontologically sensitive rock formations. Therefore, construction activities could damage or destroy previously unknown, unique paleontological resources in the SPA.*

Mitigation

Mitigation Measure 3A.7-10: Conduct Construction Personnel Education, Stop Work if Paleontological Resources are Discovered, Assess the Significance of the Find, and Prepare and Implement a Recovery Plan as Required.

To minimize potential adverse impacts on previously unknown potentially unique, scientifically important paleontological resources, the project applicant(s) of all project phases where construction would occur in the Ione and Mehrten Formations shall do the following:

- ▶ Before the start of any earthmoving activities for any project phase in the Ione or Mehrten Formations, the project applicant(s) shall retain a qualified paleontologist or archaeologist to train all construction personnel involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered.
- ▶ If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and notify the appropriate lead agency (identified below). The project applicant(s) shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate Paleontology guidelines (1996). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the lead agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., Sacramento County).

Implementation: Project applicant(s) of all project phases within the Ione and Mehrten Formations.

Timing: During earthmoving activities in the Ione and Mehrten Formations as shown in Exhibit 3A.7-1.

Enforcement: 1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.

2. For the off-site detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Most of the SPA and the off-site elements are underlain by the Salt Springs Slate, Copper Hill Volcanics, and Gopher Canyon Volcanics. Because of the way in which these rocks formed, they would not contain vertebrate fossils or fossil plant assemblages. Therefore, construction activities that occur in these rock formations would have no impact on unique paleontological resources.

However, the western edge of the SPA is underlain by Eocene-age sediments of the Ione Formation. Vertebrate mammal, plant, and invertebrate fossils have been recovered from the Ione Formation from over 300 locations in Nevada, Contra Costa, Placer, Butte, Alameda, Merced, Tuolumne, Sutter, Sierra, Plumas, Calaveras, Kern, Stanislaus, and Amador counties, including the town of Ione (about 16 miles south of the SPA) (UCMP 2009).

The off-site detention basin west of Prairie City Road would be located within the Mehrten Formation. Vertebrate fossils have been recovered from the Mehrten Formation from over 40 locations in Calaveras, San Joaquin, Stanislaus, Tuolumne, and Merced Counties (UCMP 2009). In addition, several specimens of plant fossils have been recovered locally from the Mehrten Formation in Granite Bay, Roseville, and Rocklin (Sierra College Natural History Museum 2009).

Because of the large number of fossils that have been recovered from the Mehrten and Ione Formations throughout the Central Valley, they are considered paleontologically sensitive rock units under the Society of Vertebrate Paleontology guidelines (1995), thus suggesting that there is a potential for uncovering additional similar fossil remains during construction-related earthmoving activities in these formations in the SPA. Therefore, the potential for damage to previously unknown unique paleontological resources during earthmoving activities in the SPA and the off-site detention basin is considered a **potentially significant, direct** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.7-10 would reduce potentially significant impacts related to damage or destruction of unique paleontological resources within the Ione and Mehrten Formations to a **less-than-significant** level under the Proposed Project Alternative because construction workers would be alerted to the possibility of encountering paleontological resources, and in the event that resources were encountered, fossil specimens would be recovered and recorded and would undergo appropriate curation.

Finding for Elements Outside the City of Folsom's Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City's jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.7-10. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.7-10, which would mitigate this potential impact to a less than significant level.

GEOLOGY, SOILS, MINERALS, AND PALEONTOLOGICAL RESOURCES – WATER

IMPACT 3B.7-1 **Possible Risks to People and Structures Caused by Strong Seismic Ground Shaking.** *Zone 4 of the “Water” Study Area is located in an area of generally low seismic activity; however, structures constructed as part of the Off-site Water Facility Alternatives could be subject to seismic ground shaking from an earthquake along active faults in the Sierra Nevada.*

Mitigation

Mitigation Measure 3B.7-1a: Prepare Geotechnical Report(s) for the Off-site Water Facilities and Implement Required Measures.

Facility design for all Off-site Water Facility components shall comply with the site-specific design recommendations as provided by a licensed geotechnical or civil engineer to be retained by the City. The final geotechnical and/or civil engineering report shall address and make recommendations on the following:

- ▶ site preparation;
- ▶ soil bearing capacity;
- ▶ appropriate sources and types of fill;
- ▶ potential need for soil amendments;
- ▶ road, pavement, and parking areas;
- ▶ structural foundations, including retaining-wall design;
- ▶ grading practices;
- ▶ soil corrosion of concrete and steel;
- ▶ erosion/winterization;
- ▶ seismic ground shaking;
- ▶ liquefaction; and
- ▶ expansive/unstable soils.

In addition to the recommendations for the conditions listed above, the geotechnical investigation shall include subsurface testing of soil and groundwater conditions, and shall determine appropriate foundation designs that are consistent with the version of the CBC that is applicable at the time building and grading permits are applied for. All recommendations contained in the final geotechnical engineering report shall be implemented by the City.

Implementation: City of Folsom Utilities Department.

Timing: Prior to completion of engineering plans for all Off-site Water Facilities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site water facilities within Unincorporated Sacramento County or the City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Mitigation Measure 3B.7-1b: Incorporate Pipeline Failure Contingency Measures Into Final Pipeline Design.

Isolation valves or similar devices shall be incorporated into all pipeline facilities to prevent substantial losses of surface water in the event of pipeline rupture, as recommended by a licensed

geotechnical or civil engineer. The specifications of the isolation valves shall conform to the CBC and American Water Works Association standards.

Implementation: City of Folsom Utilities Department.

Timing: Prior to completion of engineering plans for all Off-site Water Facilities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site water facilities within Unincorporated Sacramento County or the City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The localized geologic conditions characterizing Zone 4 of the “Water” Study Area are not conducive to hazards associated with rupture of an active fault or slope failure. For this reason, this discussion places emphasis on those hazards that relate to ground motion resulting from a seismic event and potential secondary effects based on the geologic conditions present within Zone 4 of the “Water” Study Area.

The Sacramento Valley has historically experienced very low seismic activity. Therefore, there is a low probability for disruption of water supply service through a pipeline breakage or damage to the WTP. Seismic design consistent with current professional engineering and industry standards would be used in construction for resistance to strong ground motion, especially for lateral forces.

However, without site-specific geotechnical information and interpretation, the City is unable to accurately pinpoint if and where these types of techniques would be required. As a result, this **direct** impact is considered **potentially significant**. No **indirect** impacts would occur.

With the implementation of the above mitigation, potential impacts from strong seismic ground-shaking would be reduced to a **less-than-significant** level through the implementation of recommendations made by a licensed geotechnical engineer in compliance with the CBC prepared as part of a formal geotechnical investigation.

IMPACT 3B.7-2 **Construction-Related Erosion.** *Construction activities during implementation of the Off-site Water Facility Alternatives would involve grading and movement of earth in soils subject to wind and water erosion hazard.*

Mitigation

Implement Mitigation Measures 3B.9-1a, 3B.9-1b, 3B.9-3a, and 3B.9-3b.

Implementation: City of Folsom Utilities Department.

Timing: Prior to start of construction.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.

2. For the off-site water facilities within Unincorporated Sacramento County or the City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Construction of the various Off-site Water Facility components would expose bare soil to precipitation and wind erosion, thereby potentially resulting in increased sedimentation of local waterways. Ground-disturbing activities, including removal of vegetation, could cause increased water runoff rates and concentrated flows, thereby potentially leading to accelerated erosion. In agricultural areas, this could result in measurable losses to soil productivity. In addition, because construction would occur in close proximity to local waterways, such effects to water quality and aquatic habitat could be considerable if proper erosion control measures are not implemented. Dewatering operations used during pipeline installation and the installation of sub-grade structures associated with the WTP or storage tanks also carries the potential for increased sedimentation of local waterways. Therefore, this **direct** impact is considered **potentially significant**. **No indirect** impacts would occur.

With implementation of the mitigation measures listed above, erosion from construction activities related to the off-site water facilities would be reduced to a **less-than-significant** level because a SWPPP would be prepared and BMPs would be implemented to reduce erosion along the pipeline alignment, and a drainage plan would be prepared and implemented to reduce erosion at the WTP.

IMPACT 3B.7-3 **Unstable Geologic Conditions.** *The Off-site Water Facility Alternatives could be located on a geologic unit or soil that is unstable, or that could become unstable as a result of the Off-site Water Facilities.*

Mitigation

Implement Mitigation Measures 3B.7-1a and 3B.7-1b.

Implementation: City of Folsom Utilities Department.

Timing: Prior to completion of engineering plans for all Off-site Water Facilities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site water facilities within Unincorporated Sacramento County or the City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Based on the discussions provided for geologic hazards within the setting description, the primary concerns related to local geologic conditions is related to settlement and differential settlement. Settlement could potentially occur from the placement of new static loads with possibly half of the settlement taking place during

construction or shortly thereafter. Differential settlement could occur between foundation blocks or slabs due to variability in underlying soil conditions. Total and differential settlement could therefore damage proposed foundations, structures, and pipelines. Additionally, although unlikely, regional subsidence could cause potential damage or rupture to the buried pipelines and other associated structures designed with minimal tolerance for settlement. Therefore, these **direct** and **indirect impacts** is considered **potentially significant**.

With implementation of the mitigation measures listed above, geologic hazards in terms of total and differential settlement would be reduced to a **less-than-significant** level, because a licensed geotechnical or soils engineer would investigate the site-specific soil conditions and design the facilities to withstand settlement in accordance with the CBC.

IMPACT 3B.7-4 **Exposure to Potential Hazards from Problematic Soils.** *The Off-site Water Facility Alternatives could encounter expansive or corrosive soils thereby subjecting related structures to potential risk of failure.*

Mitigation

Implement Mitigation Measures 3B.7-1a.

Mitigation Measure 3B.7-4: Implement Corrosion Protection Measures.

As determined appropriate by a licensed geotechnical or civil engineer, the City shall ensure that all underground metallic fittings, appurtenances, and piping include a cathodic protection system to protect these facilities from corrosion.

Implementation: City of Folsom Utilities Department.

Timing: Prior to completion of engineering plans for all Off-site Water Facilities.

Enforcement: 1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.

 2. For the off-site water facilities within Unincorporated Sacramento County or the City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Soils within Zone 4 generally exhibit a moderate to high potential for shrink-swell. Unless properly mitigated, shrink-swell soils could exert additional pressure on buried pipelines producing shrinkage cracks that would allow water infiltration and compromise the integrity of backfill material. Depending on the depth of the buried pipeline, soil expansion or contraction could lead to undue lateral pipeline stress and stress of structural joints. Over time, lateral stresses could lead to pipeline rupture or leaks in the coupling joints. Likewise, structural facilities, including the WT and pump station, could be subjected to hazards from expansive soils is constructed directly on expansive soil materials. This **direct** impact would be a **potentially significant**. **No indirect** impacts would occur.

Soil materials encountered within Zone 4 of the Off-site Water Facilities Study Area exhibit a moderate to high potential for corrosion to uncoated steel. Corrosive soil materials could lead to pipe corrosion, potentially

resulting in pipe failure and localized surface flooding of water or localized settlement of surface soils in the location of the failure. Therefore, this **direct** impact is considered **potentially significant**. **No indirect** impacts would occur.

With implementation of the mitigation measure listed above, soil-related hazards in terms of expansive and corrosive soils would be reduced to a **less-than-significant** level because a licensed geotechnical or soils engineer would investigate the site-specific soil conditions and design the facilities to withstand expansive soil pressures and soil corrosivity.

IMPACT **Possible Damage of or Destruction to of Previously Unknown Unique Paleontological Resources**
3B.7-5 **during Construction-Related Activities.** *Construction of the Off-site Water Facility Alternatives could directly or indirectly destroy a unique paleontological resource or site.*

Mitigation

Mitigation Measure 3B.7-5: Conduct Construction Personnel Education, Stop Work if Paleontological Resources are Discovered, Assess the Significance of the Find, and Prepare and Implement a Recovery Plan as Required.

To minimize potential adverse impacts on previously unknown potentially unique, scientifically important paleontological resources, the City shall implement appropriate measures during construction of the Offsite Water Facility improvements. These measures shall be required for construction activities at the following locations: (1) Grant Line Road, south of SR 16; (2) Florin road, east of Excelsior Road; (3) Gerber Road, east of Excelsior Road; (4) White Rock Road, east of Prairie City Road; and (5) Prairie City Road and shall include:

- ▶ Before the start of any earthmoving activities for any project phase in the Riverbank Formation, the project applicant(s) shall retain a qualified paleontologist or archaeologist to train all construction personnel involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered.
- ▶ If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and notify Sacramento County Planning and Community Development Department. The project applicant(s) shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate Paleontology guidelines (1996). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the County to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Implementation: City of Folsom Utilities Department.

Timing: During earthmoving activities in the Roverbank, Ione, and Mehrten Formations as shown in Wagner et al, 1981.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site water facilities within Unincorporated Sacramento County or the City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Fossil remains of vertebrates that existed during the Pleistocene have been encountered during excavation activities within the Riverbank, Mehrten, and Ione geologic formations underlie the southern and northeastern portions of Zone 4 of the Off-site Water Facilities Study Area. The remaining portions of Zone 4 are generally underlain by the Laguna Formation, mine/dredge tailings, or Holocene-aged channel deposits. As provided in the discussion of the affected environment, these formations are generally devoid of significant vertebrate fossils, and no previously recorded fossil sites from this formation are known from either Zone 4 or the surrounding area (City of Rancho Cordova 2006). Furthermore, the conveyance pipeline would be constructed within existing roadways or along the shoulder and, therefore, has a low likelihood for disturbing native ground surfaces.

Nevertheless, each of the Off-site Water Facility Alternatives along one or more portions of each respective alignment has the potential to encounter the sensitive geologic formations identified above. The conveyance alignment for the Proposed Off-site Water Facility Alternative would traverse cross-county east of Gerber Road, which as shown in Exhibit 3B.7-1 of the DEIR/DEIS, is underlain by the Riverbank Formation. In addition, all the conveyance alignments would traverse areas in the vicinity of Prairie City Road, which are underlain by the Mehrten and Ione Formations, thereby creating the potential for encountering paleontological resources during construction-related excavation/trenching.

Since fossils have been discovered within the Mehrten, Ione, and Riverbank Formations throughout the Central Valley, these formations are considered paleontologically sensitive. As a result, the potential for encountering and potentially damaging or destroying unique paleontological resources during construction activities within these sensitive geologic formations is considered a **potentially significant direct** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3B.7-5 would reduce potentially significant impacts related to damage or destruction of unique paleontological resources within the Riverbank Formation to a **less-than-significant** level because construction workers would be alerted to the possibility of encountering paleontological resources, and in the event that resources were encountered, and fossil specimens would be recovered and recorded and would undergo appropriate curation.

HAZARDS AND HAZARDOUS MATERIALS – LAND

IMPACT 3A.8-2 Potential Human Health Hazards from Possible Exposure of Existing On-site Hazardous Materials.
Construction workers and future residents could be exposed to hazardous materials known to exist within the SPA.

Mitigation

Mitigation Measure 3A.8-2: Complete Investigations Related to the Extent to Which Soil and/or Groundwater May Have Been Contaminated in Areas Not Covered by the Phase I and II Environmental Site Assessments and Implement Required Measures.

The project applicant(s) for any discretionary development application shall conduct Phase I Environmental Site Assessments (where an Phase I has not been conducted), and if necessary, Phase II Environmental Site Assessments, and/or other appropriate testing for all areas of the SPA and include, as necessary, analysis of soil and/or groundwater samples for the potential contamination sites that have not yet been covered by previous investigations (as shown in Exhibit 3A.8-1) before construction activities

begin in those areas. Recommendations in the Phase I and II Environmental Site Assessments to address any contamination that is found shall be implemented before initiating ground-disturbing activities in these areas.

The project applicant(s) shall implement the following measures before ground-disturbing activities to reduce health hazards associated with potential exposure to hazardous substances:

- ▶ Prepare a plan that identifies any necessary remediation activities appropriate for proposed on- and off-site uses, including excavation and removal of on-site contaminated soils, redistribution of clean fill material in the SPA, and closure of any abandoned mine shafts. The plan shall include measures that ensure the safe transport, use, and disposal of contaminated soil and building debris removed from the site. In the event that contaminated groundwater is encountered during site excavation activities, the contractor shall report the contamination to the appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminants before discharge into the sanitary sewer system. The project applicant(s) shall be required to comply with the plan and applicable Federal, state, and local laws. The plan shall outline measures for specific handling and reporting procedures for hazardous materials and disposal of hazardous materials removed from the site at an appropriate off-site disposal facility.
- ▶ Notify the appropriate Federal, state, and local agencies if evidence of previously undiscovered soil or groundwater contamination (e.g., stained soil, odorous groundwater) is encountered during construction activities. Any contaminated areas shall be remediated in accordance with recommendations made by the Sacramento County Environmental Management Department, Central Valley RWQCB, DTSC, and/or other appropriate Federal, state, or local regulatory agencies.
- ▶ Obtain an assessment conducted by PG&E and SMUD pertaining to the contents of any existing pole-mounted transformers located in the SPA. The assessment shall determine whether existing on-site electrical transformers contain PCBs and whether there are any records of spills from such equipment. If equipment containing PCB is identified, the maintenance and/or disposal of the transformer shall be subject to the regulations of the Toxic Substances Control Act under the authority of the Sacramento County Environmental Health Department.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., Sacramento County).

Implementation: Project applicant(s) for any discretionary development application.

Timing: Before and during earthmoving activities.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the off-site detention basin west of Prairie City Road: Sacramento County Environmental Management Department.
 3. Other regulatory agencies, such as California Department of Toxic Substances Control, or Central Valley Regional Water Quality Control Board, as appropriate.

Implement Mitigation Measure 3A.9-1.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The Russell Ranch South Phase I Environmental Site Assessment detailed concerns related to radio/utility towers and associated buildings that may contain asbestos (Youngdahl & Associates 1995). Demolition activities can cause asbestos fibers to become airborne and potentially inhaled, which can lead to a variety of health problems. However, demolition and removal of these structures is not defined as part of the Proposed Project Alternative or action alternatives. Because there is no project-related mechanism for exposure to potential sources of asbestos within the structures, there would be no impact associated with project implementation.

Because the existing on-site residence could contain ACM and lead paint, demolition activities could expose construction workers to asbestos fibers and lead particles. In addition, electrical transformers are likely to be located within the SPA. If not properly dismantled, transported, and disposed, PCBs could be released into the environment during potential removal of these transformers.

Completed Phase I Environmental Site Assessments within the SPA cover the majority of the total area (Exhibit 3A.8-3 on page 3A.8-8 of the DEIR/DEIS) and do not include the full extent of an abandoned railroad track that runs parallel to Old Placerville Road. According to Geotracker and the Federal Railroad Administration, no accidental releases of petroleum products or other hazardous materials associated with the railroad track have been reported (SWRCB 2008).

As discussed in Section 3A.8.1.2, "Phase I Environmental Site Assessments," of the DEIR/DEIS, dredger mining activities have historically occurred in the SPA. Mercury and other metals are often associated with mining activities, and may exist in areas that would require earthmoving activities, which could expose construction workers to hazardous materials (Ramcon 2003a). In addition, at least one mine shaft exists on site, and others may be present. It is unknown whether mines located within the SPA have been properly abandoned in accordance with Federal, state and local regulations.

Four small areas of the SPA were not assessed through the Phase I Environmental Site Assessment process, and information about former land uses or potential hazardous materials use or disposal is not available for these areas (see Exhibit 3A.8-3 on page 3A.8-8 of the DEIR/DEIS). In the absence of this information, it is possible that former land uses may have resulted in a release of hazardous materials onto the SPA. Therefore, for the reasons stated above, this **direct** impact is considered to be **potentially significant**. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.9-1 would require use of erosion- and sediment-control best management practices, reducing the potential for runoff and release of soils, including legacy sources of mercury from project-related construction sites. Implementation of Mitigation Measure 3A.8-2 would reduce significant impacts from potential human health hazards from possible exposure to hazardous materials under the Proposed Project Alternative to a **less-than-significant** level because the entire SPA would be evaluated through the Phase I and/or Phase II Environmental Site Assessment processes, a site plan identifying remediation activities and setting forth procedures to appropriately handle hazardous materials (if any are encountered) would be prepared, and hazardous substances that are encountered would be removed and properly disposed of by a licensed contractor in accordance with Federal, state, and local regulations.

Finding for Elements Outside the City of Folsom's Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and

not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measures 3A.8-2 and 3A.9-1. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measures 3A.8-2 and 3A.9-1, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.8-3 Potential Development Constraints Due to the Listing on the National Priorities List (NPL) and Cortese List. *The SPA contains Area 40, part of the Aerojet Superfund site, which has the potential to create a hazard to public health or the environment. Ongoing remediation activities could delay or limit project development on or near the site of those remediation activities.*

Mitigation

Mitigation Measure 3A.8-3a: Require the Project Applicant(s) to Cooperate with Aerojet and Regulatory Agencies to Preserve, Modify, or Close Existing Groundwater Monitoring Wells.

The project applicant(s) for any particular discretionary development that would occur in or adjacent to the Area 40 boundary shall consult with Aerojet, EPA, DTSC, and/or the Central Valley RWQCB or any successor in interest to establish the preservation, modification, or closure of existing groundwater monitoring wells. If necessary, Aerojet, or any successor may purchase lots or obtain access agreements from the project applicant(s) to maintain access to monitoring wells and/or remediation systems. If groundwater wells are to be affected by proposed tentative maps, then the project applicant(s) or successors shall provide the City with evidence that the relocation, modification, or closure of the well(s) is approved by the appropriate agencies as part of the City’s final map approval process and before development.

The project applicant(s) for activities related to the off-site detention basin located outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) with Sacramento County.

Implementation: Project applicants(s) for activities that would occur in the Area 40 boundary or on areas used for groundwater monitoring and other remediation activities.

Timing: Ongoing to the satisfaction of EPA, DTSC, and/or the Central Valley RWQCB.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.

Mitigation Measure 3A.8-3b: Coordinate Development Activities to Avoid Interference with Remediation Activities.

The project applicant(s) for any particular discretionary development that would occur in or adjacent to the Area 40 boundary shall provide notice to Aerojet or any successor in interest and DTSC, the Central Valley RWQCB, and the City of Folsom of the location, nature, and duration of construction activities least 30 days before construction activities begin in areas on or near property with current or planned remediation activities

(Area 40). Remedial actions, as required by DTSC, RWQCB, and/or the EPA, may include, but are not limited to:

- ▶ deed restrictions on land and groundwater use;
- ▶ requirements for building ventilation, heating, and air conditioning design;
- ▶ monitoring;
- ▶ installation of vertical barriers;
- ▶ biological, chemical, and/or physical treatment;
- ▶ extraction or excavation; and/or
- ▶ pump and treat activities.

Before the approval of grading plans which include areas within the Area 40 boundary or the off-site detention basin, the project applicant(s) shall consult with Aerojet, EPA, DTSC, and/or the Central Valley RWQCB or any successor to schedule the timing of construction activities to prevent potential conflicts with investigation and remediation activities.

The project applicant(s) for activities related to the off-site detention basin located outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) with Sacramento County.

Implementation: Project applicant(s) for activities within the Area 40 boundary or on lands used for monitoring or other remediation-related activities.

Timing: Before the approval of grading plans and during construction activities within the Area 40 boundary, off-site detention basin, or on lands used for monitoring or other remediation-related activities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
3. U.S. Environmental Protection Agency, California Department of Toxic Substances Control, and/or Central Valley Regional Water Quality Control Board, Aerojet General Corporation, as appropriate.

Mitigation Measure 3A.8-3c: Provide Written Notification to the City that, as required by EPA, DTSC, and the Central Valley RWQCB, Notification Obligations and/or Easements Have Been Fulfilled to Ensure that Construction Activities Do Not Interfere with Remedial Actions.

Pursuant to their oversight over investigations of hazardous substances and determination of remedial action, EPA and/or DTSC establish, as appropriate, deed restrictions (e.g., restrictions on future groundwater uses or future land uses) or easements (e.g., continued access to groundwater wells and pipelines) on property with associated notice requirements. The project applicant(s) for all such affected project activities, located within the Area 40 boundary, the off-site detention basin, or lands subject to monitoring or other remediation activities shall provide notification in writing to the City (or Sacramento County for the off-site detention basin) that said required notification obligations have been fulfilled. Evidence of the method of notification required by EPA and/or DTSC shall be submitted to the City before approval of tentative maps or improvement plans.

The project applicant(s) for such affected project activities shall coordinate with the City to include this provision as part of tentative map approval within the Area 40 boundary or lands subject to monitoring or

other remediation activities. The project applicant(s) shall coordinate with Sacramento County for such affected project activities pertaining to the off-site detention basin.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., Sacramento County).

Implementation: Project applicant(s) for activities that would occur in the Area 40 boundary or on areas used for groundwater monitoring and other remediation activities.

Timing: Before approval of final maps and/or issuance of permits for sales trailers and model homes within the Area 40 boundary, the off-site detention basin, or lands subject to monitoring or other remediation activities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.

Mitigation Measure 3A.8-3d: Land Use Restrictions for Contaminated Soil and Groundwater within Area 40 as Depicted on the Remedial Restrictions Area Exhibit 3A.8-9.

Prior to approval of any tentative maps, improvement plans, or discretionary project approvals for locations within Area 40, as depicted in the Remedial Restrictions Area (Exhibit 3A.8-9), the project applicant(s) shall designate those areas that are subject to off-gassing hazards in excess of an indoor air standard, as open space or park use, as required by the City and Aerojet in consultation with the EPA. Areas designated for open space or park under this mitigation measure shall be determined by the City and by Aerojet in consultation with the EPA using risk calculations (completed in accordance with EPA's 1989 *Risk Assessment Guidance for Superfund* [EPA/540/1-89-002] and DTSC's 1992 *Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities* and 1994 *Preliminary Endangerment Assessment Guidance Manual*, or such guidance as may be in place at the time risk assessment is performed) for exposure to off-gassing from either soil or groundwater based on detected PCE and TCE concentrations. The project applicant(s) for such affected areas located within Area 40 as depicted on the Remedial Restrictions Area Exhibit 3A.8-9 shall implement this measure as part of tentative map applications or other discretionary project approvals when such applications are submitted to the City.

If the portions of Area 40 that are designated for park and open space use are not available for use as park and open space as identified in the SPA concurrently with surrounding development that creates demand for park and open space use, the project applicant(s), and the owners of land within the SPA shall identify and the City may rezone equivalent acreage of suitable park and open space land within the SPA for development as interim or permanent park and open space to meet the then current demand.

Implementation: Project applicant(s) in consultation with the City, Aerojet, and U.S. Environmental Protection Agency for activities that would occur in Area 40, as depicted on the Remedial Restrictions Area Exhibit 3A.8-9.

Timing: Prior to approval of tentative maps within Area 40 as depicted on the Remedial Restrictions Area Exhibit 3A.8-9.

Enforcement: For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department; U.S. Environmental Protection Agency.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

A portion of the Aerojet Superfund site (Area 40) is located in the SPA, and is undergoing investigation and remediation under the direction of EPA and DTSC. An approximately 54-acre portion of the SPA is part of a larger carve-out area that has been removed from the Superfund site. This carve-out area is no longer a Cortese-listed site. Area 40 and the carve-out area are illustrated on Exhibit 3A.8-1 and 3A.8-2 on pages 3A.8-4 and 3A.8-5, respectively, of the DEIR/DEIS.

Soil and groundwater investigations have been conducted at Area 40 since 1985. These investigations have identified the presence of soil and groundwater contamination in the SPA, including VOCs, metals, and perchlorate. Area 40 includes two areas of soil where concentrations of VOCs, metals, perchlorate, dioxins, and furans exceed human health or ecological screening levels (identified in Exhibit 3A.8-2 on page 3A.8-5 of the DEIR/DEIS). Compliance with Sacramento LAFCo Resolution 1196 would require demonstration that the on-site surface contamination has been remediated to standards determined to be acceptable by Federal and state regulatory agencies before Area 40 could be developed with uses proposed in the Folsom South of U.S. 50 Specific Plan.

Groundwater contamination at Area 40 includes VOCs, metals, and perchlorate at concentrations in excess of human health screening levels. Exhibit 3A.8-2 on page 3A.8-5 of the DEIR/DEIS illustrates the location of an area where total VOC concentrations in the surface groundwater layer are more than 3,000 micrograms per liter (ug/L). In this area, off-gassing of VOCs from groundwater could result in soil vapor concentrations above health-based risk standards in indoor air. As illustrated in Exhibits 3A.8-4 through 3A.8-8 of the DEIR/DEIS, this area is proposed for park and open space use in the Proposed Project Alternative and the action alternatives.

A memorandum from Arcadis to the City of Folsom, in 2007 (ARCADIS 2007), discussed probable human health effects associated with land uses within the northern portion of Area 40 in response to concerns related to potential ambient air exposures associated with park and recreation use. No buildings are proposed for this area, resulting in no potential indoor air exposure. The memorandum indicated that the concentration of ambient VOCs resulting from off-gassing of contaminated groundwater would not be high enough to create an unacceptable risk to children or adults using the area for outdoor recreational activities (ARCADIS 2007). Arcadis concluded that park or open space land uses would be acceptable on this portion of Area 40. Arcadis' conclusions were limited to risks posed by off-gassing of groundwater, and were based on an understanding that the EPA would ensure that contaminated soils are remediated appropriately in accordance with future land uses as proposed in the Folsom South of U.S. 50 Specific Plan and analyzed in the DEIR/DEIS.

Subsequent to the release of the DEIR/DEIS, updated environmental information regarding the boundaries of the contaminated groundwater in Area 40 became available that may necessitate certain changes to the locations and sizes of the open space and parks and residential uses in the Community Park West area of the Specific Plan. Those changes are depicted in Exhibit 3A.8-9, Remedial Restrictions Area. Implementation of Mitigation Measure 3A.8-3d will adequately address the development constraints posed by the Area 40 contamination boundaries. The changes are minor and will not result in new significant environmental impacts or any substantial increase in the severity of any environmental impact analyzed in the EIR/EIS.

The land identified for the proposed off-site detention basin is also located on the Aerojet Superfund site, in the Eastern OU. The proposed detention basin is not within an identified source area as defined in the Partial Consent

Decree (Partial Consent Decree entered June 23, 1989 [and modifications thereto] in the consolidated actions Nos. CIVS-86-0063-EJG and CIVS-86-0064-EJG) and was not identified as an area of concern as identified in the Eastern Operable Unit Sampling Plan (Aerojet General Corporation 2008). The detention basin would be required to adhere to any deed restrictions.

Although enforcement of LAFCo resolution 1196 would ensure that the proposed land use plans would not pose a risk to human health, ongoing remediation at this Federally listed site may delay or limit the availability of some development, including parks and open space at or near the contaminated sites. The level of remediation effort at these sites may limit future development to open space uses on a portion of Area 40. Ongoing regulatory review and approvals required by EPA, DTSC, and the Central Valley RWQCB would ensure that any site-specific land use limitations are identified and required when the land is made available for development. Aerojet will also retain right of access to certain properties to operate and maintain the monitoring wells or to conduct other remediation activities. This **direct** impact is considered **potentially significant**. There would be **no indirect** impacts.

Implementation of Mitigation Measures 3A.8-3a, 3A.8-3b, 3A.8-3c, and 3A.8-3d would reduce significant potential development constraints due to site listing on the NPL and/or Cortese List under the Proposed Project Alternative to a **less-than-significant** level because remediation activities, implementation of deed restrictions, and other actions required prior to implementation of the project would be required by EPA, DTSC, and/or other agencies as part of the Superfund investigation and remediation activities. Furthermore, the open space land uses within Area 40 would be expanded as necessary to protect human health based on the results of appropriate testing.

Finding for Elements Outside the City of Folsom’s Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measures 3A.8-3a, 3A.8-3b, 3A.8-3c, and 3A.8-3d. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measures 3A.8-3a, 3A.8-3b, 3A.8-3c, and 3A.8-3d, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.8-5 Potential for Blast-Related Injury to Construction Workers and the General Public. Development in the SPA would entail the use of explosive materials as part of grading activities in the eastern portion of the SPA that could result in injury to construction workers and the general public.

Mitigation

Mitigation Measure 3A.8-5: Prepare and Implement a Blasting Safety Plan in Consultation with a Qualified Blaster.

To reduce the potential for accidental injury or death related to blasting, contractors whose work in the SPA will include blasting shall prepare and implement a blasting safety plan. This plan shall be created in coordination with a qualified blaster, as defined by the Construction Safety and Health Outreach Program, Subpart U, Section 1926.901, and distributed to all appropriate members of construction teams. The plan

shall apply to project applicant(s) of all project phases in which blasting would be employed. The plan shall include, but is not limited to:

- ▶ storage locations that meet ATF standards contained in 27 CFR Part 55;
- ▶ safety requirements for workers (e.g., daily safety meetings, personal protective equipment);
- ▶ an accident management plan that considers misfires (i.e. explosive fails to detonate), unexpected ignition, and flyrock; and
- ▶ measures to protect surrounding property (e.g., netting, announcement of dates of expected blasting, barricades, and audible and visual warnings).

Upon completion of a blasting safety plan, the project applicant(s) shall secure any required permits from the City of Folsom Fire Department and the El Dorado County Sheriff's Department for blasting activities in Sacramento County and El Dorado County, respectively.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado County).

Implementation: Project applicant(s) and contractor(s) of all project phases in which blasting would be employed.

Timing: At the submission of tentative map applications.

Monitoring:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Fire Department.
2. For the off-site roadway connections in El Dorado County: El Dorado County Sheriff's Department.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Blasting may be required for excavation and removal of rock from the eastern slopes of the SPA. Blasting entails the placement of explosive materials into a borehole, which is then ignited. The subsequent explosion generates air blasts and seismic waves that fracture the surrounding rock. Generally, explosives used for construction purposes consist of ammonium nitrate and fuel oil (Centers for Disease Control and Prevention [CDC] 2004). Reasonably foreseeable accidents associated with blasting include accidental discharge and expulsion of materials beyond the expected distance (i.e., flyrock).

Explosive materials are ignited from sources of energy. During construction-related blasting activities, materials are ignited from the controlled used of electricity. Accidental discharge of explosive materials can also occur from extraneous sources of electricity. Sources of electricity within the SPA include power lines, radio transmitters, and electrical storms. Depending on the amount of material and method of storage, the size and extent of an accidental discharge could cause extensive destruction. Injuries and fatalities could result from the initial explosion and/or secondary effects such as fires and flyrock.

Flyrock is a potential hazard from blasting that could occur under accidental and planned ignition. Flyrock is defined as mud, water, or fragments of rock that accidentally travel outside of the expected blast area. Creation of flyrock can be the result of many factors, including anomalies in the geology and rock structure, poor communication, and incorrect blast hole layout and loading (CDC 2004). Blasting-induced flyrock can travel up to one-half mile at a rate of 400 miles per hour (recorded at 200 feet from the blast site) (CDC 2008). There are numerous documented cases of flyrock causing bodily harm to construction workers and the general public, sometimes leading to fatalities (CDC 2004).

Section 12101 through 12103 of the California Health and Safety Code describe permit requirements for manufacturing, possession, transportation, and use of explosives, which would apply to blasting activities in the SPA, and these permits must be issued or endorsed by the jurisdiction in which blasting would take place.

OSHA's Construction Safety and Health Outreach Program sets standards for blaster qualifications, transportation, storage, and loading, execution, and post-explosion requirements. However, accidental discharge or materials or production of flyrock remains possible. Sources of electricity, including radio towers and power lines, are located within the eastern slopes and could cause injury or fatalities to construction workers or the general public. Therefore, **direct** impacts associated with blasting activities are considered to be **potentially significant**. There would be **no indirect** impacts.

Implementation of Mitigation Measure 3A.8-5 would reduce potential impacts related to blasting activities because a blasting safety plan would be prepared and implemented that would include protection measures for construction workers and the general public, and the proper permits would be secured by the project applicant(s) of all affected project phases. Because these actions would substantially diminish the probability of accidents involving the production of flyrock and accidental ignition, this impact would be reduced to a **less-than-significant** level.

Finding for Elements Outside the City of Folsom's Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City's jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado County; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.8-5. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.8-5, which would mitigate this potential impact to a less than significant level.

IMPACT **Possible Exposure of People to Electric and Magnetic Fields.** *Residential developments and/or schools*
3A.8-6 *would be located near high voltage transmission lines and radio towers, which could expose the general public to EMFs.*

Mitigation

Mitigation Measure 3A.8-6: Notification of EMF Exposure.

Potential purchasers of residential properties near the transmission lines shall be made aware of the controversy surrounding EMF exposure. The California Department of Real Estate shall be requested to insert an appropriate notification into the applicant's final Subdivision Public Report application, which

shall be provided to purchasers of properties within 100 feet from the 100-115kV power line, or within 150 feet from the 220-230 kV power line. The notification would include a discussion of the scientific studies and conclusions reached to date, acknowledge that the notification distance is not based on specific biological evidence, but rather, the distance where background levels may increase, and provide that, given some uncertainty in the data, this notification is merely provided to allow purchasers to make an informed decision.

Implementation: Project applicant(s) for any particular discretionary development entitlement in the vicinity of high-tension transmission lines.

Timing: At the submission of tentative map applications.

Enforcement:

1. City of Folsom Community Development Department.
2. Folsom Cordova Unified School District.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The SPA is traversed by two 230-kV, one 115 kV, and one 69-kV electrical transmission lines on steel lattice towers within a single 400-foot-wide right-of-way, with lines spread throughout the easement to approximately 50 feet from the edges of the right-of-way. Under the Proposed Project Alternative and the other four action alternatives, the transmission line easement would be developed into open space, which would be approximately 400 feet wide. Additional 69-kV transmission lines extend westward from this right-of-way towards Prairie City Road, and a 69-kV transmission line dead-ends in the SPA just east of Placerville Road. (Capitol Utility Specialists 2009.)

Common utility line setbacks generally incorporate a distance of approximately 50 feet on each side of the high-tension power lines; the open space area in the SPA would be 400 feet wide because three separate lines are present. California does not require additional housing setback requirements from electrical transmission lines that would take into account the generation of EMFs. However, ongoing research shows that once emitted from the source, an EMF dissipates rapidly in a circular pattern and weakens with distance from the emitting source. For instance, at a distance of 200 feet from a 230 kV line, the EMF drops to a level of 1.8 mG (NIEHS 2002).

A few organizations have taken active steps to limit exposure to EMFs, while other organizations have issued guidelines to reduce EMF exposure. For example, the National Association of Certified Home Inspectors cites the Office of Technology Assessment of the U.S. Congress, which recommends a policy of “prudent avoidance” with respect to EMFs. “Prudent avoidance” means to measure fields, determine the sources, and act to reduce exposure. The National Association of Certified Home Inspectors suggests that exposure to EMFs should be limited to 2.5 mG or less. CDE has taken the position that K–12 schools may not be constructed within 150 feet of an easement for a 230-kV transmission line (approximately 200 feet from the power line itself). This effectively reduces school-site exposures to 2 mG or less. Since new schools constructed on the project site would require CDE approval, no schools could be constructed within 150 feet of a 230-kV transmission line easement, and no school-site exposures in excess of 2 mG would occur.

Under the Proposed Project Alternative and action alternatives, residential developments are planned adjacent to the 400-foot-wide easement, which could place houses within 200 feet of the 230-kV transmission line and within 150 feet of a 69 kV or 115 kV transmission line.

The radio towers located in the eastern portion of the SPA are registered with the FCC, and must conform with rules and regulations involving exposure of the general public to EMFs. Tower operators must comply with Federal regulations for continued registration of these radio towers. By complying with the FCC's safety standards, the general public would not be exposed to unacceptable EMF levels from the towers.

Because the Proposed Project Alternative and the four action alternatives would not provide at least 200 feet of separation between 230-kV transmission lines (and 150 feet of separation between any 69 kV or 115 kV transmission lines) and any residential developments, the **direct** impact of exposure of the general public to EMFs would be **potentially significant**. There would be **no indirect** impacts.

Implementation of Mitigation Measure 3A.8-6 would reduce the potentially significant impact related to adverse health effects from the possible exposure to EMFs to a **less-than-significant** level because prudent avoidance of high tension power lines would result in residential housing being relocated where possible, and disclosure would be required for any residences which were less than 200 feet from the 230-kV transmission line and 150 feet from the 69-kV and 115-kV transmission lines.

IMPACT 3A.8-7 **Potential for Public Health Hazards from Mosquitoes Associated with Project Water Features.** *Project implementation would include construction of 16 on-site detention basins and 1 off-site detention basin, which could attract mosquitoes and other waterborne vectors, thereby potentially creating a public health hazard.*

Mitigation

Mitigation Measure 3A.8-7: Prepare and Implement a Vector Control Plan in Consultation with the Sacramento-Yolo Mosquito and Vector Control District.

To ensure that operation and design of the stormwater system, including multiple planned detention basins, is consistent with the recommendations of the Sacramento-Yolo Mosquito and Vector Control District regarding mosquito control, the project applicant(s) of all project phases shall prepare and implement a Vector Control Plan. This plan shall be prepared in coordination with the Sacramento-Yolo Mosquito and Vector Control District and shall be submitted to the City for approval before issuance of the grading permit for the detention basins under the City's jurisdiction. For the off-site detention basin, the plan shall be submitted to Sacramento County for approval before issuance of the grading permit for the off-site detention basin. The plan shall incorporate specific measures deemed sufficient by the City to minimize public health risks from mosquitoes, and as contained within the Sacramento-Yolo Mosquito and Vector Control District BMP Manual (Sacramento-Yolo Mosquito and Vector Control District 2008). The plan shall include, but is not limited to, the following components:

- ▶ Description of the project.
- ▶ Description of detention basins and all water features and facilities that would control on-site water levels.
- ▶ Goals of the plan.
- ▶ Description of the water management elements and features that would be implemented, including:
 - BMPs that would implemented on-site;
 - public education and awareness;
 - sanitary methods used (e.g., disposal of garbage);

- mosquito control methods used (e.g., fluctuating water levels, biological agents, pesticides, larvacides, circulating water); and
 - stormwater management (consistent with Stormwater Management Plan).
- Long-term maintenance of the detention basins and all related facilities (e.g., specific ongoing enforceable conditions or maintenance by a homeowner’s association).

To reduce the potential for mosquitoes to reproduce in the detention basins, the project applicant(s) shall coordinate with the Sacramento-Yolo Mosquito and Vector Control District to identify and implement BMPs based on their potential effectiveness for SPA conditions. Potential BMPs could include, but are not limited to, the following:

- build shoreline perimeters as steep and uniform as practicable to discourage dense plant growth;
- perform routine maintenance to reduce emergent plant densities to facilitate the ability of mosquito predators (i.e., fish) to move throughout vegetated area;
- design distribution piping and containment basins with adequate slopes to drain fully and prevent standing water. The design slope should take into consideration buildup of sediment between maintenance periods. Compaction during grading may also be needed to avoid slumping and settling;
- coordinate cleaning of catch basins, drop inlets, or storm drains with mosquito treatment operations;
- enforce the prompt removal of silt screens installed during construction when no longer needed to protect water quality;
- if the sump, vault, or basin is sealed against mosquitoes, with the exception of the inlet and outlet, submerge the inlet and outlet completely to reduce the available surface area of water for mosquito egg-laying (female mosquitoes can fly through pipes); and
- design structures with the appropriate pumping, piping, valves, or other necessary equipment to allow for easy dewatering of the unit if necessary (Sacramento Yolo Mosquito and Vector Control District 2008).

The project applicant(s) of the project phase containing the off-site detention basin shall coordinate mitigation for the off-site with the affected oversight agency (i.e., Sacramento County).

Implementation: Project applicant(s) of all project phases containing water features.

Timing: Before issuance of grading permits for the project water features.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site detention basin west of Prairie City Road: Sacramento-Yolo Mosquito and Vector Control District.

Finding for Elements within the City of Folsom’s Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The Sacramento-Yolo Mosquito and Vector Control District recognizes a variety of stormwater-related structures to be common mosquito development sites. Implementation of the Proposed Project Alternative and the four action alternatives includes a variety of features that are considered to be mosquito attractants, including 16 detention basins, storm drains, and roadside ditches. Typical stormwater facilities create habitat for mosquitoes that are attracted to above-ground, clean water sources, and underground, polluted (nutrient rich) sources. Because stormwater infrastructure would be located in close proximity to proposed development, diseases, such as West Nile Virus, could be easily spread within the population through mosquito vectors (Sacramento-Yolo Mosquito and Vector Control District 2008).

To reduce the threat from mosquito-borne threats to human health, the District maintains a best management practices manual (Sacramento-Yolo Mosquito and Vector Control District 2008). This manual details preventive measures to reduce mosquito populations, production rates, or the timing of mosquito hatching. However, the project does not incorporate BMPs that would control mosquitoes. Because the potential for mosquito-borne health hazards would occur with development of the project and the project currently does not include any mosquito prevention BMPs, this **direct** impact would be **potentially significant**. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.8-7 would reduce significant impacts related to potential public health hazards from mosquitoes under the Proposed Project Alternative to a **less-than-significant** level because a site plan, which would require identification of remediation activities, implementation of BMPs to reduce mosquito breeding habitats, and coordination with the District to ensure that mosquito attractants are avoided to the extent possible, would be developed and implemented.

Finding for Elements Outside the City of Folsom’s Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.8-7. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.8-7, which would mitigate this potential impact to a less than significant level.

HAZARDS AND HAZARDOUS MATERIALS – WATER

IMPACT 3B.8-1 **Accidental Spill from Routine Transport, Use, or Disposal of Hazardous Materials.** *Accidental spills of hazardous materials could result during routine transport, use, or disposal activities as part of the implementation of the Off-site Water Facility Alternatives.*

Mitigation

Mitigation Measure 3B.8-1a: Transport, Store, and Handle Construction-Related Hazardous Materials in Compliance with Relevant Regulations and Guidelines.

The City shall ensure, through the enforcement of contractual obligations, that all contractors transport, store, and handle construction-related hazardous materials in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by Caltrans, Central Valley RWQCB, local fire departments, and the County environmental health department.

Recommendations shall include as appropriate transporting and storing materials in appropriate and approved containers, maintaining required clearances, and handling materials using applicable Federal, state and/or local regulatory agency protocols. In addition, all precautions required by the Central Valley RWQCB-issued NPDES construction activity stormwater permits shall be taken to ensure that no hazardous materials enter any nearby waterways.

In the event of a spill, the City shall ensure, through the enforcement of contractual obligations, that all contractors immediately control the source of any leak and immediately contain any spill utilizing appropriate spill containment and countermeasures. If required by the local fire departments, the local environmental health department, or any other regulatory agency, contaminated media shall be collected and disposed of at an off-site facility approved to accept such media.

The storage, handling, and use of the construction-related hazardous materials shall be in accordance with applicable Federal, state, and local laws. Construction-related hazardous materials and hazardous wastes (e.g., fuels and waste oils) shall be stored away from stream channels and steep banks to prevent these materials from entering surface waters in the event of an accidental release. These materials shall be kept at sufficient distance (at least 500 feet) from nearby residences or other sensitive land uses. This includes materials stored for expected use, materials in equipment and vehicles, and waste materials.

Implementation: City of Folsom Utilities Department.

Timing: Prior to construction and operation of all Off-site Water Facilities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site water facilities constructed within Sacramento County or the City of Rancho Cordova: Sacramento County Environmental Management Department.
3. Other regulatory agencies, such as California Department of Toxic Substances Control, or Central Valley Regional Water Quality Control Board, as appropriate.

Mitigation Measure 3B.8-1b: Prepare and Implement a Hazardous Materials Management Plan.

The City shall prepare a Hazardous Materials Management Plan (HMMP) for the proposed WTP. The HMMP shall provide for safe storage, containment, and disposal of chemicals and hazardous

materials related to WTP operations, including waste materials. The plan shall include, but shall not be limited to, the following:

- ▶ a description of hazardous materials and hazardous wastes;
- ▶ a description of handling, transport, treatment, and disposal procedures, as relevant for each hazardous material or hazardous waste;
- ▶ preparedness, prevention, contingency, and emergency procedures, including emergency contact information;
- ▶ A description of personnel training including, but not limited to: (1) recognition of existing or potential hazards resulting from accidental spills or other releases; (2) implementation of evacuation, notification, and other emergency response procedures; (3) management, awareness, and handling of hazardous materials and hazardous wastes, as required by their level of responsibility;
- ▶ Instructions on keeping Materials Safety and Data Sheets (MSDS) on-site for each on-site, hazardous chemical;
- ▶ Identification of the locations of hazardous material storage areas, including temporary storage areas, which shall be equipped with secondary containment sufficient in size to contain the volume of the largest container or tank; and
- ▶ A description of equipment maintenance procedures.

The HMMP shall be made a condition of contractual obligation and shall be available for review by construction inspectors and implementation compliance shall be monitored.

Implementation: City of Folsom Utilities Department.

Timing: Prior to construction and operation of all Off-site Water Facilities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site water facilities constructed within Sacramento County or the City of Rancho Cordova: Sacramento County Environmental Management Department.
3. Other regulatory agencies, such as California Department of Toxic Substances Control, or Central Valley Regional Water Quality Control Board, as appropriate.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Construction of the Off-site Water Facilities would routinely involve the use of fuels, oils, and/or solvents, which could be accidentally spilled or released from containment. Such release could expose individuals and the environment to hazardous materials. During excavation and construction activities, it is anticipated that gasoline, diesel fuel, and hydraulic fluid would be handled on the construction site. Equipment fueling and maintenance requirements would likely use temporary aboveground bulk storage tanks as well as storage in sheds or trailers.

The potential for an accidental release exists during handling and transfer of these materials. If a significant spill were to occur, the accidental release could pose a hazard both to construction employees and the environment, depending on the relative hazard of the material released. Although typical construction management practices limit and often eliminate the impact of such accidental releases, there is a possibility of a spill or a release with the temporary on-site storage of hazardous materials. Therefore, construction-related **direct** and **indirect** impacts are considered **potentially significant**.

Operation of the proposed WTP would involve routine transport, use, or disposal of hazardous or potentially hazardous materials. The materials described in the setting discussion would be utilized at the WTP to help remove suspended solids, control and adjust pH, and disinfect untreated surface water, in order to consistently achieve mandated drinking water limitations (primary and secondary drinking water standards) and provide customers with a quality drinking water product. In addition to the chemicals listed in the setting discussion, paints, paint thinners, waste oils, miscellaneous lubricating oils, laboratory solvents, compressed acetylene and oxygen gas, and diesel fuel would be stored in various small quantities at the WTP site. Additionally, proprietary polymers would be stored in bulk and may include: cationic polymer used as a coagulation agent, anionic polymer used as a flocculation agent, and nonionic polymer used as a filter aid.

Chlorine or liquid sodium hypochlorite would be used for disinfection of the drinking water and to comply with state laws requiring residual chlorine within water distribution systems. Identical to common household bleach except with regards to concentration of the active ingredient (sodium hypochlorite), liquid sodium hypochlorite would be delivered to the site in tank trucks as a 12.5% (trade) solution. Liquid sodium hypochlorite is inherently safer and far less hazardous than compressed chlorine gas, commonly used in the drinking water treatment industry. Liquid sodium hypochlorite is moderately corrosive. However, liquid sodium hypochlorite in its natural liquid state poses far less severe inhalation hazard than chlorine gas. Because there is a possibility of a spill or a release with the on-site storage of hazardous materials, this **direct** impact is considered **potentially significant**. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3B.8-1a would reduce potentially significant impacts under the Proposed Off-site Water Facility Alternative to a **less-than-significant** level by ensuring the transport, storage, and use of construction-related hazardous materials complies with applicable Federal, state, and local regulations. Implementation of Mitigation Measure 3B.8-1b would reduce potentially significant impacts under the Proposed Off-site Water Facility Alternative to a **less-than-significant** level through preparation of an HMMP for the WTP.

IMPACT 3B.8-2 **Create Accident Conditions Involving Potential Release of Hazardous Materials.** *Construction and operation of the Off-site Water Facilities could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.*

Mitigation

Implement Mitigation Measures 3B.8-1b, 3B.16-3a, and 3B.16-3b.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Construction and operation of the proposed WTP under the Proposed Off-site Water Facility Alternative would involve the use of a variety of hazardous materials such as fuels, motor oils, paints, compressed gases, and chemicals. In addition, construction of the Off-site Water Facilities has the potential to disrupt existing utilities

and infrastructure (e.g., natural gas). As provided in Section 3B.16, “Utilities and Service Systems – Water,” of the DEIR/DEIS, high-pressure natural gas pipelines are housed in major roadways including Mather Boulevard, Sunrise Boulevard, Douglas Road, and Florin Road. Because there is a possibility of a hazardous spill or a release of hazardous substances (e.g., natural gas) during the construction and on-site storage of hazardous materials at the WTP, this **direct** impact is considered **potentially significant**. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3B.8-1b would reduce potentially significant impacts under the Proposed Off-site Water Facility Alternative to a **less-than-significant** level through preparation of an HMMP for the WTP and coordination with utility providers. Implementation of Mitigation Measures 3B.16-3a and 3B.16-3b would minimize risks related to the potential for rupturing high-pressure natural gas lines during construction and, therefore, this impact would be reduced to a **less-than-significant** level following mitigation implementation.

IMPACT 3B.8-2 **Use of Hazardous Materials within One-Quarter Mile of Schools.** *Operation of the Off-site Water Facilities could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.*

Mitigation

Implement Mitigation Measure 3B.8-1a and 3B.8-1b.

- Implementation:** City of Folsom Utilities Department.
- Timing:** Prior to construction and operation of all Off-site Water Facilities.
- Enforcement:** 1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site water facilities constructed within Sacramento County or the City of Rancho Cordova: Sacramento County Environmental Management Department.
3. Other regulatory agencies, such as California Department of Toxic Substances Control, or Central Valley Regional Water Quality Control Board, as appropriate.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Construction and operation of the proposed WTP under the Proposed Off-site Water Facility Alternative would involve the use of a variety of hazardous materials such as fuels, motor oils, paints, compressed gases, and chemicals. In addition, construction of the Off-site Water Facilities has the potential to disrupt existing utilities and infrastructure (e.g., natural gas). As provided in Section 3B.16, “Utilities and Service Systems – Water,” of the DEIR/DEIS, high-pressure natural gas pipelines are housed in major roadways including Mather Boulevard, Sunrise Boulevard, Douglas Road, and Florin Road. Because there is a possibility of a hazardous spill or a release of hazardous substances (e.g., natural gas) during the construction and on-site storage of hazardous materials at the WTP, this **direct** impact is considered **potentially significant**. **No indirect** impacts would occur

Implementation of Mitigation Measure 3B.8-1b would reduce potentially significant impacts under the Proposed Off-site Water Facility Alternative to a **less-than-significant** level through preparation of an HMMP for the WTP and coordination with utility providers. Implementation of Mitigation Measures 3B.16-3a and 3B.16-3b would

minimize risks related to the potential for rupturing high-pressure natural gas lines during construction and, therefore, this impact would be reduced to a **less-than-significant** level following mitigation implementation.

IMPACT 3B.8-5 **Create a Significant Hazard to the Public or the Environment.** *Construction of the Off-site Water Facilities could encounter one or more sites listed as containing hazardous materials or wastes and, as a result, could create a significant hazard to the public or the environment.*

Mitigation

Mitigation Measure 3B.8-5a: Conduct Phase 1 Environmental Site Assessment for Selected Alignment.

Prior to construction, the City shall conduct a Phase 1 Environmental Site Assessment according to American Society for Testing and Materials (ASTM) protocol for the selected conveyance pipeline alignment, pump station, well, and WTP site. If any hazardous materials or waste sites are identified during the Phase 1 Environmental Site Assessment, the City shall implement Mitigation Measure 3.8-5b.

Implementation: City of Folsom Utilities Department.

Timing: Prior to construction of all Off-site Water Facilities.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the off-site water facilities constructed within Sacramento County or the City of Rancho Cordova: Sacramento County Environmental Management Department.
3. Other regulatory agencies, such as California Department of Toxic Substances Control, or Central Valley Regional Water Quality Control Board, as appropriate.

Mitigation Measure 3B.8-5b: Develop and Implement a Remediation Plan.

If determined necessary to mitigate for potential hazards resulting from disturbance of existing contaminated areas based on the results of the Phase 1 Environmental Site Assessment, the extent of contamination from hazardous materials sites within or adjacent to the Off-site Water Facilities construction area shall be delineated during final design. Disturbance to contaminated areas during Off-site Water Facilities construction shall be avoided, or any work done within contaminated areas shall be undertaken in compliance with standards approved by the DTSC or Sacramento County Department of Environmental Health to ensure that hazardous materials will not be released as a result of the ground disturbance.

Additionally, if unidentified contaminated soil or groundwater are encountered, or if suspected contamination is encountered during any construction activities, work shall be halted in the area of potential exposure, and the type and extent of contamination shall be identified. A qualified professional, in consultation with appropriate regulatory agencies, will then develop and implement a plan to remediate the contamination and properly dispose of the contaminated material.

Implementation: City of Folsom Utilities Department.

- Timing:** Prior to construction of all Off-site Water Facilities.
- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the off-site water facilities constructed within Sacramento County or the City of Rancho Cordova: Sacramento County Environmental Management Department.
 3. Other regulatory agencies, such as California Department of Toxic Substances Control, or Central Valley Regional Water Quality Control Board, as appropriate.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The Proposed Off-site Water Facility Alternative would be constructed in a rural portion of the County where the conveyance pipeline alignment would not directly cross a site which is known to be included on a list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5 (TrackInfo Services 2008). Six listed sites were identified within a quarter-mile of the alignment in the database search; however, these sites are located at a sufficient distance (e.g., greater than 100 feet) away from the actual roadway where construction activities would occur. Nonetheless, as Off-site Water Facilities construction commences, it is possible that contaminated soil or groundwater could be encountered during excavation thereby posing a health threat to construction workers, the public, and the environment. Therefore, this **indirect** impact is considered **potentially significant**. No direct impact would occur.

Implementation of Mitigation Measures 3B.8-5a and 3B.8-5b would reduce potentially significant impacts associated with the accidental discovery of hazardous materials or wastes under the Proposed Off-site Water Facility Alternative to a **less-than-significant** level through preparation of an environmental site assessment and development and implementation of a remediation plan, where appropriate.

IMPACT 3B.8-7 Exposure to Wildland Fire Hazards. *Implementation of the Off-site Water Facilities could expose people or structures to a significant risk of loss, injury or death involving wildland fires.*

Mitigation

Mitigation Measure 3B.8-7a: Keep Construction Area Clear of Combustible Materials.

The City shall ensure, through the enforcement of contractual obligations that during construction, staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. The contractor shall keep these areas clear of combustible materials in order to maintain a firebreak. Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws.

Implementation: City of Folsom Utilities Department.

Timing: Prior to construction and operation of all Off-site Water Facilities.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the off-site water facilities constructed within Sacramento County or the City of Rancho Cordova: Sacramento County Fire Department.

Mitigation Measure 3B.8-7b: Provide Accessible Fire Suppression Equipment.

Work crews shall be required to carry or have sufficient fire suppression equipment to ensure that any fire resulting from construction activities is immediately extinguished. All off-road equipment using internal combustion engines shall be equipped with spark arrestors.

Implementation: City of Folsom Utilities Department.

Timing: Prior to construction and operation of all Off-site Water Facilities.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the off-site water facilities constructed within Sacramento County or the City of Rancho Cordova: Sacramento County Fire Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Zone 4 of the Water Study Area is located in a local responsibility area where the risk of grassland wildfires is moderate. Construction activities, including welding, vehicle refueling, and pipeline installation would occur in close proximity to areas containing dried vegetation or other materials that could serve as fire fuel. Any construction equipment that normally includes a spark arrester would be equipped with an arrester in good working order. Nonetheless, the potential for construction equipment and vehicles to come in contact with heavily vegetated areas, thereby igniting dry vegetation. This is a **potentially significant, direct** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measures 3B.8-7a and 3B.8-7b would reduce impacts associated with wildland fire hazards under the Proposed Off-site Water Facility Alternative to a **less-than-significant** level by requiring that construction areas are cleared of combustible materials and ensuring access to fire suppression equipment.

HYDROLOGY AND WATER QUALITY – LAND

- IMPACT 3A.9-1** **Potential Temporary, Short-Term Construction-Related Drainage and Water Quality Effects.**
Construction activities during project implementation would involve extensive grading and movement of earth, which would substantially alter on-site drainage patterns and could generate sediment, erosion, and other nonpoint source pollutants in on-site stormwater that could drain to off-site areas and degrade local water quality.

Mitigation

Mitigation Measure 3A.9-1: Acquire Appropriate Regulatory Permits and Prepare and Implement SWPPP and BMPs.

Prior to the issuance of grading permits, the project applicant(s) of all projects disturbing one or more acres (including phased construction of smaller areas which are part of a larger project) shall obtain coverage under the SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ), including preparation and submittal of a project-specific SWPPP at the time the NOI is filed. The project applicant(s) shall also prepare and submit any other necessary erosion and sediment control and engineering plans and specifications for pollution prevention and control to Sacramento County, City of Folsom, El Dorado County (for the off-site roadways into El Dorado Hills under the Proposed Project Alternative). The SWPPP and other appropriate plans shall identify and specify:

- ▶ the use of an effective combination of robust erosion and sediment control BMPs and construction techniques accepted by the local jurisdictions for use in the project area at the time of construction, that shall reduce the potential for runoff and the release, mobilization, and exposure of pollutants, including legacy sources of mercury from project-related construction sites. These may include but would not be limited to temporary erosion control and soil stabilization measures, sedimentation ponds, inlet protection, perforated riser pipes, check dams, and silt fences
- ▶ the implementation of approved local plans, non-stormwater management controls, permanent post-construction BMPs, and inspection and maintenance responsibilities;
- ▶ the pollutants that are likely to be used during construction that could be present in stormwater drainage and nonstormwater discharges, including fuels, lubricants, and other types of materials used for equipment operation;
- ▶ spill prevention and contingency measures, including measures to prevent or clean up spills of hazardous waste and of hazardous materials used for equipment operation, and emergency procedures for responding to spills;
- ▶ personnel training requirements and procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP; and
- ▶ the appropriate personnel responsible for supervisory duties related to implementation of the SWPPP.

Where applicable, BMPs identified in the SWPPP shall be in place throughout all site work and construction/demolition activities and shall be used in all subsequent site development activities. BMPs may include, but are not limited to, such measures as those listed below.

- ▶ Implementing temporary erosion and sediment control measures in disturbed areas to minimize discharge of sediment into nearby drainage conveyances, in compliance with state and local standards in effect at the time of construction. These measures may include silt fences, staked straw bales or wattles, sediment/silt basins and traps, geofabric, sandbag dikes, and temporary vegetation.
- ▶ Establishing permanent vegetative cover to reduce erosion in areas disturbed by construction by slowing runoff velocities, trapping sediment, and enhancing filtration and transpiration.
- ▶ Using drainage swales, ditches, and earth dikes to control erosion and runoff by conveying surface runoff down sloping land, intercepting and diverting runoff to a watercourse or channel, preventing sheet flow over sloped surfaces, preventing runoff accumulation at the base of a grade, and avoiding flood damage along roadways and facility infrastructure.

A copy of the approved SWPPP shall be maintained and available at all times on the construction site.

For those areas that would be disturbed as part of the U.S. 50 interchange improvements, Caltrans shall coordinate with the development and implementation of the overall project SWPPP, or develop and implement its own SWPPP specific to the interchange improvements, to ensure that water quality degradation would be avoided or minimized to the maximum extent practicable.

Mitigation for the off-site elements outside of the City of Folsom's jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties, or Caltrans).

Implementation: Project applicant(s) during all project phases and on-site and off-site elements.

Timing: Submittal of the State Construction General Permit NOI and SWPPP (where applicable) and development and submittal of any other locally required plans and specifications before the issuance of grading permits for all on-site project phases and off-site elements and implementation throughout project construction.

Enforcement:

1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
2. For the two roadway connections in El Dorado Hills: El Dorado County Department of Transportation.
3. For the detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
4. For the U.S. 50 interchange improvements: Caltrans.
5. For all construction activities subject to the state's Construction General Permit and violators of local ordinances referred to the state for enforcement: Central Valley Regional Water Quality Control Board.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Implementation of the Proposed Project Alternative would include substantial construction activity over more than 2,500 acres, including soil removal, trenching and pipe installation, fabrication of concrete channels, grading, and revegetation. An infrastructure backbone and drainage system would be installed throughout the SPA. Construction activities associated with development of the SPA would create the potential for soil erosion and sedimentation both within and downstream of the SPA. The construction process could also result in the accidental release of other pollutants to surface waters, including oil and grease, petroleum hydrocarbons, chemical substances used during construction, waste concrete, and wash water.

The substantial construction-related alteration of on-site drainages could result in soil erosion and stormwater discharges of suspended solids, increased turbidity, and potential release, mobilization, and exposure of other pollutants, including legacy sources of mercury from project-related construction sites. This contaminated runoff

could enter Alder Creek, Buffalo Creek, Coyote Creek, Carson Creek, or other on-site drainage channels and ultimately drain off-site to downstream water bodies including Lake Natoma and the lower American River. Many construction-related wastes have the potential to degrade existing water quality and beneficial uses by altering the dissolved-oxygen content, temperature, pH, suspended-sediment and turbidity levels, or nutrient content, or by causing toxic effects in the aquatic environment. The presence and distribution of legacy mercury in upland areas and/or drainages is currently unknown; however, if it is present in the sediments where construction activities disturb soils, it could become mobilized and become exposed to the environment downstream. Therefore, project-related construction activities could violate water quality standards or cause direct harm to aquatic organisms.

Localized erosion hazards may be high where the SPA topography is steep. Intense rainfall and associated stormwater runoff in relatively flat areas could result in short periods of sheet erosion within areas of exposed or stockpiled soils. If uncontrolled, these soil materials could cause sedimentation and blockage of drainage channels. Further, the compaction of soils by heavy equipment may reduce the infiltration capacity of soils and increase the potential for runoff and erosion. Non-stormwater discharges could result from activities such as construction dewatering procedures, or discharge or accidental spills of hazardous substances such as fuels, oils, concrete, paints, solvents, cleaners, or other construction materials.

Because the Proposed Project Alternative would disturb large areas of land, substantially alter on-site drainage patterns, and could result in impacts on water quality within on-site drainage channels and ultimately off-site drainage channels as a result of temporary, short-term construction activities, the **direct** and **indirect** project-related erosion and water quality impacts would be **significant**.

Implementation of Mitigation Measure 3A.9-1 would reduce the significant temporary, short-term construction-related drainage and water quality effects under the Proposed Project Alternative to a **less-than-significant level** by requiring preparation and implementation of a SWPPP with appropriate BMPs such as source control, revegetation, and erosion control, to maintain surface water quality conditions in adjacent receiving waters.

Finding for Elements Outside the City of Folsom's Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City's jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.9-1. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.9-1, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.9-2 **Potential Increased Risk of Flooding and Hydromodification from Increased Stormwater Runoff.** *Project implementation would increase the amount of impervious surfaces on the SPA, thereby increasing surface runoff. This increase in surface runoff would result in an increase in both the total volume and the peak discharge rate of stormwater runoff, and therefore could result in greater potential for on- and off-site flooding.*

Mitigation

Mitigation Measure 3A.9-2: Prepare and Submit Final Drainage Plans and Implement Requirements Contained in Those Plans.

Before the approval of grading plans and building permits, the project applicant(s) of all project phases shall submit final drainage plans to the City, and to El Dorado County for the off-site roadway connections into El Dorado Hills, demonstrating that off-site upstream runoff would be appropriately conveyed through the SPA, and that project-related on-site runoff would be appropriately contained in detention basins or managed with through other improvements (e.g., source controls, biotechnical stream stabilization) to reduce flooding and hydromodification impacts.

The plans shall include, but not be limited to, the following items:

- ▶ an accurate calculation of pre-project and post-project runoff scenarios, obtained using appropriate engineering methods, that accurately evaluates potential changes to runoff, including increased surface runoff;
- ▶ runoff calculations for the 10-year and 100-year (0.01 AEP) storm events (and other, smaller storm events as required) shall be performed and the trunk drainage pipeline sizes confirmed based on alignments and detention facility locations finalized in the design phase;
- ▶ a description of the proposed maintenance program for the on-site drainage system;
- ▶ project-specific standards for installing drainage systems;
- ▶ City and El Dorado County flood control design requirements and measures designed to comply with them;

Implementation of stormwater management BMPs that avoid increases in the erosive force of flows beyond a specific range of conditions needed to limit hydromodification and maintain current stream geomorphology. These BMPs will be designed and constructed in accordance with the forthcoming SSQP Hydromodification Management Plan (to be adopted by the RWQCB) and may include, but are not limited to, the following:

- use of Low Impact Development (LID) techniques to limit increases in stormwater runoff at the point of origination (these may include, but are not limited to: surface swales; replacement of conventional impervious surfaces with pervious surfaces [e.g., porous pavement]; impervious surfaces disconnection; and trees planted to intercept stormwater);
- enlarged detention basins to minimize flow changes and changes to flow duration characteristics;
- bioengineered stream stabilization to minimize bank erosion, utilizing vegetative and rock stabilization, and inset floodplain restoration features that provide for enhancement of riparian habitat and maintenance of natural hydrologic and channel to floodplain interactions;
- minimize slope differences between any stormwater or detention facility outfall channel with the existing receiving channel gradient to reduce flow velocity; and
- minimize to the extent possible detention basin, bridge embankment, and other encroachments into the channel and floodplain corridor, and utilize open bottom box culverts to allow sediment passage on smaller drainage courses.

- ▶ The final drainage plan shall demonstrate to the satisfaction of the City of Folsom Community Development and Public Works Departments and El Dorado County Department of Transportation that 100-year (0.01 AEP) flood flows would be appropriately channeled and contained, such that the risk to people or damage to structures within or down gradient of the SPA would not occur, and that hydromodification would not be increased from pre-development levels such that existing stream geomorphology would be changed (the range of conditions should be calculated for each receiving water if feasible, or a conservative estimate should be used, e.g., an Ep of 1 ±10% or other as approved by the Sacramento Stormwater Quality Partnership and/or City of Folsom Public Works Department).

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with El Dorado County.

Implementation: Project applicant(s) during all on-site project phases and off-site elements.

Timing: Before approval of grading plans and building permits of all project phases.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Public Works Department.
 2. For the two roadway connections in El Dorado Hills: El Dorado County Department of Transportation.

Finding for Elements within the City of Folsom’s Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Project implementation would include development on approximately 2,500 acres of land, most of which has not been previously developed. The Proposed Project Alternative includes residential and commercial development, and supporting facilities and services, including parks, schools, and major circulation and roadway infrastructure. The various types of proposed land uses would each contribute different relative amounts of stormwater runoff corresponding to the %age of impervious surface associated with each land use category, which ranges from 2% (wetlands/open space) to 95% (major roads, parking, and stormwater detention) (City and County of Sacramento 1996: 5-7). This increase in impervious surface would increase the peak discharge rate of stormwater runoff generated on the SPA and from areas upstream (e.g., contribution of flow from off-site watersheds to Alder Creek within the SPA).

While it appears that the applicants’ proposed Storm Drainage Masterplan (MacKay & Soms 2007) could appropriately convey upstream off-site runoff and would appropriately detain project-related on-site runoff in a manner that effectively meets current stormwater management criteria to acceptable levels, hydromodification is not addressed in the Storm Drainage Master Plan and final designs and specifications have not been submitted or approved by the City. Without the necessary information to demonstrate that all stormwater criteria and standards, including hydromodification management, are being met, it cannot be assumed that potentially significant impacts would not occur. Therefore, implementation of the Proposed Project Alternative could result in **potentially significant, direct** and **indirect** impacts related to stormwater runoff and the subsequent risk of flooding and/or hydromodification.

Implementation of Mitigation Measure 3A.9-2 would reduce the potentially significant impact associated with the potential increased risk of flooding from increased stormwater runoff under the Proposed Project Alternative to a **less-than-significant** level because the project applicant(s) would demonstrate to the appropriate regulatory agency that the project would conform with applicable state

and local regulations regulating surface water runoff, including the procedures outlined in the Sacramento City/County Drainage Manual (City and County of Sacramento 1996) and the El Dorado County SWMP (El Dorado County 2004), which are designed to meet or exceed applicable state and local regulations pertaining to stormwater runoff. Specific project design standards as required in this mitigation measure would, when implemented, provide flood protection to meet FEMA 100-year (0.01 AEP) flood protection criteria, would safely convey on-site and off-site flows through the SPA, would reduce the effects of hydromodification on stream channel geomorphology, and would prevent substantial increased flood hazard on downstream areas by limiting peak discharges of flood flows to below pre-project levels.

Finding for Elements Outside the City of Folsom’s Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.9-2. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.9-2, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.9-3 **Long-Term Water Quality and Hydrology Effects from Urban Runoff.** *Project implementation would convert a large area of undeveloped land to residential and commercial uses, thereby changing the amount and timing of potential long-term pollutant discharges in stormwater and other urban runoff to Alder Creek, Buffalo Creek, Coyote Creek, Carson Creek, and other on- and off-site drainages.*

Mitigation

Mitigation Measure 3A.9-3: Develop and Implement a BMP and Water Quality Maintenance Plan.

Before approval of the grading permits for any development project requiring a subdivision map, a detailed BMP and water quality maintenance plan shall be prepared by a qualified engineer retained by the project applicant(s) the development project. Drafts of the plan shall be submitted to the City of Folsom and El Dorado County for the off-site roadway connections into El Dorado Hills, for review and approval concurrently with development of tentative subdivision maps for all project phases. The plan shall finalize the water quality improvements and further detail the structural and nonstructural BMPs proposed for the project. The plan shall include the elements described below.

- ▶ A quantitative hydrologic and water quality analysis of proposed conditions incorporating the proposed drainage design features.
- ▶ Predevelopment and post development calculations demonstrating that the proposed water quality BMPs meet or exceed requirements established by the City of Folsom and including details regarding the size, geometry, and functional timing of storage and release pursuant to the “Stormwater Quality Design Manual for Sacramento and South Placer Regions” ([SSQP 2007b] per NPDES Permit No. CAS082597 WDR Order No. R5-2008-0142, page 46) and El Dorado County’s NPDES SWMP (County of El Dorado 2004).

- ▶ Source control programs to control water quality pollutants on the SPA, which may include but are limited to recycling, street sweeping, storm drain cleaning, household hazardous waste collection, waste minimization, prevention of spills and illegal dumping, and effective management of public trash collection areas.
- ▶ A pond management component for the proposed basins that shall include management and maintenance requirements for the design features and BMPs, and responsible parties for maintenance and funding.
- ▶ LID control measures shall be integrated into the BMP and water quality maintenance plan. These may include, but are not limited to:
 - surface swales;
 - replacement of conventional impervious surfaces with pervious surfaces (e.g., porous pavement);
 - impervious surfaces disconnection; and
 - trees planted to intercept stormwater.
- ▶ New stormwater facilities shall be placed along the natural drainage courses within the SPA to the extent practicable so as to mimic the natural drainage patterns. The reduction in runoff as a result of the LID configurations shall be quantified based on the runoff reduction credit system methodology described in “Stormwater Quality Design Manual for the Sacramento and South Placer Regions, Chapter 5 and Appendix D4” (SSQP 2007b) and proposed detention basins and other water quality BMPs shall be sized to handle these runoff volumes.

For those areas that would be disturbed as part of the U.S. 50 interchange improvements, it is anticipated that Caltrans would coordinate with the development and implementation of the overall project SWPPP, or develop and implement its own SWPPP specific to the interchange improvements, to ensure that water quality degradation would be avoided or minimized to the maximum extent practicable.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with El Dorado County and Caltrans.

Implementation: Project applicant(s) during all on-site project phases and off-site elements.

Timing: Prepare plans before the issuance of grading permits for all project phases and off-site elements and implementation throughout project construction.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department and Public Works Department.
 2. For the two roadway connections in El Dorado Hills: El Dorado County Department of Transportation.
 3. For the U.S. 50 interchange improvements: Caltrans.

Finding for Elements within the City of Folsom’s Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The conversion of undeveloped land to urban land uses would alter the types, quantities, and timing of contaminant discharges in stormwater runoff. Overall, the potential for the Proposed Project Alternative to cause or contribute to long-term discharges of urban contaminants (e.g., oil and grease, fuel, trash) into the stormwater drainage system and ultimate receiving waters would increase compared to existing conditions. Some contaminants associated with existing on-site agricultural activities (e.g., sediment, nutrients, pathogens, agricultural chemicals) would decrease as these uses are phased out during project development. The potential discharges of contaminated urban runoff from paved and landscaped areas could increase or could cause or contribute to adverse effects on aquatic organisms in receiving waters. Urban contaminants typically accumulate during the dry season and may be washed off when adequate rainfall returns in the fall to produce a “first flush” of runoff. The amount of contaminants discharged in stormwater drainage from developed areas varies based on a variety of factors, including the intensity of urban uses such as vehicle traffic, types of activities occurring on-site (e.g., office, commercial, industrial), types of contaminants used on-site (e.g., pesticides, herbicides, cleaning agents, petroleum byproducts), contaminants deposited on paved surfaces, and the amount of rainfall.

The storm drainage system for the Proposed Project Alternative, as described in the Folsom Plan Area Specific Plan (City of Folsom 2009) and Storm Drainage Masterplan (MacKay & Somps 2007), would be designed to direct runoff flows into on-site detention basins (and one off-site basin west of Prairie City Road), and would incorporate water quality treatment. The stormwater quality treatment configurations would use treatment methodologies as described in the Stormwater Quality Design Manual (SSQP 2007b) and approved by the City. The Sacramento NPDES MS4 Permit (described in above in the “Regulatory Framework” section), which applies to this project area, requires that “priority new development and redevelopment projects shall integrate LID principles early in the project planning and design process.” The goal is to increase infiltration potential, evaporation, and surface storage while reducing excess stormwater runoff. The LID techniques would consist of a series of surface swales, catch basins, drainage inlets, underground pipes and detention basins. New stormwater facilities would be placed along the natural drainage courses within the SPA to the extent practicable so as to mimic the natural drainage patterns. The goal of the LID features would be to mimic the predevelopment hydrology at the SPA by using the above decentralized design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall.

However, because final design plans and specifications have not been submitted to or approved by the City or El Dorado County (for off-site roadway connections), implementation of the Proposed Project Alternative could result in contaminants entering receiving waters, thus resulting in adverse effects from long-term urban runoff. Because the Proposed Project Alternative could result in impacts on water quality within on-site drainage channels and ultimately off-site drainage channels as a result of runoff from the SPA, the project-related water quality impacts would be both **direct** and **indirect**, and would be **potentially significant**.

Implementation of Mitigation Measure 3A.9-3 would reduce the potentially significant impact associated with potential long-term water quality effects of urban runoff under the Proposed Project Alternative to a **less-than-significant** level because the project applicant(s) of all project phases would develop and implement a BMP and water quality maintenance plan that would demonstrate to the City that the Proposed Project Alternative would conform to applicable state and local regulations restricting surface water runoff including the Stormwater Quality Design Manual for the Sacramento and South Placer Regions (SSQP 2007b) and El Dorado County’s SWMP (El Dorado County 2004). The permanent BMPs proposed for the stormwater treatment system and described in detail in the SSQP have been shown to be effective in reducing contaminant levels in urban runoff (EPA 1999, CASQA 2003).

Finding for Elements Outside the City of Folsom’s Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.9-3. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.9-3, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.9-4 **Potential Exposure of People or Structures to a Significant Risk of Flooding as a Result of the Failure of a Levee or Dam.** *The SPA is not in an area protected by levees and is not located within the Folsom Dam inundation zone; however, there are existing dams impounding water within and upstream of the SPA.*

Mitigation

Mitigation Measure 3A.9-4: Inspect and Evaluate Existing Dams Within and Upstream of the Project Site and Make Improvements if Necessary.

Prior to submittal to the City of tentative maps or improvement plans the project applicant(s) of all project phases shall conduct studies to determine the extent of inundation in the case of dam failure. If the studies determine potential exposure of people or structures to a significant risk of flooding as a result of the failure of a dam, the applicants(s) shall implement of any feasible recommendations provided in that study, potentially through drainage improvements, subject to the approval of the City of Folsom Public Works Department.

Implementation: Project applicant(s) of all on-site project phases and off-site elements.

Timing: Prior to submittal to the City of tentative maps or improvement plans.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

For planning purposes, the State Office of Emergency Services (OES), with information from the U.S. Bureau of Reclamation and DWR, has the responsibility to provide local governments with critical hazard response information, including information related to potential flooding from levee failure or dam inundation. The SPA is not in an area protected by levees; however, Folsom Dam is located approximately 4.5 miles north of the SPA. The OES has mapped the dam inundation zones in Sacramento County for Folsom Dam. The map shows that while a relatively large portion of Sacramento County and the City of Folsom would be inundated with water in the event of a dam or dike failure, the SPA is outside of the mapped inundation area (Sacramento County 2007b:383-384, Figure III-4). In addition, a dam failure plan, the flooding ALERT system, and evacuation procedures are integrated into Sacramento County’s Emergency Operations Plan (City of Sacramento 2005:7.2-10). Further, the occurrence of dam inundation (due to dam or dike failure) is based on extremely remote conditions (Sacramento County 2007b:383) and implementation of any of the project alternatives would do nothing to increase the potential for dam failure.

There are five ponds within and three ponds upstream (to the south of White Rock Road) of the SPA that appear to hold water throughout the year. They are formed behind existing dams in topographically low areas along

existing drainages located within subwatersheds AC1d, AC2d, AC9a, AC5b, and OF 4a and OF 4b, respectively. The pond in subwatershed AC9a, estimated to be approximately 3 to 5 surface acres, is formed by an earthen dam approximately 15 to 20 feet in height on the north side of the pond; the depth and associated volume of the pond is unknown (GenCorp Realty Investments, LLC 2008). The height of the other dams and/or volume of water in the associated impoundments are unknown. Due to the unknown size of the dams and associated water impoundment volumes, it is currently unknown whether or not any of the dams are under the jurisdictional oversight of the DSOD. Additionally, evaluation of the dams has not been conducted to determine stability, potential for risk of failure, and/or estimated area of downstream inundation in the event of failure.

While unlikely based on field observation of what appear to be relatively small dimensions, is currently unknown whether or not the dams are within the jurisdictional oversight of the DSOD. Because the current condition (e.g., stability) of the dams within and upstream of the SPA are unknown and the area of downstream inundation in the event of failure is also uncertain, implementation of the Proposed Project Alternative could result in people or structures downstream of these features to be exposed to a significant risk of flooding if the dams were to fail. Therefore, project-related impacts related to the failure of a dam are considered **direct and potentially significant**. No **indirect** impacts would occur.

Implementation of Mitigation Measure 3A.9-4 would reduce the potential for increased risk of flooding as a result of the failure of a dam under the Proposed Project Alternative to a **less-than-significant level** because the project applicant(s) of all project phases would demonstrate that people or structures would not be exposed to the small dams and associated impoundments within and upstream of the SPA meet minimum stability requirements and not exposure of people or structures to a significant risk of flooding.

HYDROLOGY AND WATER QUALITY – WATER

IMPACT 3B.9-1 **Potential Temporary, Short-Term Construction-Related Drainage and Water Quality Effects.** *Construction of the Off-site Water Facilities could generate discharges to surface water resources that could potentially violate water quality standards or waste discharge requirements.*

Mitigation

Mitigation Measure: Implement Mitigation Measures 3A.3-1a and 3A.3-1b.

Mitigation Measure 3B.9-1a: Acquire Appropriate Regulatory Permits and Prepare and Implement SWPPP and BMPs.

The City shall prepare a SWPPP specific to the selected Off-site Water Facility Alternative and secure coverage under SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall identify specific actions and BMPs relating to the prevention of stormwater pollution from project-related construction sources by identifying a practical sequence for site restoration, BMP implementation, contingency measures, responsible parties, and agency contacts. The SWPPP shall reflect localized surface hydrological conditions and shall be reviewed and approved by the City prior to commencement of work and shall be made conditions of the contract with the contractor selected to build the Off-site Water Facilities. The SWPPP shall incorporate control measures in the following categories:

- ▶ soil stabilization and erosion control practices (e.g., hydroseeding, erosion control blankets, mulching, etc.);
- ▶ dewatering and/or flow diversion practices, if required (see Mitigation Measure 3B.9-1b);
- ▶ sediment control practices (temporary sediment basins, fiber rolls, etc.);
- ▶ temporary and post-construction on- and off-site runoff controls;

- ▶ special considerations and BMPs for water crossings, wetlands, drainages, and vernal pools;
- ▶ monitoring protocols for discharge(s) and receiving waters, with emphasis placed on the following water quality objectives: dissolved oxygen, floating material, oil and grease, pH, and turbidity;
- ▶ waste management, handling, and disposal control practices;
- ▶ corrective action and spill contingency measures;
- ▶ agency and responsible party contact information, and
- ▶ training procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP.

The SWPPP shall be prepared by a qualified SWPPP practitioner with BMPs selected to achieve maximum pollutant removal and represent the best available technology that is economically achievable. Emphasis for BMPs shall be placed on controlling discharges of oxygen-depleting substances, floating material, oil and grease, acidic or caustic substances or compounds, and turbidity. Performance and effectiveness of these BMPs shall be determined either by visual means where applicable (i.e., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination, (inadvertent petroleum release) as required to determine adequacy of the measure.

Implementation: City of Folsom Utilities Department.

Timing: Development of the SWPPP prior to construction of all Off-site Water Facilities and implementation throughout construction.

Enforcement:

1. Central Valley Regional Water Quality Control Board.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For improvements within unincorporated Sacramento County or City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Mitigation Measure 3B.9-1b: Properly Dispose of Hydrostatic Test Water and Construction Dewatering in Accordance with the Central Valley Regional Water Quality Control Board.

All hydrostatic test water and construction dewatering shall be discharged to an approved land disposal area or drainage facility in accordance with Central Valley RWCQB requirements. The City or its construction contractor shall provide the Central Valley RWQCB with the location, type of discharge, and methods of treatment and monitoring for all hydrostatic test water discharges. Emphasis shall be placed on those discharges that would occur directly to surface water bodies.

Implementation: City of Folsom Utilities Department.

Timing: Incorporation measures into SWPPP prior to construction and implementation throughout construction, as appropriate.

Enforcement:

1. Central Valley Regional Water Quality Control Board.

2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For improvements within unincorporated Sacramento County or City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Construction of the Off-site Water Facilities would involve excavation, soil stockpiling, grading, and the installation of support buildings, storage tanks, pumping facilities, and pipelines. During site grading, trenching, and construction activities, large areas of bare soil would be exposed to erosive forces for long periods of time. Bare soils are much more likely to erode than vegetated areas due to the lack of dispersion, infiltration, and retention created by covering vegetation. Construction activities involving soil disturbance, excavation, cutting/filling, stockpiling, dewatering and grading activities could result in increased erosion and sedimentation to surface waters. At locations where the crossing of a water feature (e.g. Morrison Creek), the removal of riparian vegetation and disturbance of the creek bed or bank could also result in the weakening the bank's structure and increase its susceptibility to erosion. Disturbing the geomorphic characteristics and stability of the channel bed and banks may initiate chronic erosion in natural channels. Such impacts could be exacerbated if the riparian vegetation is not reestablished and stabilized prior to the next high-flow or precipitation event and could result in **potentially significant direct** impacts within the immediate vicinity of construction and **indirect** impacts to water quality further downstream.

Hazardous materials associated with construction would be limited to substances associated with mechanized equipment, such as gasoline and diesel fuels, engine oil, and hydraulic fluids. If precautions are not taken to contain contaminants, accidental spills of these substances during construction could produce contaminated stormwater runoff (nonpoint source pollution), a major contributor to the degradation of water quality in surface waters. Without proper containment and incident response measures in place, the operation of construction equipment could result in **potentially significant direct** and **indirect** impacts to water quality. Prior to construction grading, the City must file an NOI with the Central Valley RWQCB to comply with the General NPDES Construction Permit and prepare the SWPPP, which addresses the measures that would be included in the project to minimize and control construction and post-construction runoff to the "maximum extent practicable." However, without these documents available for review as part of this EIR/EIS, the City is unable to determine their adequacy in achieving applicable water quality standards. In addition, NPDES permits require the implementation of BMP's that achieve a level of pollution control to the maximum extent practical, which may not necessarily be completely protective of aquatic life. This represents a **potentially significant, direct impact**. For these reasons, the implementation of the prescribed mitigation would be required to ensure that the Off-site Water Facilities SWPPP and Grading Plan(s) include measures necessary to minimize water quality impacts as a result of project construction and post-construction runoff.

With the implementation of the above mitigation measures, impacts to surface water quality for all the Off-site Water Facility Alternatives would be reduced to a **less-than-significant** level through the inclusion of focused BMPs for the protection of surface water resources. Monitoring and contingency response measures would be included to verify compliance with water quality objectives for all surface waters crossed during construction. Particular emphasis would be placed on dissolved oxygen, floating material, oil and grease, pH, and turbidity as these are generally the water quality constituents of most concern during construction-related activities.

IMPACT **Alteration of Drainage Patterns Resulting in Off-site Flooding and/or Erosion.** *The Off-site Water Facilities*

3B.9-3 *could result in the alteration of existing drainage patterns thereby increasing the rate or amount of surface runoff in a manner that could result in substantial flooding and/or erosion or siltation on- or off-site.*

Mitigation

Mitigation Measure 3B.9-3a: Prepare and Implement Drainage Plan(s) for Structural Facilities.

The City shall prepare a Drainage Plan for the selected Off-site Water Facility WTP and shall incorporate measures to maintain off-site runoff during peak conditions to pre-construction discharge levels. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities during and following construction. The City shall evaluate options for on-site detention including, but not limited to, providing temporary storage within a portion or portions of proposed paved areas, linear infiltration facilities along the site perimeter, and/or other on-site opportunities for detention, retention, and/or infiltration facilities. Design specifications for the detention, retention, and/or infiltration facilities shall provide sufficient storage capacity to accommodate the 10-year, 24-hour storm event. In addition, the Drainage Plan shall delineate the overland release path for flows generated by a 100-year frequency storm, so that structural pad elevations for buildings, containment facilities, storage tank, and container storage areas are placed a minimum of one foot above the property's highest frontage curb elevation. The Drainage Plan shall also provide sufficient attenuation of flows to ensure no net increase in off-site discharges to waterways that drain across the FSC via one or more drainage chutes (e.g., Buffalo Creek).

Implementation: City of Folsom Utilities Department.

Timing: Development of the Drainage Plan prior to start of construction.

Enforcement:

1. Central Valley Regional Water Quality Control Board.
2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For improvements within unincorporated Sacramento County or City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.
4. For all off-site improvements that would drain across one or more of the FSC drainage chutes: U. S. Bureau of Reclamation.

Mitigation Measure 3B.9-3b: Ensure the Provision of Sufficient Outlet Protection and On-site Containment.

Energy dissipaters, vegetated rip-rap, soil protection, and/or other appropriate BMPs shall be included within all storm-drain outlets to slow runoff velocities and prevent erosion at discharge locations for the WTP. A long-term maintenance plan shall be implemented for all drainage discharge control devices. The WTP layout shall also include sufficient on-site containment and pollution-control devices for drainage facilities to avoid the off-site release of water quality pollutants, oil and grease.

Implementation: City of Folsom Utilities Department.

Timing: Incorporation of measures into the Drainage Plan prior to start of construction.

Enforcement:

1. Central Valley Regional Water Quality Control Board.

2. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
3. For improvements within unincorporated Sacramento County or City of Rancho Cordova: Sacramento County Planning and Community Development Department or City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The construction of a new WTP and storage facility under these alternatives has the potential to alter the surface infiltration characteristics of the WTP/storage site, which could result in increases in both the volume and discharge rate of stormwater runoff thereby potentially contributing to flooding on site or at downstream locations. Pump station and well facilities could also contribute to increased runoff, but at a far lesser magnitude. Following construction, the impervious surfaces created with the storage and treatment facilities and paved areas are expected to result in increases in peak runoff flows. Under these alternatives, the WTP site is located in the headwaters of Buffalo Creek, which flows west and is tributary to the Lower American River (see Exhibit 3B.9-1). All drainage runoff from the WTP would enter Buffalo Creek at two locations and, without mitigation, could contribute to hydro-modification within the drainage catchment and downstream scouring. In addition, development of the WTP site could require a minor alteration of Buffalo Creek, to facilitate development of the site.

Based on direction provided in Section 2 of the County's Drainage Manual, the Sacramento Method charts were used in estimating drainage discharges for a design storm event for an assumed overland flow system. The Sacramento Method uses the urban unit hydrograph as a basis for estimating runoff hydrographs using design charts that have been created to expedite design flow calculations for basins less than 640 acres (260 hectares) (Sacramento City/County Drainage Manual 1996). The Sacramento Method charts are based on discrete recurrence interval where peak flow is given versus drainage area for the 10- and 100-year recurrence intervals. The main variables used in the simplified charts are the %age of impervious surface area and total drainage area, which for the WTP and storage tank areas equals approximately 10 acres. Based on conditions observed on site, existing site conditions were assumed to have a 20% impervious surface cover. Under the developed Off-site Water Facilities condition, the impervious surface cover was increased to 95% to provide a worst-case estimate of peak runoff.

Using Exhibits 2-16 and 2-22 in the Sacramento City/County Drainage Manual, the results reveal the estimated rate of stormwater runoff (in cfs) produced on site for a 10- and 100-year storm event. Rates of runoff are the absolute maximum that would occur during a 24-hour storm and, therefore, provide a conservative estimate for determining the net change in post-Off-site Water Facilities runoff. Based on the simplified method, the Off-site Water Facilities WTP could produce up to 21.0 cfs during a 10-year storm event; a net increase of 6.0 cfs when compared with existing conditions. Similarly, the net increase in peak runoff during a 100-year storm event is estimated at 31.0 cfs; up 9.0 cfs from the existing condition. Appendix M-VIII provides the unit hydrographs used to derive these values.

The net increase in peak runoff as a result of these Off-site Water Facility Alternatives would likely be partially attenuated by several of the containment areas, landscaped areas, paved walkways, and crushed rock roadways included as part of the WTP design and, therefore, it is reasonable to conclude that the above values likely over-estimate post-Off-site Water Facilities drainage flows. However, given that no formal Drainage Plan has been developed to attenuate post-construction drainage flows, the Sacramento Method provides a basic means for comparison and, based on the results, it is reasonable to conclude that the Off-site Water Facilities would result in a net increase in drainage discharge from the WTP site. This increase in peak flows could contribute to additional downstream flooding and/or bank scour. These **direct** and **indirect** impacts could be **potentially significant**.

With the implementation of the above mitigation measures, impacts to on- and off-site drainage patterns would be mitigated to a **less-than-significant** level through the preparation of a formal drainage plan to attenuate post-construction runoff thereby minimizing the potential for on and off-site flooding and long-term hydromodification impacts.

IMPACT 3B.9-5 Exceed Drainage Capacity and Contribute Sources Polluted Runoff. *The Off-site Water Facilities could create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.*

Mitigation

Implement Mitigation Measures 3B.9-3a and 3B.9-3b.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

As previously indicated under Impact 3B.9-3, a formal Drainage Plan has not been prepared for the WTP and/or other Off-site Water Facilities components. Given that the conveyance pipeline would be completely buried underground following construction with no corresponding increase in impervious surfaces, no changes in post-construction runoff volumes are anticipated from the conveyance facilities that could otherwise overwhelm existing drainage infrastructure. Drainage runoff from the On-site or White Rock WTP site would enter Buffalo Creek near its headwaters, either east or west of Prairie City Road, respectively. Although typical engineering standards require that all storm drain pipelines are capable of conveying a 10-year frequency storm while providing temporary storage for the 100-year event, without the availability of actual engineering plans the City unable to confirm compliance with these standards. Without confirmation that the WTP's design satisfies this minimum criteria, there remains a potential for the WTP to contribute additional peak runoff that could exceed the channel capacity of Buffalo Creek, which ultimately becomes a piped waterway west of Hazel Avenue. Based on these determinations, the **direct** impacts would be **potentially significant**.

With the implementation of the above mitigation measures, impacts to existing drainage infrastructure and would be reduced to a **less-than-significant** level through the preparation of a formal drainage plan to attenuate post-construction runoff thereby minimizing the potential for off-site flooding and long-term water quality impacts. The implementation of Mitigation Measure 3B.9-3a would require that all storm drain pipelines and the proposed detention basin include sufficient capacity to minimize concerns related to the effects of hydromodification.

IMPACT 3B.9-6 Impede or Redirect Flood Flows. *The Off-site Water Facilities could place structures within a 100-year flood hazard area, which would impede or redirect flood flows.*

Mitigation

Implement Mitigation Measures 3B.7-1a and 3B.9-1a.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The WTP and storage facilities would not be constructed within a delineated 100-year flood hazard area or floodway per CDPH requirements. As a result, the construction and operation of this Off-site Water Facilities feature would not place structures within a 100-year flood hazard area as mapped on the most recent Federal Flood Insurance Rate Map. Small segments of the proposed conveyance pipelines under all the alternatives would cross floodways or flood zones associated with Morison Creek, Elder Creek, or Laguna Creek. These crossings would be completed using in-channel or trenchless construction techniques and would be installed at sufficient depth below existing and/or planned flood control facilities.

Following construction, the conveyance pipeline would generally be submerged a minimum of five feet below the ground surface and set back from local waterways. Facilities installed beneath the bed of the local creeks would be constructed within a 100-year flood zone, but would be situated, beneath the channel bed. Additionally, construction of these facilities, particularly at water crossings, would likely occur during the summer months and would be of limited duration and, therefore, would be unlikely to expose workers to significant risk of injury or death as a result of flooding. However, without the availability of site-specific engineering plans, the City is unable to ensure that the conveyance pipeline is placed within suitable bedding materials at the required depths below the channel bed. The improper placement of the conveyance pipeline at waterway crossings could destabilize the impacted portion of the channel bed and banks thereby contributing to changes in downstream changes in hydrology. The **direct** and **indirect** impacts of these changes are considered **potentially significant**.

With the implementation of recommendations from a licensed geotechnical engineer as required by Mitigation Measure 3B.7.1a combined with measures designed to minimize impacts to channel morphology during construction as required by Mitigation Measure 3B.9.1a, the Off-site Water Facility Alternatives would not result in significant impedances or redirection of flood flows and the impact would be **less-than-significant**.

LAND USE AND AGRICULTURAL RESOURCES – LAND

IMPACT 3A.10-3 **Cancellation of Existing On-Site Williamson Act Contracts.** *Project implementation could result in the cancellation of Williamson Act contracts.*

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Approximately 1,530 acres of the SPA consist of agricultural lands under existing Williamson Act contracts. Notices of nonrenewal were filed on these parcels in 2004 and 2006; as a result, these existing contracts will expire in 2014 and 2016, respectively. Project implementation would require the cancellation of one or more of these Williamson Act contracts before their expiration date because the proposed land uses would not be permitted under the existing contracts.

Because the timing of the development of particular phases of the SPA is unknown at this time (see Section 2.3.1 in Chapter 2, “Alternatives,” of the DEIR/DEIS for a discussion of project phasing), future Williamson Act cancellation requests would be submitted on an as-needed basis, in conjunction with tentative map or other entitlement actions. The project applicant(s) for development of parcels under Williamson Act contract would need to apply to the City of Folsom for contract cancellation; as a result, the actual determination of consistency with the statutory consistency requirements would be made by the Folsom City Council, as it would succeed to the contracts upon annexation of the SPA. The City would be required to make findings supporting the cancellation of all Williamson Act contracts pursuant to California Government Code Section 51282 by determining if the cancellation is consistent with the purpose of the California Land Conservation Act or the cancellation is in the public interest (as discussed in detail in the “Regulatory Framework” section above). As a result, this **direct** impact is considered **significant**.

Implementation of the Proposed Project Alternative would likely result in the cancellation of one or more of the existing Williamson Act contracts prior to their expiration dates in 2014 and 2016 to accommodate the project development. Feasible mitigation measures, such as participation in an agricultural conservation easement, are not available to reduce impacts associated with the cancellation of these Williamson Act contracts to a less-than-significant level because no such programs are available. Therefore, this impact remains **significant and unavoidable**. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to cancellation of existing on-site Williamson Act contracts.

IMPACT 3A.10-4 **Potential Conflict with Existing Off-Site Williamson Act Contracts.** *Project implementation could conflict with lands under Williamson Act contracts south of the SPA; thereby potentially resulting in cancellation of those contracts.*

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Land south of the SPA is characterized primarily by seasonal grazing land in an unincorporated area regulated by Sacramento County and the majority of these lands are under Williamson Act contracts. As discussed above, project implementation would require the cancellation of Williamson Act contracts because the proposed land uses would not be permitted under the existing contracts. The removal of the SPA from Williamson Act contracts for urban development may encourage the non-renewal of contracts on lands south of the SPA.

The land south of the SPA is located in a rural unincorporated portion of Sacramento County beyond the USB. The USB defines the ultimate boundary of urban development and is intended to be permanent, allowing modification only under special circumstances. These lands are not within the UPA, and it is not expected this area would receive urban levels of public infrastructure and services to support urban development. The Teichert and Walltown quarries are proposed 0.9 mile and 1.2, respectively, south of the SPA and would require cancellation of lands under Williamson Act contracts. No urban development is currently proposed south of the projects site. Nonetheless, land uses inconsistent with Williamson Act provisions and resulting in subsequent contract non-renewals could occur through requests for general plan amendments and rezoning of these lands. Project implementation could conflict with existing Williamson Act contracts or result in the cancellation of such contracts on lands south of the SPA and this **indirect** impact is considered **potentially significant**.

Implementation of the Proposed Project Alternative could conflict with existing off-site Williamson Act contracts or result in the cancellation of such contracts on lands south of the SPA. Feasible mitigation measures, such as participation in an agricultural conservation easement, are not available to reduce impacts associated with the cancellation of these Williamson Act contracts to a less-than-significant level because no such programs are available. Therefore, this impact remains potentially **significant and unavoidable**. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to cancellation of existing off-site Williamson Act contracts.

LAND USE AND AGRICULTURAL RESOURCES – WATER

IMPACT 3B.10-4 **Cancellation of Existing On-site Williamson Act Contracts.** *Construction of the Off-site Water Facility Alternatives could conflict with lands under Williamson Act contracts; thereby potentially resulting in cancellation of those contracts.*

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Construction of the conveyance pipeline under the Proposed Off-site Water Facility Alternative would be located primarily within existing roadway right-of-way with the exception of a small section of agricultural land between the Freeport bifurcation and Grant Line Road. This would require a temporary construction easement and a permanent easement. No existing Williamson Act Contracts are on file for areas bordering the conveyance alignment under the Proposed Off-site Water Facility Alternative.

Construction of the WTP under the Proposed Off-site Water Facility Alternative would occur on land currently protected by a Williamson Act Contract, but as described in the setting section, that land is currently in non-renewal status. For instances where the Off-site Water Facilities would affect contracted lands, such as the WTP site, the Williamson Act has specific provisions for acquisition of contracted land for public improvements. Article 6 of the Williamson Act (California Government Code Sections 51290–51295) provides that a public entity may acquire land within an agricultural preserve for a public improvement through eminent domain or in lieu of eminent domain, and that this action terminates the contract.

However, given that these alternatives would necessitate the premature cancellation of the existing Williamson Act non-renewal process, these alternatives would be in conflict with the general intent of the Williamson Act. This **indirect** impact would be **significant**.

Implementation of the Proposed Off-site Water Facility Alternative would conflict with existing off-site Williamson Act contracts or result in the cancellation of such contracts on lands south of the project site. Feasible mitigation measures, such as participation in an agricultural conservation easement, are not available to reduce impacts associated with the cancellation of these Williamson Act contracts to a less-than-significant level because no such programs are available. Therefore, this impact remains **potentially significant and unavoidable**. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to cancellation of existing on-site Williamson Act contracts.

IMPACT **Potential Temporary Disruptions to Existing Agricultural Operations.** *Implementation of the Off-site Water*
3B.10-5 *Facilities could potentially affect existing agricultural operations and result in a loss in agricultural productivity.*

Mitigation

Mitigation Measure 3B.10-5: Restore Affected Agricultural Lands to Preproject Conditions.

The City shall consult with all affected land owners where the selected alignment would cross Important Farmland. As part of the easement acquisition process, the City shall demonstrate a good-faith effort to negotiate with affected landowners an agreed-upon compensation for the loss of any existing pasture and/or row crops currently in production. During these consultations the City shall also, in conjunction with landowners’ input, identify areas along the right-of-way that could be left in agricultural production as well as locations for access gates to allow for city staff access. Access gate locations shall be included in the final design plans for the Off-site Water Facilities. Compensation for the loss of crops and associated revenues shall be up to the provisions of law.

Implementation: City of Folsom Utilities Department.

Timing: Immediately following construction.

Enforcement: Sacramento County Community Development and Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The conveyance pipeline options under the Proposed Off-Site Water Facility Alternative would primarily be located within existing road rights-of-way, although construction areas may extend into adjacent lands used for agriculture. Although the pipeline would be buried and installed in close proximity to the roadway, construction activities may require the removal of existing irrigation structures and topsoil. The temporary disruption caused by installation of the conveyance pipeline and auxiliary structures has the potential to be significant depending on its ultimate placement. If not sufficiently buried, future use of tillage equipment, drainage facilities, or other agricultural activities within the easement may not be possible thereby resulting in a loss in agricultural productivity. Therefore, this **direct** temporary impact would be **significant**. No **indirect** impacts would occur.

Implementation of Mitigation Measure 3B.10-4 would reduce significant impacts related to disruption of existing agricultural operations under the Proposed Off-site Water Facility Alternative to a less-than-significant level by restoring agricultural land within the easement area to preproject conditions.

NOISE – LAND

IMPACT 3A.11-1 **Temporary, Short-Term Exposure of Sensitive Receptors to Increased Equipment Noise from Project Construction.** *Project implementation would result in temporary, short-term construction activities associated with development of residential, commercial, schools, and park uses, supporting roadways, and other infrastructure improvements. Project-related construction activities could expose existing off-site and future on-site sensitive receptors to temporary noise levels that exceed the applicable noise standards and/or result in a substantial increase in ambient noise levels.*

Mitigation

Mitigation Measure 3A.11-1: Implement Noise-Reducing Construction Practices, Prepare and Implement a Noise Control Plan, and Monitor and Record Construction Noise near Sensitive Receptors.

To reduce impacts associated with noise generated during project-related construction activities, the project applicant(s) and their primary contractors for engineering design and construction of all project phases shall ensure that the following requirements are implemented at each work site in any year of project construction to avoid and minimize construction noise effects on sensitive receptors. The project applicant(s) and primary construction contractor(s) shall employ noise-reducing construction practices. Measures that shall be used to limit noise shall include the measures listed below:

- ▶ Noise-generating construction operations shall be limited to the hours between 7 a.m. and 7 p.m. Monday through Friday, and between 8 a.m. and 6 p.m. on Saturdays and Sundays.
- ▶ All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses.

- ▶ All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- ▶ All motorized construction equipment shall be shut down when not in use to prevent idling.
- ▶ Individual operations and techniques shall be replaced with quieter procedures (e.g., using welding instead of riveting, mixing concrete off-site instead of on-site).
- ▶ Noise-reducing enclosures shall be used around stationary noise-generating equipment (e.g., compressors and generators) as planned phases are built out and future noise sensitive receptors are located within close proximity to future construction activities.
- ▶ Written notification of construction activities shall be provided to all noise-sensitive receptors located within 850 feet of construction activities. Notification shall include anticipated dates and hours during which construction activities are anticipated to occur and contact information, including a daytime telephone number, for the project representative to be contacted in the event that noise levels are deemed excessive. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) shall also be included in the notification.
- ▶ To the extent feasible, acoustic barriers (e.g., lead curtains, sound barriers) shall be constructed to reduce construction-generated noise levels at affected noise-sensitive land uses. The barriers shall be designed to obstruct the line of sight between the noise-sensitive land use and on-site construction equipment. When installed properly, acoustic barriers can reduce construction noise levels by approximately 8–10 dB (EPA 1971).
- ▶ When future noise sensitive uses are within close proximity to prolonged construction noise, noise-attenuating buffers such as structures, truck trailers, or soil piles shall be located between noise sources and future residences to shield sensitive receptors from construction noise.
- ▶ The primary contractor shall prepare and implement a construction noise management plan. This plan shall identify specific measures to ensure compliance with the noise control measures specified above. The noise control plan shall be submitted to the City of Folsom before any noise-generating construction activity begins. Construction shall not commence until the construction noise management plan is approved by the City of Folsom. Mitigation for the two off-site roadway connections into El Dorado County must be coordinated by the project applicant(s) of the applicable project phase with El Dorado County, since the roadway extensions are outside of the City of Folsom's jurisdictional boundaries.

Implementation: Project applicant(s) and primary contractor(s) of all project phases.

Timing: Before and during construction activities in the SPA and within El Dorado Hills.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the two roadway connections off-site into El Dorado Hills: El Dorado County Development Services Department.

Finding for Elements within the City of Folsom's Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The Proposed Project Alternative includes development of a variety of mixed uses (i.e., residential, commercial, office/industrial, schools, community parks, and open space land uses) and supporting on-site roadway and infrastructure improvements. Construction of the proposed land uses and improvements would likely occur by sub-areas, within the SPA, in a sequence established by individual land owners (project applicant[s]) and influenced by market demand.

Construction noise levels in the project vicinity from on-site activities would fluctuate depending on the particular type, number, and duration of usage for the varying equipment. The effects of construction noise largely depend on the type of construction activities occurring on any given day, noise levels generated by those activities, distances to noise sensitive receptors, and the existing ambient noise environment in the receptor's vicinity. Construction generally occurs in several discrete stages, each phase requiring a specific complement of equipment with varying equipment type, quantity, and intensity. These variations in the operational characteristics of the equipment change the effect they have on the noise environment of the SPA and in the surrounding community for the duration of the construction process.

With respect to future on-site noise-sensitive receptors, the City of Folsom exempts daytime construction noise from applicable standards. However, if construction activities occur during the more noise-sensitive evening and nighttime hours, due to the potential necessity of continuous activity for specific components to maintain structural integrity, project-generated noise levels could exceed 45 dB L_{eq} at future on-site sensitive receptors within 2,000 feet of activity centers (e.g., the acoustical center of areas of the SPA where construction activities are focused). Currently, there are no on-site noise-sensitive receptors; however, it is projected that as the project develops, new noise-sensitive receptors could be located near construction source noise activity centers (e.g., well within 2,000 feet as subsequent project phases are developed and each phase includes sensitive uses).

Existing off-site noise sensitive receptors are located in the City of Folsom to the north of the eastern portion of the SPA and in the County of El Dorado to the east of the eastern portion of the SPA. It is projected that the noise-sensitive receptors located in the City of Folsom would not be affected by project construction noise during the daytime hours due to the intervening location of U.S. 50 that serves as a major dominating noise source. In addition, as described above, the City of Folsom exempts daytime construction noise from the applicable standards. Conversely, the County of El Dorado has not adopted an exemption for construction noise that occurs in the daytime hours. Based on the modeling conducted, project-generated noise levels could exceed 55 dB L_{eq} within 850 feet of the activity center. Currently, off-site noise-sensitive receptors in the County of El Dorado are located to the east of the SPA and within 800 feet of proposed areas of construction. Also, if construction activities were to occur during the more noise-sensitive evening and nighttime hours, due to the potential necessity of continuous activity for specific components to maintain structural integrity, project-generated noise levels could exceed 50 and 45 dB L_{eq} within 1,300, and 2,000 feet of the activity centers, respectively. Currently, off-site noise sensitive receptors in both the City of Folsom and the County of El Dorado are located within those project-generated contour distances.

Thus, project construction of on-site elements could expose future on-site and existing off-site sensitive receptors to equipment noise levels that exceed the applicable noise standards and/or result in a substantial increase in ambient noise levels especially during the more noise-sensitive hours of the day. Thus, this would be considered a **direct, significant** impact. **No indirect** impacts would occur.

With implementation of Mitigation Measure 3A.11-1, construction would be limited to daytime hours, for which associated noise levels are considered exempt from the provisions of applicable standards established by the City of Folsom and the County of Sacramento. Therefore, on-site and off-site impacts from temporary, short-term

exposure of sensitive receptors to increased equipment noise from project construction under the Proposed Project Alternative would be reduced to a **less-than-significant level**.

Finding for Elements Outside the City of Folsom’s Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado County; therefore, the City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.11-1. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.11-1, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.11-3 Temporary, Short-Term Exposure of Sensitive Receptors to Potential Groundborne Noise and Vibration from Project Construction. *Project implementation could expose sensitive receptors to groundborne noise and vibration levels that exceed applicable standards that could cause human disturbance or damage structures.*

Mitigation

Mitigation Measure 3A.11-3: Implement Measures to Prevent Exposure of Sensitive Receptors to Groundborne Noise or Vibration from Project Generated Construction Activities.

- ▶ To the extent feasible, blasting activities shall not be conducted within 275 feet of existing or future sensitive receptors.
- ▶ To the extent feasible, bulldozing activities shall not be conducted within 50 feet of existing or future sensitive receptors.
- ▶ All blasting shall be performed by a blast contractor and blasting personnel licensed to operate in the State of California.
- ▶ A blasting plan, including estimates of vibration levels at the residence closest to the blast, shall be submitted to the enforcement agency for review and approval prior to the commencement of the first blast.
- ▶ Each blast shall be monitored and documented for groundbourne noise and vibration levels at the nearest sensitive land use and associated recorded submitted to the enforcement agency. If any exceedances of vibration levels as shown in Table 3A.11-17 are documented, the blasting plan required above shall be revised to incorporate additional protective measures (e.g., increased distance, smaller blast load) to the maximum extent feasible to further reduce vibration levels.

Implementation: Project applicant(s) and primary contractor(s) of all project phases.

Timing: Before and during bulldozing and blasting activities in the SPA and within El Dorado Hills and the County of Sacramento.

- Enforcement:**
1. For all project-related improvements that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For the two roadway connections off-site into El Dorado Hills: El Dorado County Development Services Department.
 3. For the off-site detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 4. For the U.S. 50 interchange improvements: Caltrans.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Construction activities in the SPA may result in varying degrees of temporary groundborne noise and vibration, depending on the specific construction equipment used and activities involved. Groundborne noise and vibration levels caused by various types of construction equipment and activities (e.g., bulldozers, blasting, etc.) are summarized in Table 3A.11-17 of the DEIR/DEIS.

With respect to the Proposed Project Alternative, maximum groundborne noise and vibration levels would be associated with bulldozing and blasting activities. According to FTA, levels associated with the use of a large bulldozer and blasting are 0.089 and 1.13 in/sec peak particle velocity (PPV) (87 and 109 vibration decibels (VdB)) at 25 feet, respectively.

With respect to the prevention of structural damage, bulldozing would not exceed the Caltrans-recommended level of 0.2 in/sec PPV, even at a distance of 25 feet. However, blasting could exceed this level within 80 feet of said activities based on FTA's recommended procedure for applying a propagation adjustment to these reference levels. In addition, with respect to prevention of human disturbance, bulldozing and blasting could exceed the FTA-recommended level of 78 VdB within 50 and 275 feet, respectively. Long-term operational-related activities would not be anticipated to include any major sources of groundborne noise or vibration. The exact locations of bulldozing activities and blasting points have not been determined at this time; however, the nearest sensitive receptors (e.g., existing off-site El Dorado residences to the east of the steep hillside area where blasting could occur, and planned on-site receptors) could be located within the distances modeled above that are correlated with the Caltrans- and FTA- recommended exceedance levels. Thus, short-term construction could result in the exposure of persons to or generation of excessive groundborne noise or vibration levels. As a result, this would be a **direct significant** impact. **No indirect** impacts would occur.

Off-Site Elements

The off-site improvements to the U.S. 50 interchanges at Prairie City Road and the construction of the Oak Avenue and Empire Ranch interchanges, the Rowberry Drive Overcrossing, the El Dorado County roadway connections and the detention basin west of Prairie City Road would be anticipated to include the use of typical heavy construction equipment (e.g., bulldozing). Blasting is not expected to be required for construction of these off-site elements. As described above, bulldozing would not exceed the Caltrans-recommended level of 0.2 in/sec PPV for the prevention of structural damage even at a distance of 25 feet; however, bulldozing could exceed the FTA-recommended level of 78 VdB for the prevention of human disturbance within 50 feet of said activities. The nearest receptor relative to off-site construction elements is approximately 40 feet from the proposed Empire Ranch interchange onramp, which is within the distance modeled above that is correlated with the FTA-recommended exceedance levels. Thus, short-term construction could result in the exposure of persons to or

generation of excessive groundborne noise or vibration levels. As a result, this would be a **direct, significant** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.11-3 would reduce project-generated groundborne noise and vibration levels and the exposure thereof under the Proposed Project Alternative. However, depending on the exact location of said activities, which is not determined at this time, sensitive receptors could still be exposed to levels that exceed those recommended by Caltrans and FTA for the prevention of structural damage and human disturbance. Furthermore, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, or Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. As a result, this **direct** impact would be considered **significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with groundborne noise and vibration from project construction to a less-than-significant level because it is technically infeasible to allow construction activities without groundborne noise and vibration from construction activities. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without groundborne construction noise and vibration, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to construction groundborne noise and vibration.

IMPACT 3A.11-4 Long-Term Exposure of Sensitive Receptors to Increased Traffic Noise Levels from Project Operation.
Project implementation would result in long-term increases in ADT volumes on affected roadway segments. Increased traffic volumes would result in a substantial (e.g., 3 dB L_{dn}/CNEL) increase in ambient noise levels on- and off-site at nearby noise-sensitive receptors.

Mitigation

Mitigation Measure 3A.11-4: Implement Measures to Prevent Exposure of Sensitive Receptors to Increases in Noise from Project-Generated Operational Traffic on Off-Site and On-Site Roadways.

To meet applicable noise standards as set forth in the appropriate General Plan or Code (e.g., City of Folsom, County of Sacramento, and County of El Dorado) and to reduce increases in traffic-generated noise levels at noise-sensitive uses, the project applicant(s) of all project phases shall implement the following:

- ▶ Obtain the services of a consultant (such as a licensed engineer or licensed architect) to develop noise-attenuation measures for the proposed construction of on-site noise-sensitive land uses (i.e., residential dwellings and school classrooms) that will produce a minimum composite Sound Transmission Class (STC) rating for buildings of 30 or greater, individually computed for the walls and the floor/ceiling construction of buildings, for the proposed construction of on-site noise-sensitive land uses (i.e., residential dwellings and school classrooms).
- ▶ Prior to submittal of tentative subdivision maps and improvement plans, the project applicant(s) shall conduct a site-specific acoustical analysis to determine predicted roadway noise impacts attributable to the project, taking into account site-specific conditions (e.g., site design, location of structures, building characteristics). The acoustical analysis shall evaluate stationary- and mobile-source noise attributable to the proposed use or uses and impacts on nearby noise-sensitive land uses, in accordance with adopted City noise standards. Feasible measures shall be identified to reduce project-related noise impacts. These measures may include, but are not limited to, the following:

- limiting noise-generating operational activities associated with proposed commercial land uses, including truck deliveries;
- constructing exterior sound walls;
- constructing barrier walls and/or berms with vegetation;
- using “quiet pavement” (e.g., rubberized asphalt) construction methods on local roadways; and,
- using increased noise-attenuation measures in building construction (e.g., dual-pane, sound-rated windows; exterior wall insulation).

Implementation: Project applicant(s) of all project phases.

Timing: Before submittal of tentative subdivision maps or improvement plans; during project construction activities at noise-sensitive receptors in the SPA; at the existing noise-sensitive receptors on Empire Ranch Road from Broadstone Parkway to Iron Point Road; and at the existing noise-sensitive receptors on Latrobe Road from White Rock Road to Golden Foothills Parkway.

- Enforcement:**
1. For all noise-sensitive receptors that would be located within the City of Folsom: City of Folsom Community Development Department.
 2. For all noise-sensitive receptors in El Dorado Hills: El Dorado County Development Services Department.
 3. For all noise-sensitive receptors in the vicinity the off-site detention basin west of Prairie City Road: Sacramento County Planning and Community Development Department.
 4. For all noise-sensitive receptors adjacent to the U.S. 50 interchange improvements: Caltrans.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Project implementation would result in an increase in ADT volumes on affected roadway segments and, consequently, an increase in traffic source noise. To assess this impact, traffic noise levels associated with the Proposed Project Alternative under existing no project and plus project conditions were predicted for affected roadway segments using FHWA’s Highway Noise Prediction Model (FHWA-RD-77-108) (FHWA 1978) and traffic data (e.g., ADT volumes, vehicle speeds, and % distribution of vehicle types) from DKS Associates, Inc. and Caltrans. This model is based on the California vehicle noise (CALVENO) reference noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and ground attenuation factors and does not assume any natural or human-made shielding (e.g., the presence of vegetation, berms, walls, or buildings).

Project implementation would result in net increases along affected roadway segments in comparison to existing no project conditions that range from -6.7 to 10.0 under existing plus Proposed Project Alternative conditions. Those modeled increases that would be considered substantial (e.g., 3 dB $L_{dn}/CNEL$ where existing or projected future traffic noise levels range between 60 and 65 dB $L_{dn}/CNEL$, or 1.5 dB $L_{dn}/CNEL$ where existing or projected future traffic noise levels are greater than 65 dB $L_{dn}/CNEL$) in comparison to existing no project conditions are indicated in bold. Project implementation would result in a substantial permanent increase in ambient noise levels on- and off-site at nearby sensitive receptors (e.g., Empire Ranch Road from Broadstone Parkway to Iron Point Road and

Latrobe Road from White Rock Road to Golden Foothills Parkway) under future (2030) plus project conditions. Therefore, this would be a **direct significant** impact. **No indirect** impacts would occur.

Significant traffic noise impacts at existing noise-sensitive areas associated with growth of communities are generally very difficult to feasibly mitigate because some areas may already have noise barriers, or new noise barriers may be infeasible from a cost standpoint or ineffective because of openings in the barriers that are commonly required for roadway ingress and egress. Because it may not be feasible to reduce the project-related long-term operations traffic noise level increases to a less-than-significant level at all existing noise-sensitive land uses along affected roadway segments, this **direct** impact under the Proposed Project Alternative would remain **significant and unavoidable**. **No indirect** impacts would occur.

No other feasible mitigation measures are available to reduce impacts associated with project-related long-term operational increases in traffic noise to a less-than-significant level because it is technically infeasible to allow new development without some exposure of sensitive receptors to increased traffic noise. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without increased traffic noise, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to long-term exposure of sensitive receptors to increased traffic noise.

IMPACT 3A.11-5 Long-Term Exposure of Sensitive Receptors to Increased Stationary-Source Noise Levels from Project Operation. *Project implementation would result in increases in on-site stationary-source noise levels associated with the proposed residential, commercial, mixed-use, office/industrial, park, and educational land uses. These stationary noise sources could exceed the applicable noise standards (hourly and maximum) and result in a substantial increase in ambient noise levels.*

Mitigation

Mitigation Measure 3A.11-5: Implement Measures to Reduce Noise from Project-Generated Stationary Sources.

The project applicant(s) for any particular discretionary development project shall implement the following measures to reduce the effect of noise levels generated by on-site stationary noise sources that would be located within 600 feet of any noise-sensitive receptor:

- ▶ Routine testing and preventive maintenance of emergency electrical generators shall be conducted during the less sensitive daytime hours (i.e., 7:00 a.m. to 6:00 p.m.). All electrical generators shall be equipped with noise control (e.g., muffler) devices in accordance with manufacturers' specifications.
- ▶ External mechanical equipment associated with buildings shall incorporate features designed to reduce noise emissions below the stationary noise source criteria. These features may include, but are not limited to, locating generators within equipment rooms or enclosures that incorporate noise-reduction features, such as acoustical louvers, and exhaust and intake silencers. Equipment enclosures shall be oriented so that major openings (i.e., intake louvers, exhaust) are directed away from nearby noise-sensitive receptors.
- ▶ Parking lots shall be located and designed so that noise emissions do not exceed the stationary noise source criteria established in this analysis (i.e., 50 dB for 30 minutes in every hour during the daytime [7 a.m. to 10 p.m.] and less than 45 dB for 30 minutes of every hour during the night time [10 p.m. to 7 a.m.]). Reduction of parking lot noise can be achieved by locating parking lots as far away as

feasible from noise sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses.

- ▶ Loading docks shall be located and designed so that noise emissions do not exceed the stationary noise source criteria established in this analysis (i.e., 50 dB for 30 minutes in every hour during the daytime [7 a.m. to 10 p.m.] and less than 45 dB for 30 minutes of every hour during the night time [10 p.m. to 7 a.m.]). Reduction of loading dock noise can be achieved by locating loading docks as far away as possible from noise sensitive land uses, constructing noise barriers between loading docks and noise-sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses.

Implementation: Project applicant(s) of all project phases.

Timing: Before submittal of improvement plans for each project phase, and during project operations for testing of emergency generators.

Enforcement: City of Folsom Community Development Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

This impact assesses the long-term exposure of existing off-site and proposed on-site sensitive receptors to increased stationary-source noise levels from proposed on-site project operations. The land use compatibility of future noise levels at the proposed on-site sensitive receptors from off-site stationary noise sources are discussed in Impact 3A.11-7. It is important to also note for the assessment of this impact that the applicable Code states that the external noise level at residential land uses caused by stationary noise sources must be less than 50 dB for 30 minutes in every hour during the daytime (7 a.m. to 10 p.m.) and less than 45 dB for 30 minutes of every hour during the night time (10 p.m. to 7 a.m.). These criteria are the most stringent of the applicable noise standards. Therefore, all criteria that apply to stationary noise sources would be complied with if external noise levels at residential land uses were limited to less than 50 dB during the day time and less than 45 dB during the night time.

The land use plans under the Proposed Project Alternative and the other four action alternatives feature a mix of various land uses, including residential, commercial, mixed-use, office/industrial, park, and educational. These land uses would introduce new on-site stationary noise sources, including rooftop heating, ventilation, and air conditioning (HVAC) equipment; mechanical equipment; emergency electrical generators; parking lot activities; and loading dock operations. The sources and levels of noise typically associated with these land uses that are stationary in nature are discussed separately below.

Mechanical HVAC Equipment

HVAC equipment could be a primary noise source associated with residential, commercial, and industrial uses. HVAC equipment is often mounted on rooftops, located on the ground, or located within mechanical rooms. The noise sources could take the form of fans, pumps, air compressors, chillers, or cooling towers. Noise levels from HVAC equipment vary substantially depending on unit efficiency, size, and location, but generally range from 45 to 70 dB L_{eq} at a distance of 50 feet (EPA 1971). Accounting for typical attenuation rates of 6 dB per doubling of distance and shielding provided by on-site structures, noise levels attributed to HVAC mechanical systems are not anticipated to exceed stationary-source noise level criteria; however, the potential for impacts still exists. As a result, the impact of noise from HVAC equipment under the Proposed Project Alternative, Resource Impact Minimization, Centralized Development, Reduced Hillside Development, and No USACE Permit Alternatives is considered a **direct, potentially significant** impact. **No indirect** impacts would occur.

Emergency Electrical Generators

Emergency generators may be used to supply necessary power requirements to vital systems within facilities constructed on the general commercial, community commercial, office/industrial, and mixed-use land uses. Emergency generators are typically operated under two conditions: loss of main electrical supply or preventive maintenance/testing. The operation of mechanical equipment associated with emergency operations is exempt from the noise standards outlined in the Folsom City Municipal Code; thus, this analysis focuses on routine preventive maintenance and testing operations, which are conducted on a periodic basis.

Reference noise-level measurements of emergency generators with rated power outputs from 50 kilowatts (kW) to 125 result in noise levels ranging from 61 to 73 dB L_{eq} and 63–84 dB L_{max} at a distance of 45 feet (EPA 1971, RCNM 2006). Based on these reference noise levels, emergency electrical generators located within 700 feet of noise-sensitive land uses could exceed the City noise standard for daytime stationary-source noise. In addition, generators located within 1,200 feet of noise-sensitive land uses could exceed the City noise standard for nighttime stationary-source noise. As a result, the impact of noise levels from preventive maintenance testing and operation of emergency electrical generators under the Proposed Project Alternative, Resource Impact Minimization, Centralized Development, Reduced Hillside Development, and No USACE Permit Alternatives is considered a **direct, potentially significant** impact. **No indirect** impacts would occur.

Parking Lot Activities

Parking lots are expected to be included in the office/industrial and community commercial land uses. The details required to accurately predict noise emissions from car parking activities, location, size, and parking demand are not yet established. Therefore, the potential impact of noise generated by parking lot operations is evaluated in this analysis using a representative scenario at a programmatic level.

Reference noise level measurements of parking lot activities indicate that average sound exposure levels (SEL) associated with a single parking event are approximately 71 dB SEL at distance of 50 feet (FTA 2006). Activities making up a single parking event included vehicle arrival, limited idling, occupants exiting the vehicle, door closures, conversations among passengers, occupants entering the vehicle, startup, and departure of the vehicle. A representative parking lot with 1,000 stalls and 1,000 parking events per hour would produce a noise level that exceeds the City standard for the daytime at distances up to 380 feet and exceeds the nighttime noise standard at distances up to 600 feet. It is possible that the distance between parking lots and residential land uses would be less than 380 feet because shared boundaries between commercial, community commercial, and office/industrial land uses exist under the Proposed Project Alternative and the other four action alternatives. Therefore, the impact of noise generated from parking lot activities under the Proposed Project, Resource Impact Minimization, Centralized Development, Reduced Hillside Development, and No USACE Permit Alternatives is considered a **direct, potentially significant** impact. **No indirect** impacts would occur.

Loading Dock and Delivery Activity

Noise sources associated with loading dock and delivery activities can include trucks idling, on-site truck circulation, trailer-mounted refrigeration units, pallets dropping, and the operation of forklifts. Reference noise level measurements at loading docks previously undertaken by AECOM indicates that typical hourly average noise levels range from 55 to 60 dB L_{eq} and from 80 to 84 dB L_{max} at a distance of 50 feet (EDAW/AECOM [now AECOM] 2008). Based on these previously measured noise levels, the City's daytime stationary noise criterion would be exceeded approximately 300 feet from the acoustic centre of the loading dock and the nighttime stationary noise criterion would be exceeded approximately 170 feet from the acoustic centre of the loading dock.

It is possible that the distance between loading docks and residential land uses could be less than 170 feet because shared boundaries between commercial, community commercial, and office/industrial land uses are planned under the Proposed Project Alternative and the other four action alternatives. Therefore, noise generated from loading dock and delivery activities under the No USACE Permit, Proposed Project, Resource Impact Minimization,

Centralized Development, and Reduced Hillside Development Alternatives is considered a **direct, potentially significant** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.11-5 would reduce stationary source noise from proposed on-site project operations to levels in compliance with the City of Folsom Code to a **less-than-significant** level under the Proposed Project Alternative through the use of noise control devices, restricted operational periods, and required design features.

IMPACT 3A.11-7 **Compatibility of Proposed On-Site Land Uses with the Ambient Noise Environment.** *The project includes development of on-site noise-sensitive land uses that could be exposed to noise levels that exceed the noise standards set forth in the applicable General Plan and Code.*

Mitigation

Implement Mitigation Measure 3A.11-4.

Implementation: Project applicant(s) of all project phases.

Timing: Before submittal of tentative subdivision maps or improvement plans.

Enforcement: Folsom Community Development Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Ambient noise levels in the SPA would be influenced largely by vehicle traffic on area roadways. Traffic noise levels within the SPA were modeled using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108) and traffic data (e.g., ADT volumes, vehicle speeds, and % distribution of vehicle types) from DKS Associates, Inc. and Caltrans. This model is based on the California vehicle noise (CALVENO) reference noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and ground attenuation factors and does not assume any natural or human-made shielding (e.g., the presence of vegetation, berms, walls, or buildings).

The 60-dB $L_{dn}/CNEL$ noise contours for adjacent roadways (i.e., U.S. 50, White Rock Road, and Prairie City Road) and on-site proposed roadways (i.e., Oak Avenue, Scott Road, Placerville Road, Street "B," Empire Ranch Road, Easton Valley Parkway, and Street "A"), extend onto portions of the SPA, including areas of proposed single-family and multifamily residential development. Predicted noise levels at some proposed on-site residential land uses would exceed the City's land-use compatibility standard of 60 dB $L_{dn}/CNEL$. In addition, exterior noise levels that exceed 70 $L_{dn}/CNEL$ would also be anticipated to exceed the City's interior noise standard of 45 $L_{dn}/CNEL$, based on a standard interior to exterior reduction of 25 dB. Thus, exposure of proposed on-site land uses to traffic noise levels would be considered a **direct, significant** impact. **No indirect** impacts would occur.

Typically, a 6-foot sound wall would reduce noise levels from approximately 5-6 dB and for each additional foot of wall another 1 dB (Caltrans 1998). Thus, implementation of Mitigation Measure 3A.11-4 would reduce on-site traffic noise levels at proposed noise-sensitive land uses to levels conditionally acceptable with mitigation (i.e., 65 dB $L_{dn}/CNEL$). As a result, this direct impact would be reduced to a **less-than-significant** level under the Proposed Project Alternative.

IMPACT **Temporary, Short-Term Exposure of Sensitive Receptors to Increased Equipment Noise from Project**
3B.11-1 **Construction.** *The Off-site Water Facility Alternatives could expose persons to or generate noise levels in excess of applicable City and County standards.*

Mitigation

Mitigation Measure 3B.11-1a: Limit Construction Hours.

Construction activities shall be limited to daylight hours between 7 a.m. and 7 p.m. Monday through Friday, and 9 a.m. and 5 p.m. on Saturday. No construction shall be allowed on Sundays or holidays.

Implementation: City of Folsom Utilities Department.

Timing: During construction of all Off-site Water Facility components.

Enforcement: 1. For structural improvements that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.

2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.

3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Mitigation Measure 3B.11-1b: Minimize Noise from Construction Equipment and Staging.

Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools, where used within 200 feet of a sensitive receptor. The City's construction specifications shall also require that the contractor select staging areas as far as feasibly possible from sensitive receptors.

Implementation: City of Folsom Utilities Department.

Timing: During construction of all Off-site Water Facility components.

Enforcement: 1. For structural improvements that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.

2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.

3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Mitigation Measure 3B.11-1c: Maximize the Use of Noise Barriers.

Construction contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from nearby residences. If feasible, noise barriers shall be used at the construction site and staging area. Temporary walls, stockpiles of excavated materials, or moveable sound barrier curtains would be appropriate in instances where construction noise would exceed 90 dBA and occur within less than 50 feet from a sensitive receptor. The final selection of noise barriers will be subject to the City’s approval and shall provide a minimum 10 dBA reduction in construction noise levels.

Implementation: City of Folsom Utilities Department.

Timing: During construction of all Off-site Water Facility components.

- Enforcement:**
1. For structural improvements that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.
 2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.
 3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Mitigation Measure 3B.11-1d: Prohibit Non-Essential Noise Sources During Construction.

No amplified sources (e.g., stereo “boom boxes”) shall be used in the vicinity of residences during project construction.

Implementation: City of Folsom Utilities Department.

Timing: During construction of all Off-site Water Facility components.

- Enforcement:**
1. For structural improvements that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.
 2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.
 3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Mitigation Measure 3B.11-1e: Monitor Construction Noise and Provide a Mechanism for Filing Noise Complaints.

An on-site complaint and enforcement manager shall track and respond to noise complaints. The City shall also provide a mechanism for residents, businesses, and agencies to register complaints with the City if construction noise levels are overly intrusive or construction occurs outside the required hours.

Implementation: City of Folsom Utilities Department.

- Timing:** During construction of all Off-site Water Facility components.
- Enforcement:**
1. For structural improvements that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.
 2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.
 3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Construction of the Off-site Water Facilities would occur in rural and industrial portions of the eastern Sacramento County. Over the entire length of these conveyance alternatives, there are approximately 25 rural residences that would be located within 50 to 100 feet of Off-site Water Facilities construction. Construction activities would generally involve excavation, concrete removal, earth movement, stockpiling, trenching activities, and truck hauling. These construction activities would generate temporary and intermittent noise at and near the conveyance pipeline alignment during the 36-month construction schedule. Noise levels would fluctuate depending on the particular type, number, and duration of use of various pieces of construction equipment. In addition, construction-related material haul trips would raise ambient noise levels along haul routes depending on the number of haul trips and the types of vehicles used. These activities would be more pronounced at the booster pump station facility where construction activities would occur for an extended duration of time.

In addition to actual pipe installation, staging areas would be located at various points along the construction route. These areas would be used to store pipe, equipment, and other construction related material. In some cases, staging areas would be used for the duration of the Off-site Water Facilities construction. In other cases, the area would be moved along the route to minimize the hauling distances and avoid disrupting any one area for an extended period of time. These staging areas could be considerable sources of noise, particularly if equipment is accessed and moved during nighttime hours when individuals are sensitive to intrusive noise.

Based on the noise levels provided in Table 3B.11-5 on page 3B.11-9 of the DEIR/DEIS and in assuming a conservative attenuation rate of 4.5 dBA per doubling distance, noises levels generated during construction could range from 75.5 to over 80 dBA at the nearest sensitive receptor locations depending on the types of equipment in operation. Additionally, back-up beepers associated with trucks and equipment used for material loading and unloading at the staging area would generate significantly increased noise levels over the ambient noise environment in order to be discernable and protect construction worker safety as required by the U.S. Occupational Safety and Health Administration (OSHA) (29 CFR 1926.601 and 29 CFR 1926.602).

Because existing daytime noise levels in the vicinity of the conveyance pipeline alignment are assumed to range from 50 to 60 dBA, daytime construction work associated with the Off-site Water Facilities would significantly affect the noise environment of residences in close proximity to construction activities by increasing ambient noise levels by five dBA or more. While construction activities would occur when a majority of people are at work, retired persons, people who work at home, and people caring for their children in their homes could be significantly affected temporarily by noise when construction activities are occurring in the immediate vicinity. This **direct** temporary and short-term impact is considered **potentially significant**. **No indirect** impacts would occur.

The exposure of individual sensitive receptors to elevated noise levels would be contingent on the types of equipment in use and the duration of use. For example, while construction of the Off-site Water Facilities would occur on a 36-month construction schedule, pipeline construction would progress at rate of approximately 50 to 100 feet a day and, therefore, no one particular receptor along the selected alignment would be subjected to elevated noise for more than a couple of days. Construction activities associated with the Off-site Water Facilities would therefore be temporary in nature and related noise impacts would be short-term. However, since pipeline construction activities could substantially increase ambient noise levels at noise-sensitive locations, with potential intermittent noise levels exceeding 80 dBA, construction noise would result in **potentially significant**, temporary, **direct** impacts to sensitive receptors. **No indirect** impacts would occur.

Although implementation of the above mitigation measures would generally reduce construction noise, construction-related noise levels could occasionally exceed the Sacramento County and City of Rancho Cordova standards regarding construction noise. In addition, construction activities at the pump station facility may occur over a more extended period of time, up to several months, and could contribute to noises levels in excess of 80 dBA. These impacts could remain **significant and unavoidable**, because there is no feasible mitigation to fully reduce temporary, short-term construction-related impacts to a less-than-significant level.

No other feasible mitigation measures are available to reduce impacts associated with increased equipment noise during project construction to a less-than-significant level because it is technically infeasible to allow construction activities without some temporary increase in equipment noise. The objectives of the “Water” elements of the project include construction of necessary infrastructure and sufficient water supply for the planned SPA. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow construction without some temporary increase in equipment noise, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to temporary exposure of sensitive receptors to increased equipment noise.

IMPACT 3B.11-3 **Permanent Increase in Ambient Noise Levels.** *The Off-site Water Facility Alternatives could create a substantial permanent increase in ambient noise levels in the vicinity of new pumping facilities.*

Mitigation

Mitigation Measure 3B.11-3: Implement Operational Noise Minimization Measures.

The following mitigation measures shall be implemented for the design of the WTP and the pump station(s) to ensure that operational noise levels at the property line do not exceed the City/County standards:

- ▶ Shielding and other specified measures as deemed appropriate and effective by the design engineer shall be incorporated into the design in order to comply with performance standards.
- ▶ Pumps located underground shall be shielded to not affect nearby sensitive receptors.
- ▶ Project equipment shall be outfitted and maintained with noise-reduction devices such as equipment closures, fan silencers, mufflers, acoustical louvers, noise barriers, and acoustical panels to minimize operational noise.
- ▶ Particularly noisy equipment shall be located as far away as feasibly possible from nearby sensitive receptors.
- ▶ The orientation of acoustical exits shall always be facing away from nearby sensitive receptors.

- ▶ Buildings and landscaping shall be incorporated, where possible, to absorb or redirect noise away from nearby sensitive receptors.

Implementation: City of Folsom Utilities Department.

Timing: Approval of engineering plans for the On- or Off-site WTPs and Off-site booster pumping facilities prior to construction.

- Enforcement:**
1. For structural improvements that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.
 2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.
 3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

The booster pump station would eventually consist of multiple 400 horsepower (HP) vertical turbine pumps. At times, the pumps may operate 24 hours a day, 7 days a week. Based on a review of published literature, the typical noise level for water supply pumping facilities ranges from 70 to 76 dBA at 50 feet (Environmental Science Associates 2005). However, the pumping facilities sampled as part the referenced analysis included substantially less horsepower than the Off-site Conveyance Pump’s proposed capacity and, therefore, noise levels from the proposed pumping facilities could be higher. This could result in a **potentially significant direct** impact to adjacent residences. **No indirect** impacts would occur.

Additionally, a small standby generator would be installed in an enclosure to operate up to two pumps during a power outage. The typical noise level for a generator is approximately 80 dBA at 50 feet. With a surrounding masonry buffer, or with generator placement using other structures as shielding, the effective noise level may be reduced by 10 to 15 dBA at 50 feet. Since emergency generators would operate infrequently, they would generally not contribute substantially to the overall community noise exposure outside of the site boundary. However, the combined operation of the pumps, the back-up generator, and maintenance activities depending on the proximity to the nearest sensitive receptor could generate long-term noise level in excess of Sacramento County or City of Rancho Cordova standards. This would be a **potentially significant, direct** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3B.11-3 is expected to reduce potential impacts to levels at or below standards and would generally reduce the impacts to less than significant levels. However, because of the uncertainty associated with the placement of these facilities, especially the booster pump station, and the pump station’s actual design (above- versus below-ground), the City is unable to verify whether noise levels would be reduced to below Sacramento County and City of Rancho Cordova standards as a result of the measures above and the impact could remain **potentially significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with a permanent increase in ambient noise levels to a less-than-significant level because it is technically infeasible to allow new development without some increase in ambient noise levels. The objectives of the “Water” elements of the project include

construction of necessary infrastructure and sufficient water supply for the planned SPA. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without some increase in ambient noise levels, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to a permanent increase in ambient noise levels.

PARKS AND RECREATION – WATER

IMPACT 3B.12-1 **Temporary Disruptions to Existing Recreational Facilities and Opportunities.** *Implementation of the Off-site Water Facility Alternatives could temporarily disrupt trail, golf course, or park facility access.*

Mitigation

Mitigation Measure 3B.12-1: Provide for Continued Recreational Access as Identified in Mitigation Measure 3.14-1a.

As part of the Traffic Control Plan identified in Mitigation Measure 3.14-1a, the City shall ensure that trail access is maintained throughout the construction period through the use of detours. Proper signage shall be included in multiple locations, where necessary, to provide advance notice to hikers and equestrian riders of up-coming construction activities.

Implementation: City of Folsom Utilities Department.

Timing: Prior to and during construction activities.

Enforcement:

1. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.
2. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Mitigation Measure 3A.14-1: Prepare and Implement a Construction Traffic Control Plan.

The project applicant(s) of all project phases shall prepare and implement traffic control plans for construction activities that may affect road rights-of-way. The traffic control plans must follow any applicable standards of the agency responsible for the affected roadway and must be approved and signed by a professional engineer. Measures typically used in traffic control plans include advertising of planned lane closures, warning signage, a flagperson to direct traffic flows when needed, and methods to ensure continued access by emergency vehicles. During project construction, access to existing land uses shall be maintained at all times, with detours used as necessary during road closures. Traffic control plans shall be submitted to the appropriate City or County department or the California Department of Transportation (Caltrans) for review and approval before the approval of all project plans or permits, for all project phases where implementation may cause impacts on traffic.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties and Caltrans).

Implementation: Project applicant(s) of all project phases.

- Timing:** Before the approval of all relevant plans and/or permits and during construction of all project phases.
- Enforcement:**
1. For those roadways that would be annexed into the City of Folsom: City of Folsom Public Works Department.
 2. For those roadways that would remain under the control of Sacramento County: Sacramento County Department of Transportation.
 3. For the two off-site roadway connections into El Dorado Hills: El Dorado County Department of Transportation.
 4. For U.S. 50 interchange improvements: Caltrans.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Construction of the Off-site Water Facilities would involve crossing the Folsom South Canal (FSC), which could temporarily disrupt the use of the FSC multiuse trail. Therefore, disruptions to local recreation facilities as a result of the Off-site Water Facilities would result in **potentially significant, direct** impacts. **No indirect** impacts would occur.

Because Mitigation Measure 3B.12-1 would require the public to be notified of the duration of roadway construction, detour routes would be established either through the construction site or on adjacent public streets, and access would be restored to preconstruction conditions, therefore, impacts on recreational facilities would be reduced to a **less-than-significant** level.

PUBLIC SERVICES – LAND

IMPACT 3A.14-1 **Temporary Reduction in Emergency Response Services during Construction.** *Project implementation could obstruct roadways in the project vicinity during construction, potentially obstructing or slowing emergency vehicles attempting to access the area.*

Mitigation

Mitigation Measure 3A.14-1: Prepare and Implement a Construction Traffic Control Plan.

The project applicant(s) of all project phases shall prepare and implement traffic control plans for construction activities that may affect road rights-of-way. The traffic control plans must follow any applicable standards of the agency responsible for the affected roadway and must be approved and signed by a professional engineer. Measures typically used in traffic control plans include advertising of planned lane closures, warning signage, a flagperson to direct traffic flows when needed, and methods to ensure continued access by emergency vehicles. During project construction, access to existing land uses shall be maintained at all times, with detours used as necessary during road closures. Traffic control plans shall be submitted to the appropriate City or County department or the California Department of Transportation (Caltrans) for review and approval before the approval of all project plans or permits, for all project phases where implementation may cause impacts on traffic.

Mitigation for the off-site elements outside of the City of Folsom’s jurisdictional boundaries must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies) (i.e., El Dorado and/or Sacramento Counties and Caltrans).

Implementation: Project applicant(s) of all project phases.

Timing: Before the approval of all relevant plans and/or permits and during construction of all project phases.

Enforcement:

1. For those roadways that would be annexed into the City of Folsom: City of Folsom Public Works Department.
2. For those roadways that would remain under the control of Sacramento County: Sacramento County Department of Transportation.
3. For the two off-site roadway connections into El Dorado Hills: El Dorado County Department of Transportation.
4. For U.S. 50 interchange improvements: Caltrans.

Finding for Elements Within the City of Folsom’s Jurisdiction

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Implementation of the Proposed Project Alternative would include construction activities of varying levels over a 19-year period (approximately 2011 through 2030). Most of the project-related construction activities would occur on site; however, the project involves a variety of off-site U.S. 50 interchange improvements and construction of the sewer force main and detention basin in Sacramento County and two roadway connections in El Dorado County. Nearby roadways in the vicinity of the SPA and off-site areas, such as White Rock Road, Prairie City Road, and U.S. 50, would likely be affected intermittently during construction activities (see Section 3A.15, “Traffic and Transportation – Land,” of the DEIR/DEIS). Ongoing construction activities could result in temporary lane closures, increased truck traffic, and other roadway effects that could slow or stop emergency vehicles, temporarily increasing response times and impeding existing services. Potential reduction of emergency response services during construction would be a **direct, significant** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3A.14-1 would reduce significant impacts associated with decreased emergency response times during construction under the Proposed Project Alternative to a **less-than-significant** level by requiring preparation and implementation of a construction traffic control plan that would provide for adequate emergency access during construction activities.

Finding for Elements Outside the City of Folsom’s Jurisdiction

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

For the on-site elements and off-site elements within the City’s jurisdiction, changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS. However, some of the off-site elements fall under the jurisdiction of El Dorado and Sacramento Counties, and Caltrans; therefore, the City of

Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.14-1. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.14-1, which would mitigate this potential impact to a less than significant level.

IMPACT **Increased Demand for Fire Protection Facilities, Systems, Equipment, and Services.** *Project 3A.14-2 development would result in increased demand for fire protection facilities and services, potentially resulting in the need for additional staff and equipment to maintain an adequate level of service.*

Mitigation

Mitigation Measure 3A.14-2: Incorporate California Fire Code; City of Folsom Fire Code Requirements; and EDHFD Requirements, if Necessary, into Project Design and Submit Project Design to the City of Folsom Fire Department for Review and Approval.

To reduce impacts related to the provision of new fire services, the project applicant(s) of all project phases shall do the following, as described below.

1. Incorporate into project designs fire flow requirements based on the California Fire Code, Folsom Fire Code (City of Folsom Municipal Code Title 8, Chapter 8.36), and other applicable requirements based on the City of Folsom Fire Department fire prevention standards. Improvement plans showing the incorporation automatic sprinkler systems, the availability of adequate fire flow, and the locations of hydrants shall be submitted to the City of Folsom Fire Department for review and approval. In addition, approved plans showing access design shall be provided to the City of Folsom Fire Department as described by Zoning Code Section 17.57.080 (“Vehicular Access Requirements”). These plans shall describe access-road length, dimensions, and finished surfaces for firefighting equipment. The installation of security gates across a fire apparatus access road shall be approved by the City of Folsom Fire Department. The design and operation of gates and barricades shall be in accordance with the Sacramento County Emergency Access Gates and Barriers Standard, as required by the City of Folsom Fire Code.
2. Submit a Fire Systems New Buildings, Additions, and Alterations Document Submittal List to the City of Folsom Community Development Department Building Division for review and approval before the issuance of building permits.

In addition to the above measures, the project applicant(s) of all project phases shall incorporate the provisions described below for the portion of the SPA within the EDHFD service area, if it is determined through City/El Dorado County negotiations that EDHFD would serve the 178-acre portion of the SPA.

3. Incorporate into project designs applicable requirements based on the EDHFD fire prevention standards. For commercial development, improvement plans showing roadways, land splits, buildings, fire sprinkler systems, fire alarm systems, and other commercial building improvements shall be submitted to the EDHFD for review and approval. For residential development, improvement plans showing property lines and adjacent streets or roads; total acreage or square footage of the parcel; the footprint of all structures; driveway plan views describing width, length, turnouts, turnarounds, radiuses, and surfaces; and driveway profile views showing the % grade from the access road to the structure and vertical clearance shall be submitted to the EDHFD for review and approval.
4. Submit a Fire Prevention Plan Checklist to the EDHFD for review and approval before the issuance of building permits. In addition, residential development requiring automation fire sprinklers shall submit sprinkler design sheet(s) and hydraulic calculations from a California State Licensed C-16 Contractor.

The City shall not authorize the occupancy of any structures until the project applicant(s) have obtained a Certificate of Occupancy from the City of Folsom Community Development Department verifying that all fire prevention items have been addressed on-site to the satisfaction of the City of Folsom Fire Department and/or the EDHFD for the 178-acre area of the SPA within the EDHFD service area.

Implementation: Project applicant(s) of all project phases.

Timing: Before issuance of building permits and issuance of occupancy permits or final inspections for all project phases.

Enforcement: City of Folsom Fire Department, and City of Folsom Community Development Department, and/or EDHFD for the portion of the SPA within the EDHFD service area.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Upon annexation of the SPA, fire protection services within the SMFD service area would become the responsibility of the City of Folsom Fire Department. During initial project development, Station 37 at 70 Clarksville Road would provide first-response service. This station is approximately 1.6 miles north of the SPA via Scott Road.

The EDHFD serves approximately 178 acres of the northeaster portion of the SPA as a multi-jurisdictional district. Currently, ongoing revenue neutrality negotiations between the EDHFD and the City will determine if this portion of the SPA remains in the EDHFD service area or is transferred to the jurisdiction of the City of Folsom Fire Department; therefore, it is assumed that this portion of the SPA would remain in the EDHFD service area. First-response service to the SPA within the EDHFD would be provided by Station 85 at 1050 Wilson Boulevard, approximately 1.2 miles northeast of the SPA via Latrobe Road in unincorporated El Dorado County.

The estimated population of the project under buildout of the Proposed Project Alternative would be 24,335 persons. To maintain adequate levels of service, additional fire personnel, facilities, and equipment would be required to serve project development at buildout. Using the City's ratio of 1.6 fire personnel to 1,000 residents, a minimum of 39 new firefighters would be needed to serve the Proposed Project Alternative at buildout.

The Proposed Project Alternative would include construction of two fire stations to serve the SPA (see Exhibit 2-3, "Folsom South of 50 Conceptual Land Use Plan," in Chapter 2, "Alternatives"). The first fire station would be east of Oak Avenue and north of "A" Street and would house an engine company with three personnel on each of three shifts (Haverty, pers. comm., 2009). The second fire station would be north of "B" Street and east of Scott Road. The number of personnel and equipment required at this fire station has not been determined. Final size and location of the two fire station sites would be determined on completion of response time analysis studies and through coordination with the City of Folsom Fire Department.

Per the City of Folsom Municipal Code Chapter 3, Title 3.80, "Capital Improvement New Construction Fee," new development is responsible for the full cost of additional facilities and equipment necessary as a result of that development through payment of the City's capital improvement new construction fees. This fee is used exclusively for construction of new fire and police stations and associated apparatus as required by new development. In addition, new development within the EDHFD service area would be required to pay \$1.16 per square foot of residential and commercial development, which is used exclusively for construction of new fire stations and associated apparatus (El Dorado County Fire Prevention Officers 2009).

The project applicant(s) would be required to incorporate California Fire Code and Folsom Fire Code (City of Folsom Municipal Code Title 8, Chapter 8.36) requirements into all development phases, including adequate on-site circulation, equipment access during emergency conditions, adequate firefighting water flow, hydrant spacing. In addition, the Folsom Fire Code requires that automatic fire sprinklers be installed in all new commercial construction that exceeds 3,600 square feet and some residential properties exceeding 4,999 square feet. The City of Folsom Community Development Building Division requires all new development to submit a Fire Systems New Buildings, Additions, and Alterations Document Submittal List documenting the incorporation of fire code requirements before issuance of building permits.

For those areas of the SPA within the EDHFD service area, the project applicant(s) would be required to incorporate EDHFD requirements into all development phases in addition to the requirements outlined in the California Fire Code and Folsom Fire Code. The EDHFD has adopted the El Dorado County Regional Fire Protection Standards and these standards include adequate on-site circulation, equipment access during emergency conditions, adequate firefighting water flow, and automatic fire sprinklers be installed in two-family residential dwelling units and extended to attached garages and basements. The EDHFD requires all new development to submit a Fire Prevention Plan Checklist documenting fire code requirements before issuance of building permits.

Because the City of Folsom Fire Department and EDHFD outlines fire prevention standards to be incorporated into new residential and commercial development and these standards require approval by City of Folsom Fire Department, City of Folsom Community Development Department and EDHFD for those areas of the SPA within the EDHFD service area, impacts on fire protection facilities and services would be **direct and potentially significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development.

Implementation of Mitigation Measure 3A.14-2 would reduce significant impacts under the Proposed Project Alternative associated with the increased demand for fire protection facilities, systems, equipment, and services to a **less-than-significant** level by requiring that applicable California Fire Code, City of Folsom Fire Code, and/or EDHFD standards are incorporated into the project design, along with review and approval of project plans by the City of Folsom Fire Department, the City of Folsom Community Development Department Building Division, and/or EDHFD for the 178-acre area of the SPA within the EDHFD service area prior to issuance of building permits.

IMPACT 3A.14-3 **Increased Demand for Fire Flow.** *Project implementation would include the development of residential, commercial, school, and other uses that would require adequate available water flow for fire suppression. Lack of adequate fire flow would impede effective fire suppression in the SPA.*

Mitigation

Mitigation Measure 3A.14-2: Incorporate California Fire Code; City of Folsom Fire Code Requirements; and EDHFD Requirements, if Necessary, into Project Design and Submit Project Design to the City of Folsom Fire Department for Review and Approval.

To reduce impacts related to the provision of new fire services, the project applicant(s) of all project phases shall do the following, as described below.

1. Incorporate into project designs fire flow requirements based on the California Fire Code, Folsom Fire Code (City of Folsom Municipal Code Title 8, Chapter 8.36), and other applicable requirements based on the City of Folsom Fire Department fire prevention standards. Improvement plans showing the incorporation automatic sprinkler systems, the availability of adequate fire flow, and the locations of hydrants shall be submitted to the City of Folsom Fire Department for review and approval. In addition, approved plans showing access design shall be provided to the City of Folsom Fire Department as

described by Zoning Code Section 17.57.080 (“Vehicular Access Requirements”). These plans shall describe access-road length, dimensions, and finished surfaces for firefighting equipment. The installation of security gates across a fire apparatus access road shall be approved by the City of Folsom Fire Department. The design and operation of gates and barricades shall be in accordance with the Sacramento County Emergency Access Gates and Barriers Standard, as required by the City of Folsom Fire Code.

2. Submit a Fire Systems New Buildings, Additions, and Alterations Document Submittal List to the City of Folsom Community Development Department Building Division for review and approval before the issuance of building permits.

In addition to the above measures, the project applicant(s) of all project phases shall incorporate the provisions described below for the portion of the SPA within the EDHFD service area, if it is determined through City/El Dorado County negotiations that EDHFD would serve the 178-acre portion of the SPA.

3. Incorporate into project designs applicable requirements based on the EDHFD fire prevention standards. For commercial development, improvement plans showing roadways, land splits, buildings, fire sprinkler systems, fire alarm systems, and other commercial building improvements shall be submitted to the EDHFD for review and approval. For residential development, improvement plans showing property lines and adjacent streets or roads; total acreage or square footage of the parcel; the footprint of all structures; driveway plan views describing width, length, turnouts, turnarounds, radiuses, and surfaces; and driveway profile views showing the % grade from the access road to the structure and vertical clearance shall be submitted to the EDHFD for review and approval.
4. Submit a Fire Prevention Plan Checklist to the EDHFD for review and approval before the issuance of building permits. In addition, residential development requiring automation fire sprinklers shall submit sprinkler design sheet(s) and hydraulic calculations from a California State Licensed C-16 Contractor.

The City shall not authorize the occupancy of any structures until the project applicant(s) have obtained a Certificate of Occupancy from the City of Folsom Community Development Department verifying that all fire prevention items have been addressed on-site to the satisfaction of the City of Folsom Fire Department and/or the EDHFD for the 178-acre area of the SPA within the EDHFD service area.

Implementation: Project applicant(s) of all project phases.

Timing: Before issuance of building permits and issuance of occupancy permits or final inspections for all project phases.

Enforcement: City of Folsom Fire Department, and City of Folsom Community Development Department, and/or EDHFD for the portion of the SPA within the EDHFD service area.

Mitigation Measure 3A.14-3: Incorporate Fire Flow Requirements into Project Designs.

The project applicant(s) of all project phases shall incorporate into their project designs fire flow requirements based on the California Fire Code, Folsom Fire Code, and/or EDHFD for those areas of the SPA within the EDHFD service area and shall verify to City of Folsom Fire Department that adequate water flow is available, prior to approval of improvement plans and issuance of occupancy permits or final inspections for all project phases.

Implementation: Project applicant(s) of all project phases.

Timing:	Before issuance of building permits and issuance of occupancy permits or final inspections for all project phases.
Enforcement:	City of Folsom Fire Department, City of Folsom Community Development Department, and/or EDHFD for the 178-acre portion of the SPA within the EDHFD service area.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The City of Folsom Fire Department and EDHFD maintain oversight authority to ensure that adequate water volume and pressure are available their respective service areas. The total fire flow needed to extinguish a structural fire is based on a variety of factors, including building design, internal square footage, construction materials, dominant use, height, number of floors, and distance to adjacent buildings. Minimum requirements for available fire flow at a given building are dependent on standards set in the California Fire Code. Generally, fire flow requirements for the type of development associated with the Proposed Project Alternative are identified by the California Fire Code. These fire flow requirements are 1,500 gpm for low- and medium-density residential (2-hour duration), 2,500 gpm for high-density residential (3-hour duration), 3,000 gpm for commercial/office and light industrial (3-hour duration).

In addition to meeting minimum water flow requirements, all development projects in Folsom are required to meet various other fire protection requirements identified in the Folsom Fire Code. The fire code requires that automatic fire sprinklers be installed in all new commercial construction that exceeds 3,600 square feet and some residential properties exceeding 4,999 square feet. The fire code outlines the number and distribution of fire hydrants and minimum fire-flow requirements for structures exceeding 3,600 square feet. The City of Folsom Fire Department requirements are determined for specific development projects at the design stage. For the 178-acre area of the SPA within the EDHFD service area, all development projects are required to incorporate EDHFD requirements in addition to the requirements outlined in the California Fire Code and Folsom Fire Code. As discussed above, on-going revenue neutrality negotiations between the EDHFD and City would determine if the 178-acre portion of the SPA remains in the EDHFD service area or is transferred to the jurisdiction of the City of Folsom Fire Department.

Lack of adequate fire flow would impede the ability of the City of Folsom Fire Department and/or EDHFD to provide effective fire suppression service in the SPA. Increased demands for fire flow would be considered a **significant, direct** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measures 3A.14-2 and 3A.14-3 would reduce impacts associated with increased demand for fire flow to a **less-than-significant** level under the Proposed Project Alternative because verification from the City of Folsom Fire Department and/or EDHFD that adequate water supply is available would be obtained prior to approval of improvement plans, and project fire flow would design would based on specification requirements included in the California Fire Code, the Folsom Fire Code, and/or the EDHFD for the portion of the SPA within the EDHFD service area and reviewed and approved by the City.

TRAFFIC AND TRANSPORTATION – LAND

IMPACT 3A.15-1a **Unacceptable LOS at the Folsom Boulevard/Blue Ravine Road Intersection (Intersection 1).** *Project or build alternative traffic would cause signalized intersection operations at the Folsom Boulevard/Blue Ravine Road intersection to deteriorate with an increase in delay of more than 5 seconds during either or both a.m./p.m. peak hours.*

Mitigation

Mitigation Measure 3A.15-1a: The Applicant Shall Pay a Fair Share to Fund the Construction of Improvements to the Folsom Boulevard/Blue Ravine Road Intersection (Intersection 1).

To ensure that the Folsom Boulevard/Blue Ravine Road intersection operates at an acceptable LOS, the eastbound approach must be reconfigured to consist of two left-turn lanes, one through lane, and one right-turn lane. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the Folsom Boulevard/Blue Ravine Road intersection (Intersection 1).

Implementation: City of Folsom Public Works Department.

Timing: A phasing analysis shall be performed prior to approval of the first subdivision map to determine when the improvement should be implemented and when fair share funding should be paid.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

This intersection operates at an unacceptable LOS D or worse during the a.m. and p.m. peak hours under existing conditions. Delay would increase by more than 5 seconds and **significantly impact** intersection operations during either or both a.m./p.m. peak hours under the project and all build alternatives. The impacts of the build alternatives would be similar to that of the project.

Implementation of Mitigation Measure 3A.15-1a would reduce the significant impact at Intersection 1 under the project and all build alternatives to a **less-than-significant** level. Implementation of the mitigation measure will reduce the a.m. delay to less than five seconds above the existing condition, and reduce the p.m. delay to less than the existing condition.

IMPACT 3A.15-1b **Unacceptable LOS at the Sibley Street/ Blue Ravine Road Intersection (Intersection 2).** *Project or build alternative traffic would cause signalized intersection operations at the Sibley Street/Blue Ravine Road intersection to deteriorate with an increase in delay of more than 5 seconds during the a.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1b: The Applicant Shall Pay a Fair Share to Fund the Construction of Improvements at the Sibley Street/Blue Ravine Road Intersection (Intersection 2).

To ensure that the Sibley Street/Blue Ravine Road intersection operates at an acceptable LOS, the northbound approach must be reconfigured to consist of two left-turn lanes, two through lanes, and one right-turn lane. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the Sibley Street/Blue Ravine Road intersection (Intersection 2).

Implementation: City of Folsom Public Works Department.

Timing: A phasing analysis shall be performed prior to approval of the first subdivision map to determine when the improvement should be implemented and when fair share funding should be paid.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

This intersection operates at an unacceptable LOS D during the a.m. peak hour and at an acceptable LOS C during the p.m. peak hour under existing conditions. Delay would increase by more than 5 seconds and **significantly impact** intersection operations during the a.m. peak hour under the Proposed Project Alternative.

Implementation of Mitigation Measure 3A.15-1b would reduce the significant impact on Intersection 2 under the Proposed Project Alternative to a **less-than-significant** level.

IMPACT 3A.15-1c **Unacceptable LOS at the Scott Road (West)/White Rock Road Intersection (Intersection 28).** *Unsignalized intersection operations at Scott Road (West)/White Rock Road would degrade to LOS D during the p.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1c: The Applicant Shall Fund and Construct Improvements to the Scott Road (West)/White Rock Road Intersection (Intersection 28).

To ensure that the Scott Road (West)/White Rock Road intersection operates at an acceptable LOS, a traffic signal must be installed. The applicant shall fund and construct these improvements.

Implementation: City of Folsom Public Works Department.

Timing: A phasing analysis shall be performed prior to approval of the first subdivision map to determine when the improvement should be implemented.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

This intersection operates at an acceptable LOS C during the a.m. and p.m. peak hours under existing conditions. Unsignalized intersection operations at Scott Road (West)/White Rock Road would degrade to LOS D during the p.m. peak hour under the project and all build alternatives. This is a **significant impact**.

Implementation of Mitigation Measure 3A.15-1c would reduce the significant impact on Intersection 28 under the to a **less-than-significant** level. Implementation of the mitigation measure will restore the LOS to the existing LOS C condition.

IMPACT 3A.15-1f **Unacceptable LOS at the Oak Avenue Parkway/Middle Road Intersection (Intersection 44).** *Unsignalized intersection operations at Oak Avenue Parkway/Middle Road would operate at unacceptable LOS D during either or both a.m./p.m. peak hours.*

Mitigation

Mitigation Measure 3A.15-1f: Fund and Construct Improvements to the Oak Avenue Parkway/Middle Road Intersection (Intersection 44).

To ensure that the Oak Avenue Parkway/Middle Road intersection operates at an acceptable LOS, control all movements with a stop sign. The applicant shall fund and construct these improvements.

Implementation: City of Folsom Public Works Department.

Timing: A phasing analysis shall be performed prior to approval of the first subdivision map to determine when the improvement should be implemented.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

This intersection does not exist currently exist; however, unsignalized intersection operations at Oak Avenue Parkway/Middle Road would operate at unacceptable LOS D during either or both a.m./p.m. peak hours under the Proposed Project Alternative. This is a **significant impact**.

Implementation of Mitigation Measure 3A.15-1f would reduce the significant impact on Intersection 44 to a **less-than-significant** level. Implementation of the mitigation measure will improve operations to a LOS C or better condition.

IMPACT 3A.15-1i **Unacceptable LOS at the Grant Line Road/White Rock Road Intersection (Sacramento County Intersection 3).** *Delay at the unsignalized Grant Line Road/White Rock Road intersection would increase delay by more than 5 seconds during the a.m. and p.m. peak hours.*

Mitigation

Mitigation Measure 3A.15-1i: Participate in Fair Share Funding of Improvements to Reduce Impacts on the Grant Line Road/White Rock Road Intersection and to White Rock Road widening between the Rancho Cordova City limit to Prairie City Road (Sacramento County Intersection 3).

Improvements must be made to ensure that the Grant Line Road/White Rock Road intersection operates at an acceptable LOS. The currently County proposed White Rock Road widening project will widen and realign White Rock Road from the Rancho Cordova City limit to the El Dorado County line (this analysis assumes that the Proposed Project Alternative and build alternatives will widen White Rock Road to five lanes from Prairie City road to the El Dorado County Line). This widening includes improvements to the Grant Line Road intersection and realigning White Rock Road to be the through movement. The improvements include two eastbound through lanes, one eastbound right turn lane, two northbound left turn lanes, two northbound right turn lanes, two westbound left turn lanes and two westbound through lanes. This improvement also includes the signalization of the White Rock Road and Grant Line Road intersection. With implementation of this improvement, the intersection would operate at an acceptable LOS A. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to the Grant Line Road/White Rock Road intersection (Sacramento County Intersection 3).

Implementation: Sacramento County Public Works Department.

Timing: Before project build out. Design of the White Rock Road widening to four lanes, from Grant Line Road to Prairie City Road, with intersection improvements has begun, and because this widening project is environmentally cleared and fully funded, it's construction is expected to be complete before the first phase of the Proposed Project or alternative is built.

Enforcement: Sacramento County Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This intersection operates at an acceptable LOS E during the a.m. peak hour and at an unacceptable LOS F during the p.m. peak hour under existing conditions. With the Proposed Project, the intersection would operate at LOS F during the a.m. peak hour, and delay would increase by more than 5 seconds during the p.m. peak hour. This would be a **significant impact**.

Implementation of Mitigation Measure 3A.15-1i would reduce the significant impact on the Grant Line Road/White Rock Road Intersection under development of the Proposed Project Alternative to a less-than-significant level.

Until Sacramento County implements the improvements, the impact would be classified as significant but eventually would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS A condition.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Sacramento County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation.

The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1i. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1i, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1j **Unacceptable LOS on Hazel Avenue between Madison Avenue and Curragh Downs Drive (Sacramento County Roadway Segment 10).** *The volume-to-capacity ratio on this LOS F segment would increase by more than 0.05 with project-related traffic.*

Mitigation

Mitigation Measure 3A.15-1j: Participate in Fair Share Funding of Improvements to Reduce Impacts on Hazel Avenue between Madison Avenue and Curragh Downs Drive (Roadway Segment 10).

To ensure that Hazel Avenue operates at an acceptable LOS between Curragh Downs Drive and Gold Country Boulevard, Hazel Avenue must be widened to six lanes. This improvement is part of the County adopted Hazel Avenue widening project. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to Hazel Avenue between Madison Avenue and Curragh Downs Drive (Sacramento County Roadway Segment 10).

Implementation: Sacramento County Public Works Department.

Timing: Before project build out. Construction of phase two of the Hazel Avenue widening, from Madison Avenue to Curragh Downs Drive, is expected to be completed by year 2013, before the first phase of the Proposed Project or alternative is complete.

Enforcement: Sacramento County Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

The volume-to-capacity ratio on this LOS F segment would increase by more than 0.05 under the Proposed Project. This is a **significant impact**.

Implementation of Mitigation Measure 3A.15-1j would reduce the significant impact on Hazel Avenue between Madison Avenue and Curragh Downs Drive under development of the Proposed Project Alternative to a less-than-significant level.

Until Sacramento County implements the improvement, the impact would be classified as significant but eventually would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS D condition.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this roadway segment but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Sacramento County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1j. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1j, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-11 **Unacceptable LOS at the White Rock Road/Windfield Way Intersection (El Dorado County Intersection 3).** *Unsignalized intersection operations at White Rock Road/Windfield Way would degrade as the delay would increase by more than 5 seconds under unacceptable LOS F conditions during the p.m. peak traffic hour.*

Mitigation

Mitigation Measure 3A.15-11: Participate in Fair Share Funding of Improvements to Reduce Impacts on the White Rock Road/Windfield Way Intersection (El Dorado County Intersection 3).

To ensure that the White Rock Road/Windfield Way intersection operates at an acceptable LOS, the intersection must be signalized and separate northbound left and right turn lanes must be striped. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to the White Rock Road/Windfield Way intersection (El Dorado County Intersection 3).

Implementation: El Dorado County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: El Dorado County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Unsignalized intersection operations at the White Rock Road/Windfield Way intersection would degrade as the delay would increase by more than 5 seconds under unacceptable LOS F conditions during the p.m. peak traffic

hour with project-related traffic under the Proposed Project Alternative and all build alternatives. This is a **significant impact**.

Implementation of Mitigation Measure 3A.15-11 would reduce the significant impact on the White Rock Road/Windfield Way Intersection to a less-than-significant level by improving intersection LOS under development of the Proposed Project Alternative to a less-than-significant level.

Until El Dorado County implements the improvement, the impact would be classified as significant but eventually would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS C condition.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of El Dorado County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-11. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-11, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1o **Unacceptable LOS at the Folsom Boulevard/U.S. 50 Eastbound Ramps Intersection (Caltrans Intersection 4).** *The signalized intersection of Folsom Boulevard/U.S. 50 eastbound ramps would degrade from an acceptable LOS C to an unacceptable LOS F during the p.m. peak traffic hour with project-related traffic.*

Mitigation

Mitigation Measure 3A.15-1o: Participate in Fair Share Funding of Improvements to Reduce Impacts on Eastbound U.S. 50 as an alternative to improvements at the Folsom Boulevard/U.S. 50 Eastbound Ramps Intersection (Caltrans Intersection 4).

- ▶ Congestion on eastbound U.S. 50 is causing vehicles to use Folsom Boulevard as an alternate parallel route until they reach U.S. 50, where they must get back on the freeway due to the lack of a parallel route. It is preferred to alleviate the congestion on U.S. 50 than to upgrade the intersection at the end of this reliever route.
- ▶ To ensure that the Folsom Boulevard/U.S. 50 eastbound ramps intersection operates at an acceptable LOS, auxiliary lanes should be added to eastbound U.S. 50 from Hazel Avenue to east of Folsom Boulevard. This was recommended in the Traffic Operations Analysis Report for the U.S. 50 Auxiliary Lane Project. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to the Folsom Boulevard/U.S. 50 Eastbound Ramps intersection (Caltrans Intersection 4).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

The signalized intersection of Folsom Boulevard/U.S. 50 eastbound ramps would degrade from an acceptable LOS C to an unacceptable LOS F during the p.m. peak traffic hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1o would reduce the significant impact on the Folsom Boulevard/U.S. 50 eastbound ramp intersection to a less-than-significant level by improving intersection LOS under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department and Sacramento County Department of Transportation implements the improvements, the impact would be classified as significant but eventually would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS C condition.

City of Folsom Public Works Department and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1o. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1o, which would mitigate this potential impact to a less than significant level.

IMPACT **Unacceptable LOS at the Grant Line Road/ State Route 16 Intersection (Caltrans Intersection 12).** *The*
3A.15-1p *signalized intersection of Grant Line Road/State Route 16 would experience an increase in delay during the*
a.m. peak traffic hour and degrade to an unacceptable LOS F during the p.m. peak traffic hour.

Mitigation

Mitigation Measure 3A.15-1p: Participate in Fair Share Funding of Improvements to Reduce Impacts on the Grant Line Road/ State Route 16 Intersection (Caltrans Intersection 12).

To ensure that the Grant Line Road/State Route 16 intersection operates at an acceptable LOS, the northbound and southbound approaches must be reconfigured to consist of one left-turn lane and one shared through/right-turn lane. Protected left-turn signal phasing must be provided on the northbound and

southbound approaches. Improvements to the Grant Line Road/State Route 16 intersection are contained within the County Development Fee Program, and are scheduled for Measure A funding.

- ▶ Improvements to this intersection must be implemented by Sacramento County and the City of Rancho Cordova.

The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to the Grant Line Road/SR 16 intersection (Caltrans Intersection 12).

Implementation: Sacramento County Department of Transportation and the City of Rancho Cordova Department of Public Works.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Sacramento County Department of Transportation and the City of Rancho Cordova Department of Public Works.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

The signalized intersection of Grant Line Road/State Route 16 would experience an increase in delay under unacceptable LOS F conditions during the a.m. peak traffic hour, and degrade from an acceptable LOS E to an unacceptable LOS F during the p.m. peak traffic hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1p would reduce the significant impact on Grant Line Road/State Route 16 intersection to a less-than-significant level by improving intersection LOS under development of the No Proposed Project Alternative.

Until the City of Rancho Cordova and Sacramento County implement the improvements, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS C condition.

City of Rancho Cordova Department of Public Works and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, Sacramento County and the City of Rancho Cordova, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not

have control or authority over the timing or implementation of Mitigation Measure 3A.15-1p. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1p, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1q **Unacceptable LOS on Eastbound U.S. 50 between Zinfandel Drive and Sunrise Boulevard (Freeway Segment 1).** *This freeway segment would degrade to an unacceptable LOS F during the p.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1q: Participate in Fair Share Funding of Improvements to Reduce Impacts on Eastbound U.S. 50 between Zinfandel Drive and Sunrise Boulevard (Freeway Segment 1).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS between Zinfandel Drive and Sunrise Boulevard, a bus-carpool (HOV) lane must be constructed. This improvement is currently planned as part of the Sacramento 50 Bus-Carpool Lane and Community Enhancements Project. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to Eastbound U.S. 50 between Zinfandel Drive and Sunrise Boulevard (Freeway Segment 1).

Implementation: Caltrans.

Timing: Before project build out. Construction of the Sacramento 50 Bus-Carpool Lane and Community Enhancements Project is expected to be completed by year 2013, before the first phase of the Proposed Project or alternative is complete. Construction of the Sacramento 50 Bus-Carpool Lane and Community Enhancements Project has started since the writing of the Draft EIS/EIR.

Enforcement: Caltrans.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway segment would degrade from an acceptable LOS E to an unacceptable LOS F during the p.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1q would reduce the significant impact on Eastbound U.S. 50 between Zinfandel Drive and Sunrise Boulevard to a less-than-significant level by improving freeway segment LOS under development of the Proposed Project Alternative.

Until Caltrans implements the improvements, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS E condition.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually

acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1q. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1q, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1r **Unacceptable LOS on Eastbound U.S. 50 between Hazel Avenue and Folsom Boulevard (Freeway Segment 3).** *This freeway segment would degrade to an unacceptable LOS F during the p.m. peak hour with project-related traffic.*

Mitigation

Mitigation Measure 3A.15-1r: Participate in Fair Share Funding of Improvements to Reduce Impacts on Eastbound U.S. 50 between Hazel Avenue and Folsom Boulevard (Freeway Segment 3).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS between Hazel Avenue and Folsom Boulevard, an auxiliary lane must be constructed. This improvement was recommended in the Traffic Operations Analysis Report for the U.S. 50 Auxiliary Lane Project. This improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to Eastbound U.S. 50 between Hazel Avenue and Folsom Boulevard (Freeway Segment 3).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway segment would degrade from an acceptable LOS E to an unacceptable LOS F during the p.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1r would reduce the significant impact on Eastbound U.S. 50 between Hazel Avenue and Folsom Boulevard to a less-than-significant level by improving freeway segment LOS under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department and Sacramento County Department of Transportation implements the improvement, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS D condition.

City of Folsom Public Works Department and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom’s control would mitigate or substantially lessen the project’s significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1r. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1r, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1s **Unacceptable LOS on Eastbound U.S. 50 between Folsom Boulevard and Prairie City Road (Freeway Segment 4).** *This freeway segment would degrade to an unacceptable LOS F during the p.m. peak hour and would experience an increase in the volume to capacity ratio under unacceptable LOS F conditions during the p.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1s: Participate in Fair Share Funding of Improvements to Reduce Impacts on Eastbound U.S. 50 between Folsom Boulevard and Prairie City Road (Freeway Segment 4).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS between Folsom Boulevard and Prairie City Road, an auxiliary lane must be constructed. This improvement was recommended in the Traffic Operations Analysis Report for the U.S. 50 Auxiliary Lane Project. This improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to Eastbound U.S. 50 between Folsom Boulevard and Prairie City Road (Freeway Segment 4).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway segment would experience an increase in the volume-to-capacity ratio under unacceptable LOS F conditions during the p.m. peak hour with project-related traffic under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1s would reduce the significant impact on Eastbound U.S. 50 between Folsom Boulevard and Prairie City Road to a less-than-significant level by improving freeway segment LOS under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department and Sacramento County Department of Transportation implements the improvement, the impact would be classified as significant but eventually would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS E condition.

City of Folsom Public Works Department and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1s. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1s, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1u **Unacceptable LOS on Westbound U.S. 50 between Prairie City Road and Folsom Boulevard (Freeway Segment 16).** *This freeway segment would experience an increase in the volume to capacity ratio under unacceptable LOS F conditions during the a.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1u: Participate in Fair Share Funding of Improvements to Reduce Impacts on Westbound U.S. 50 between Prairie City Road and Folsom Boulevard (Freeway Segment 16).

To ensure that Westbound U.S. 50 operates at an acceptable LOS between Prairie City Road and Folsom Boulevard, an auxiliary lane must be constructed. This improvement was recommended in the Traffic Operations Analysis Report for the U.S. 50 Auxiliary Lane Project. This improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to Westbound U.S. 50 between Prairie City Road and Folsom Boulevard (Freeway Segment 16).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

- Timing:** Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.
- Enforcement:** City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway segment would experience an increase in the volume-to-capacity ratio under unacceptable LOS F conditions during the a.m. peak hour with project-related traffic under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1u would reduce the significant impact on Westbound U.S. 50 between Prairie City Road and Folsom Boulevard to a less-than-significant level by improving freeway segment LOS under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department and Sacramento County Department of Transportation implements the improvement, the impact would be classified as significant but eventually would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to LOS D.

City of Folsom Public Works Department and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1u. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1u, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1v **Unacceptable LOS on Westbound U.S. 50 between Hazel Avenue and Sunrise Boulevard (Freeway Segment 18).** *This freeway segment would experience an increase in the volume to capacity ratio under unacceptable LOS F conditions during the a.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1v: Participate in Fair Share Funding of Improvements to Reduce Impacts on Westbound U.S. 50 between Hazel Avenue and Sunrise Boulevard (Freeway Segment 18).

To ensure that Westbound U.S. 50 operates at an acceptable LOS between Hazel Avenue and Sunrise Boulevard, an auxiliary lane must be constructed. This improvement was recommended in the Traffic Operations Analysis Report for the U.S. 50 Auxiliary Lane Project, and included in the proposed Rancho Cordova Parkway interchange project. Improvements to this freeway segment must be implemented by Caltrans. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to Westbound U.S. 50 between Hazel Avenue and Sunrise Boulevard (Freeway Segment 18).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement.

Enforcement: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway segment would experience an increase in the volume-to-capacity ratio under unacceptable LOS F conditions during the a.m. peak hour with project-related traffic under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1v would reduce the significant impact on Eastbound U.S. 50 between Hazel Avenue and Sunrise Boulevard to a less-than-significant level by improving freeway segment LOS under development of the Proposed Project Alternative.

Until the City of Rancho Cordova Department of Public Works and Sacramento County Department of Transportation implements the improvement, the impact would be classified as significant, but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to LOS D.

City of Rancho Cordova Department of Public Works and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision

(a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1v. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1v, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1w **Unacceptable LOS at the U.S. 50 Eastbound / Folsom Boulevard Ramp Merge (Freeway Merge 4).** *This freeway merge would experience an increase in density under unacceptable LOS F conditions during the p.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1w: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Eastbound / Folsom Boulevard Ramp Merge (Freeway Merge 4).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS at the Folsom Boulevard merge, an auxiliary lane from the Folsom Boulevard merge to the Prairie City Road diverge must be constructed. This improvement was recommended in the Traffic Operations Analysis Report for the U.S. 50 Auxiliary Lane Project. This improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to the U.S. 50 Eastbound/Folsom Boulevard Ramp Merge (Freeway Merge 4).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway merge would experience an increase in density under unacceptable LOS F conditions during the p.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1w would reduce the significant impact on the U.S. 50 Eastbound / Folsom Boulevard Ramp Merge to a less-than-significant level by improving freeway merge LOS under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department and Sacramento County Department of Transportation implements the improvement, the impact would be classified as significant, but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS D condition.

City of Folsom Public Works Department and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1w. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1w, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1x **Unacceptable LOS at the U.S. 50 Eastbound / Prairie City Road Diverge (Freeway Diverge 5).** *This freeway diverge would experience an increase in density under unacceptable LOS F conditions during the p.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1x: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Eastbound / Prairie City Road Diverge (Freeway Diverge 5).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS at the Prairie City Road off-ramp diverge, an auxiliary lane from the Folsom Boulevard merge must be constructed. This improvement was recommended in the Traffic Operations Analysis Report for the U.S. 50 Auxiliary Lane Project. This auxiliary lane improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Eastbound/Prairie City Road diverge (Freeway Diverge 5).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway diverge would experience an increase in density under unacceptable LOS F conditions during the p.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1x would reduce the significant impact on the U.S. 50 Eastbound / Prairie City Road Diverge to a less-than-significant level by eliminating the diverge movement from the freeway mainline under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department and Sacramento County Department of Transportation implements the improvement, the impact would be classified as significant but eventually would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to an acceptable condition. With the elimination of the diverge movement there is no specific LOS for the mitigated condition.

City of Folsom Public Works Department and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1x. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1x, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1y **Unacceptable LOS at the U.S. 50 Eastbound / Prairie City Road Merge (Freeway Merge 6).** *This freeway merge would degrade to an unacceptable LOS F during the p.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1y: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Eastbound / Prairie City Road Direct Merge (Freeway Merge 6).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS at the Prairie City Road on-ramp direct merge, an auxiliary lane to the East Bidwell Street – Scott Road diverge must be constructed. This auxiliary lane improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Eastbound/Prairie City Road direct merge (Freeway Merge 6).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway merge would degrade from an acceptable LOS E to an unacceptable LOS F during the p.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1y would reduce the significant impact on the U.S. 50 Eastbound / Prairie City Road Direct Merge to a less-than-significant level by eliminating the merge movement from the freeway mainline under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department implements the improvement, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to an acceptable condition. With the elimination of the direct merge movement there is no specific LOS for the mitigated condition.

City of Folsom Public Works Department will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1y. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1y, which would mitigate this potential impact to a less than significant level.

IMPACT **Unacceptable LOS at the U.S. 50 Eastbound / Prairie City Road Flyover On-Ramp to Oak Avenue**
3A.15-1z **Parkway Off-Ramp Weave (Freeway Weave 8).** *This new freeway weave would operate an unacceptable LOS F during the p.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1z: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Eastbound / Prairie City Road Flyover On-Ramp to Oak Avenue Parkway Off-Ramp Weave (Freeway Weave 8).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS at the Prairie City Road flyover on-ramp to Oak Avenue Parkway off-ramp weave, an improvement acceptable to Caltrans should be implemented to eliminate the unacceptable weaving conditions. Such an improvement may involve a "braided ramp". The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Eastbound/Prairie City Road flyover on-ramp to Oak Avenue Parkway off-ramp weave (Freeway Weave 8).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This new freeway weave would operate an unacceptable LOS F during the p.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1z would reduce the significant impact on the U.S. 50 Eastbound / Prairie City Road Flyover On-Ramp to Oak Avenue Parkway Off-Ramp Weave to a less-than-significant level by improving intersection LOS under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department implements the improvement, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS D condition.

City of Folsom Public Works Department will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1z. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1z, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1aa **Unacceptable LOS at the U.S. 50 Eastbound / Oak Avenue Parkway Loop Merge (Freeway Merge 9).** *This new freeway merge would operate an unacceptable LOS F during the p.m. peak.*

Mitigation

Mitigation Measure 3A.15-1aa: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Eastbound / Oak Avenue Parkway Loop Merge (Freeway Merge 9).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS at the Oak Avenue Parkway loop merge, an auxiliary lane to the East Bidwell Street – Scott Road diverge must be constructed. This auxiliary lane improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its

proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Eastbound/Oak Avenue Parkway loop merge (Freeway Merge 9).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This new freeway merge would operate an unacceptable LOS F during the p.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1aa would reduce the significant impact on the U.S. 50 Eastbound / Oak Avenue Parkway Loop Merge to a less-than-significant level by improving intersection LOS under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department implements the improvement, the impact would be classified as significant but eventually would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS C condition.

City of Folsom Public Works Department will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1aa. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1aa, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1dd 23). Unacceptable LOS at the U.S. 50 Westbound / Empire Ranch Road Loop Ramp Merge (Freeway Merge 23). This freeway merge would operate at an unacceptable LOS F during the a.m. peak hour.

Mitigation

Mitigation Measure 3A.15-1dd: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Westbound / Empire Ranch Road Loop Ramp Merge (Freeway Merge 23).

To ensure that Westbound U.S. 50 operates at an acceptable LOS, the northbound Empire Ranch Road loop on ramp should start the westbound auxiliary lane that ends at the East Bidwell Street – Scott Road off ramp. The slip on ramp from southbound Empire Ranch Road would merge into this extended auxiliary lane. Improvements to this freeway segment must be implemented by Caltrans. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Westbound/Empire Ranch Road loop ramp merge (Freeway Merge 23).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This new freeway merge would operate at an unacceptable LOS F during the a.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1dd would reduce the significant impact on the U.S. 50 Westbound / Empire Ranch Road Loop Ramp Merge to a less-than-significant level by eliminating the merge movement from the freeway mainline under development of the Proposed Project Alternative and all the build alternatives.

Until the City of Folsom Public Works Department implements the improvement, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to an acceptable condition. With the elimination of the direct merge movement there is no specific LOS for the mitigated condition.

City of Folsom Public Works Department will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1dd. The agency(ies) with jurisdiction over these off-site elements

can and should implement Mitigation Measure 3A.15-1dd, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1ee Unacceptable LOS at the U.S. 50 Westbound / Oak Avenue Parkway Loop Ramp Merge (Freeway Merge 29). *This freeway merge would operate at an unacceptable LOS F during the a.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1ee: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Westbound / Oak Avenue Parkway Loop Ramp Merge (Freeway Merge 29).

To ensure that Westbound U.S. 50 operates at an acceptable LOS, the northbound Oak Avenue Parkway loop on ramp should start the westbound auxiliary lane that ends at the Prairie City Road off ramp. The slip on ramp from southbound Oak Avenue Parkway would merge into this extended auxiliary lane. Improvements to this freeway segment must be implemented by Caltrans. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Westbound/Oak Avenue Parkway loop ramp merge (Freeway Merge 29).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This new freeway merge would operate at an unacceptable LOS F during the a.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1ee would reduce the significant impact on the U.S. 50 Westbound / Oak Avenue Parkway Loop Ramp Merge to a less-than-significant level by eliminating the merge movement from the freeway mainline under development of the Proposed Project Alternative and all the build alternatives.

Until the City of Folsom Public Works Department implements the improvement, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to an acceptable condition. With the elimination of the direct merge movement there is no specific LOS for the mitigated condition.

City of Folsom Public Works Department will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of

Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1ee. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1ee, which would mitigate this potential impact to a less than significant level.

IMPACT **Unacceptable LOS at the U.S. 50 Westbound / Prairie City Road Loop Ramp Merge (Freeway Merge 32).**
3A.15-1ff *This freeway merge would degrade to an unacceptable LOS F during the a.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1ff: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Westbound / Prairie City Road Loop Ramp Merge (Freeway Merge 32).

To ensure that Westbound U.S. 50 operates at an acceptable LOS at the Prairie City Road loop ramp merge, an auxiliary lane to the Folsom Boulevard off ramp diverge must be constructed. This auxiliary lane improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Westbound/Prairie City Road Loop Ramp Merge (Freeway Merge 32).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway merge would degrade from an acceptable LOS E to an unacceptable LOS F during the a.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1ff would reduce the significant impact on the U.S. 50 Westbound / Prairie City Road Loop Ramp Merge to a less-than-significant level by eliminating the merge movement from the freeway mainline under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department and Sacramento County Department of Transportation implements the improvement, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to an acceptable condition. With the elimination of the direct merge movement there is no specific LOS for the mitigated condition.

City of Folsom Public Works Department and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1ff. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1ff, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1gg **Unacceptable LOS at the U.S. 50 Westbound / Prairie City Road Ramp Merge (Freeway Merge 33).** *This freeway merge would experience an increase in density under unacceptable LOS F conditions during the a.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1gg: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Westbound / Prairie City Road Direct Ramp Merge (Freeway Merge 33).

To ensure that Westbound U.S. 50 operates at an acceptable LOS at the Prairie City Road direct ramp merge, an auxiliary lane to the Folsom Boulevard off ramp diverge must be constructed. This auxiliary lane improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Westbound/Prairie City Road direct ramp merge (Freeway Merge 33).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway merge would experience an increase in density under unacceptable LOS F conditions during the a.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1gg would reduce the significant impact the U.S. 50 Westbound / Prairie City Road Direct Ramp Merge to a less-than-significant level by improving freeway merge LOS under development of the Proposed Project Alternative and all build alternatives.

Until the City of Folsom Public Works Department and Sacramento County Department of Transportation implements the improvement, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS C.

City of Folsom Public Works Department and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1gg. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1gg, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1hh **Unacceptable LOS at the U.S. 50 Westbound / Folsom Boulevard Diverge (Freeway Diverge 34).** *This freeway diverge would experience an increase in density under unacceptable LOS F conditions during the a.m. peak hour, and degrade from an acceptable LOS D to an unacceptable LOS F during the p.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1hh: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Eastbound / Folsom Boulevard Diverge (Freeway Diverge 34).

To ensure that Westbound U.S. 50 operates at an acceptable LOS at the Folsom Boulevard Diverge, an auxiliary lane from the Prairie City Road loop ramp merge must be constructed. Improvements to this freeway segment must be implemented by Caltrans. This auxiliary lane improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Eastbound / Folsom Boulevard diverge (Freeway Diverge 34).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway diverge would experience an increase in density under unacceptable LOS F conditions during the a.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1hh would reduce the significant impact on the U.S. 50 Eastbound / Folsom Boulevard Diverge to a less-than-significant level by improving intersection LOS under development of the Proposed Project Alternative.

Until the City of Folsom Public Works Department and Sacramento County Department of Transportation implements the improvement, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to a LOS B.

City of Folsom Public Works Department and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1hh. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1hh, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-1ii **Unacceptable LOS at the U.S. 50 Westbound / Hazel Avenue Ramp Merge (Freeway Merge 38).** *This freeway merge would experience an increase in density under unacceptable LOS F conditions during the a.m. peak hour.*

Mitigation

Mitigation Measure 3A.15-1ii: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Westbound / Hazel Avenue Direct Ramp Merge (Freeway Merge 38).

To ensure that Westbound U.S. 50 operates at an acceptable LOS at the Hazel Avenue direct ramp merge, an auxiliary lane to the Sunrise Boulevard off ramp diverge must be constructed. This auxiliary lane improvement is included in the proposed 50 Corridor Mobility Fee Program. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to the U.S. 50 Westbound/Hazel Avenue direct ramp merge (Freeway Merge 38).

Implementation: Sacramento County Department of Transportation and City of Rancho Cordova Department of Public Works.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Sacramento County Department of Transportation and City of Rancho Cordova Department of Public Works.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway merge would experience an increase in density under unacceptable LOS F conditions during the a.m. peak hour under the Proposed Project Alternative. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-1ii would reduce the significant impact the U.S. 50 Westbound / Hazel Avenue Direct Ramp Merge to a less-than-significant level by eliminating the merge movement from the freeway mainline under development of the Proposed Project Alternative and all build alternatives.

Until the City of Rancho Cordova Department of Public Works and Sacramento County Department of Transportation implements the improvement, the impact would be classified as significant but would be reduced to a less-than-significant level once those improvements are constructed. Implementation of the mitigation measure will improve operations to an acceptable condition. With the elimination of the direct merge movement there is no specific LOS for the mitigated condition.

City of Rancho Cordova Department of Public Works and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom's control would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-1ii. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-1ii, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-2 **Increased Demand for Single-Occupant Automobile Travel in the Project Area.** *Project implementation would increase demand for single-occupant automobile travel on area roadways and intersections causing roadway and intersection impacts.*

Mitigation

Mitigation Measure 3A.15-2a: Develop Commercial Support Services and Mixed-use Development Concurrent with Housing Development, and Develop and Provide Options for Alternative Transportation Modes.

The project applicant(s) for any particular discretionary development application including commercial or mixed-use development along with residential uses shall develop commercial and mixed-use development concurrent with housing development, to the extent feasible in light of market realities and other considerations, to internalize vehicle trips. Pedestrian and bicycle facilities shall be implemented to the satisfaction of the City Public Works Department. To further minimize impacts from the increased demand on area roadways and intersections, the project applicant(s) for any particular discretionary development application involving schools or commercial centers shall develop and implement safe and secure bicycle parking to promote alternative transportation uses and reduce the volume of single-occupancy vehicles using area roadways and intersections.

Implementation: City of Folsom and Applicant(s).

Timing: Before approval of improvement plans for any particular discretionary development application that includes residential and commercial or mixed-use development.

Enforcement: City of Folsom Public Works Department.

The project applicant(s) any particular discretionary development application shall participate in capital improvements and operating funds for transit service to increase the % of travel by transit. The project's fair-share participation and the associated timing of the improvements and service shall be identified in the project conditions of approval and/or the project's development agreement. Improvements and service shall be coordinated, as necessary, with Folsom Stage Lines and Sacramento RT.

Implementation: City of Folsom, Regional Transit, and Applicant(s).

Timing: As a condition of project approval and/or as a condition of the development agreement for all project phases.

Enforcement: City of Folsom Public Works Department.

Mitigation Measure 3A.15-2b: Participate in the City's Transportation System Management Fee Program.

The project applicant(s) for any particular discretionary development application shall pay an appropriate amount into the City's existing Transportation System Management Fee Program to reduce the number of single-occupant automobile travel on area roadways and intersections.

Implementation: City of Folsom and Applicant(s).

Timing: Concurrent with construction for all project phases.

Enforcement: City of Folsom Public Works Department.

Mitigation Measure 3A.15-2c: Participate with the 50 Corridor Transportation Management Association.

The project applicant(s) for any particular discretionary development application shall join and participate with the 50 Corridor Transportation Management Association to reduce the number of single-occupant automobile travel on area roadways and intersections.

Implementation: 50 Corridor Transportation Management Association and Applicant(s).

Timing: Concurrent with construction for all project phases.

Enforcement: City of Folsom Public Works Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

The project would add significant traffic to area roadways and intersections, increasing the demand for single-occupant automobile travel on area roadways and intersections, causing roadway and intersection impacts under all five development alternatives. This increase is considered a **significant** impact.

Implementation of Mitigation Measure 3A.15-2a would reduce the demand of the single-occupant vehicle on area roadways and intersections. Implementation of Mitigation Measures 3A.15-2b and 3A.15-2c would promote usage of alternative transportation modes and increase the supply of these modes. Although the mitigation measures have the potential to substantially reduce the number of single-occupant vehicles, the project would continue to add single-occupant vehicles in the area and the impact would remain **significant and unavoidable**.

No other feasible mitigation measures are available to reduce impacts associated with increased demand for single-occupant automobile travel to a less-than-significant level because it is technically infeasible to allow new development without the potential to increase demand for single-occupant automobile trips. The project's objectives include providing a large-scale mixed-use and mixed-density residential housing development within the City of Folsom, south of U.S. 50. Therefore, mitigation to a less-than-significant level is not possible while still allowing for implementation of the specific plan. Thus, because it is impossible to allow new development without potentially increasing demand for single-occupant automobile trips, mitigation of this impact to a less-than-significant level would be facially infeasible and this impact is significant and unavoidable. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to increased demand for single-occupant automobile trips.

IMPACT 3A.15-3 **Potential Impacts Associated with the City's Transportation Impact Fee Program.** *The City of Folsom has a transportation impact fee program to implement roadway facilities (those identified in the City General Plan for implementation before Year 2030) within the city limits. However, this fee program does not cover the new roadway facilities that will be needed due to the Proposed Project or alternative.*

Mitigation

Mitigation Measure 3A.15-3: Pay Full Cost of Identified Improvements that Are Not Funded by the City's Fee Program.

In accordance with Measure W, the project applicant(s) for any particular discretionary development application shall fully fund improvements only required because of the Specific Plan.

Implementation: City of Folsom and Applicant(s).

Timing: As a condition of project approval and/or as a condition of the development agreement for all project phases.

Enforcement: City of Folsom Public Works Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

The City's fee transportation impact fee program does not cover the South of U.S. 50 area, or improvements within the existing City that will only be needed because of the Proposed Project Alternative. Measure W, passed by the City of Folsom voters, requires that all improvements required by the South of U.S. 50 Specific Plan be fully funded by the development in the SPA. Therefore, cumulative impacts identified require additional funding (beyond the current fee program) to mitigate the impacts. This is considered a **significant** impact.

Implementation of Mitigation Measure 3A.15-3 requires project applicants to fully fund all improvements only required by the Proposed Project Alternative. However, because ultimate funding of the improvements cannot be guaranteed and the City cannot guarantee implementation of the identified measures, the impact would remain **significant and unavoidable**. If the City is able to ultimately fully fund the fee program through fair-share contributions or external funding sources, the impact would be classified as significant in the short term but would be reduced to a less-than-significant level in the long term. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to this impact.

IMPACT 3A.15-4a **Unacceptable LOS at the Sibley Street/Blue Ravine Road Intersection (Folsom Intersection 2) under Cumulative (2030) Conditions.** *This signalized intersection would degrade to an unacceptable level of service D or E with an increase of five or more seconds of delay during the a.m. peak traffic hour under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4a: The Applicant Shall Pay a Fair Share to Fund the Construction of Improvements to the Sibley Street/Blue Ravine Road Intersection (Folsom Intersection 2).

To ensure that the Sibley Street/Blue Ravine Road intersection operates at a LOS D with less than the Cumulative No Project delay, the northbound approach must be reconfigured to consist of two left-turn lane, two through lanes, and one dedicated right-turn lane. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the Sibley Street/Blue Ravine Road intersection (Folsom Intersection 2).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

This signalized intersection would degrade from an unacceptable level of service (LOS) D to an unacceptable level of service D or E with an increase of five or more seconds of delay during the a.m. peak traffic hour with

traffic from the Proposed Project Alternative under cumulative (2030) conditions. This would be a **significant** impact.

Implementation of Mitigation Measure 3A.15-4a would reduce the significant impact on Folsom Intersection 2 under cumulative (2030) conditions to a **less-than-significant** level, by enabling the intersection to operate at a LOS D with less than the Cumulative No Project delay.

IMPACT 3A.15-4b **Unacceptable LOS at the Oak Avenue Parkway/East Bidwell Street Intersection (Folsom Intersection 6) under Cumulative (2030) Conditions.** *This signalized intersection would degrade to an unacceptable level of service D with an increase of five or more seconds of delay during the p.m. peak traffic hours under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4b: The Applicant Shall Pay a Fair Share to Fund the Construction of Improvements to the Oak Avenue Parkway/East Bidwell Street Intersection (Folsom Intersection 6).

To ensure that the Oak Avenue Parkway/East Bidwell Street intersection operates at an acceptable LOS, the eastbound (East Bidwell Street) approach must be reconfigured to consist of two left-turn lanes, four through lanes and a right-turn lane, and the westbound (East Bidwell Street) approach must be reconfigured to consist of two left-turn lanes, four through lanes, and a right-turn lane. It is against the City of Folsom policy to have eight lane roads because of the impacts to non motorized traffic and adjacent development; therefore, this improvement is infeasible.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

This signalized intersection would degrade from an unacceptable level of service D to an unacceptable level of service D with an increase of five or more seconds of delay during the p.m. peak traffic hours with traffic associated with the Proposed Project Alternative and all build alternatives under cumulative (2030) conditions. The impacts of these alternatives would be similar to that of the Proposed Project Alternative.

Implementation of Mitigation Measure 3A.15-4b would reduce the significant impact on Folsom Intersection 6 under the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level; however, identified improvement is against the City of Folsom policy because of the impacts to non motorized traffic; therefore, the improvement would not be implemented. Given these conditions the impact is **significant-and-unavoidable**. As explained in Section 4, "Statement of Overriding Considerations", the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to this impact.

IMPACT 3A.15-4c **Unacceptable LOS at the East Bidwell Street/Nesmith Court Intersection (Folsom Intersection 7) under Cumulative (2030) Conditions.** *Project or build alternative traffic would increase delay at this deficient intersection by more than 5 seconds during the p.m. peak traffic hour under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-7c: The Applicant Shall Pay a Fair Share to Fund the Construction of Improvements to the East Bidwell Street/Nesmith Court Intersection (Folsom Intersection 7).

To ensure that the East Bidwell Street/College Street intersection operates at acceptable LOS C or better, the westbound approach must be reconfigured to consist of one left-turn lane, one left-through lane, and two dedicated right-turn lanes. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the East Bidwell Street/Nesmith Court intersection (Folsom Intersection 7).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

This signalized intersection would operate at an unacceptable LOS E during the p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase delay at this intersection by more than 5 seconds during the p.m. peak traffic hours under the Proposed.

Implementation of Mitigation Measure 3A.15-4c would reduce the significant impact on Folsom Intersection 7 under the Proposed Project Alternative under cumulative (2030) conditions to a **less-than-significant** level, by enabling this intersection to operate at an acceptable LOS C.

IMPACT 3A.15-4d **Unacceptable LOS at the East Bidwell Street /Iron Point Road Intersection (Folsom Intersection 21) under Cumulative (2030) Conditions.** *This signalized intersection would degrade to an unacceptable LOS F during the p.m. peak traffic hours under the proposed project and all of the build alternatives under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4d: The Applicant Shall Pay a Fair Share to Fund the Construction of Improvements to the East Bidwell Street/Iron Point Road Intersection (Folsom Intersection 21).

To ensure that the East Bidwell Street /Iron Point Road intersection operates at an acceptable LOS, the northbound approach must be reconfigured to consist of two left-turn lanes, four through lanes and a right-turn lane, and the southbound approach must be reconfigured to consist of two left-turn lanes, four through lanes and a right-turn lane. It is against the City of Folsom policy to have eight lane roads because of the impacts to non motorized traffic and adjacent development; therefore, this improvement is infeasible.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

This signalized intersection would degrade from an unacceptable LOS E to an unacceptable LOS F during the p.m. peak traffic hours under the Proposed Project Alternative under cumulative (2030) conditions. Implementation of Mitigation Measure 3A.15-4d would reduce the significant impact on Folsom Intersection 21 from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level; however, identified improvement is against the City of Folsom policy because of the impacts to non motorized traffic; therefore, the improvement would not be implemented. Given these conditions the impact is **significant-and-unavoidable**. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to this traffic impact.

IMPACT 3A.15-4f **Unacceptable LOS at the Empire Ranch Road / Iron Point Road Intersection (Folsom Intersection 24) under Cumulative (2030) Conditions.** *During the p.m. peak traffic hour, this intersection would operate at LOS E or F with an increase in delay of 5 or more seconds under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4f: The Applicant Shall Pay a Fair Share to Fund the Construction of Improvements to the Empire Ranch Road / Iron Point Road Intersection (Folsom Intersection 24).

To ensure that the Empire Ranch Road / Iron Point Road intersection operates at a LOS D or better, all of the following improvements are required:

- ▶ The eastbound approach must be reconfigured to consist of one left-turn lane, two through lanes, and a right-turn lane.
- ▶ The westbound approach must be reconfigured to consist of two left-turn lanes, one through lane, and a through-right lane.
- ▶ The northbound approach must be reconfigured to consist of two left-turn lanes, three through lanes, and a right-turn lane.
- ▶ The southbound approach must be reconfigured to consist of two left-turn lanes, three through lanes, and a right-turn lane.

The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the Empire Ranch Road/Iron Point Road Intersection (Folsom Intersection 24).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Addition of traffic associated with the Proposed Project Alternative would cause this intersection to operate at LOS E or F during the p.m. peak hour with an increase in delay of 5 seconds or greater. This is a **significant impact**.

Implementation of Mitigation Measure 3A.15-4f would reduce the significant impact on Folsom Intersection 24 from Proposed Project Alternative under cumulative (2030) conditions to a **less-than-significant** level, by allowing this intersection to operate at a LOS D or better.

IMPACT 3A.15-4g **Unacceptable LOS at the Oak Avenue Parkway / Easton Valley Parkway Intersection (Folsom Intersection 33) under Cumulative (2030) Conditions.** *This new signalized intersection would operate at an unacceptable LOS D during the a.m. peak traffic hour with the addition of proposed project and alternative traffic under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4g: The Applicant Shall Fund and Construct Improvements to the Oak Avenue Parkway / Easton Valley Parkway Intersection (Folsom Intersection 33).

To ensure that the Oak Avenue Parkway / Easton Valley Parkway intersection operates at an acceptable LOS the southbound approach must be reconfigured to consist of two left-turn lanes, two through lanes, and two right-turn lanes. The applicant shall fund and construct these improvements.

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

This new signalized intersection would operate at an unacceptable LOS D during the a.m. peak traffic hour with the addition of the Proposed Project Alternative traffic under cumulative (2030) conditions. This is a **significant impact**.

Implementation of Mitigation Measure 3A.15-4g would reduce the significant impact on Folsom Intersection 33 from the Proposed Project Alternative under cumulative (2030) conditions to a **less-than-significant** level, by allowing this intersection to operate at an acceptable LOS C.

IMPACT 3A.15-4i **Unacceptable LOS at the Grant Line Road/White Rock Road Intersection (Sacramento County Intersection 3) under Cumulative (2030) Conditions.** *This signalized intersection would degrade to an unacceptable LOS F during the a.m. peak traffic hours under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4i: Participate in Fair Share Funding of Improvements to Reduce Impacts on the Grant Line Road/White Rock Road Intersection (Sacramento County Intersection 3).

To ensure that the Grant Line Road/White Rock Road intersection operates at an acceptable LOS E or better this intersection should be replaced by some type of grade separated intersection or interchange.

Improvements to this intersection are identified in the Sacramento County's Proposed General Plan. Implementation of these improvements would assist in reducing traffic impacts on this intersection by providing acceptable operation. Intersection improvements must be implemented by Sacramento County. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to the Grant Line Road/White Rock Road Intersection (Sacramento County Intersection 3).

Implementation: Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This signalized intersection would degrade from an acceptable LOS E to an unacceptable LOS F during the a.m. peak traffic hours under the Proposed Project Alternative under cumulative (2030) conditions. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4i would reduce the significant impact on the Grant Line Road/White Rock Road intersection from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS E or better.

If Sacramento County implements the improvements, the impact would be reduced to a less-than-significant level.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Sacramento County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or

implementation of Mitigation Measure 3A.15-4i. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4i, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4j **Unacceptable LOS on Grant Line Road between White Rock Road and Kiefer Boulevard (Sacramento County Roadway Segments 5-7) under Cumulative (2030) Conditions.** *Operating conditions of these deficient roadway segments would deteriorate and the V/C ratio would increase by more than 0.05 with project traffic under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4j: Participate in Fair Share Funding of Improvements to Reduce Impacts on Grant Line Road between White Rock Road and Kiefer Boulevard (Sacramento County Roadway Segments 5-7).

To improve operation on Grant Line Road between White Rock Road and Kiefer Boulevard, this roadway segment must be widened to six lanes. This improvement is proposed in the Sacramento County and the City of Rancho Cordova General Plans; however, it is not in the 2035 MTP. Improvements to this roadway segment must be implemented by Sacramento County and the City of Rancho Cordova.

The identified improvement would more than offset the impacts specifically related to the Folsom South of U.S. 50 project on this roadway segment. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to Grant Line Road between White Rock Road and Kiefer Boulevard (Sacramento County Roadway Segments 5-7).

Implementation: Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Operation of these roadway segments would operate at an unacceptable LOS F with or without the Proposed Project Alternative, and the V/C ratio would increase by more than 0.05 with Proposed Project Alternative traffic under cumulative (2030) conditions. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4j would reduce the significant impact on Grant Line Road between White Rock Road and Kiefer Boulevard from the Proposed Project Alternative under cumulative (2030) conditions, by offsetting impacts of project traffic. If Sacramento County and the City of Rancho Cordova implement the improvement, the impact would be reduced to a less-than-significant level.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality

that successful implementation the proposed improvements will require the cooperation of Sacramento County and the City of Rancho Cordova, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4j. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4j, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4k **Unacceptable LOS on Grant Line Road between Kiefer Boulevard and Jackson Highway (Sacramento County Roadway Segment 8) under Cumulative (2030) Conditions.** *Operating conditions of this deficient roadway segment would degrade by increasing the V/C by 0.05 with increased traffic under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4k: Participate in Fair Share Funding of Improvements to Reduce Impacts on Grant Line Road between Kiefer Boulevard and Jackson Highway (Sacramento County Roadway Segment 8).

To improve operation on Grant Line Road between Kiefer Boulevard Jackson Highway, this roadway segment could be widened to six lanes. This improvement is proposed in the Sacramento County and the City of Rancho Cordova General Plans; however, it is not in the 2035 MTP. Improvements to this roadway segment must be implemented by Sacramento County and the City of Rancho Cordova.

The identified improvement would more than offset the impacts specifically related to the Folsom South of U.S. 50 project on this roadway segment. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to Grant Line Road between Kiefer Boulevard and Jackson Highway (SR 16) (Sacramento County Roadway Segment 8).

Implementation: Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This roadway segment would operate at an unacceptable LOS F with an increase of V/C ratio of 0.05 or greater under the Proposed Project Alternative under cumulative (2030) conditions. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4k would reduce the significant impact on Grant Line Road between Kiefer Boulevard and Jackson Highway from the Proposed Project Alternative under cumulative (2030) conditions, by improving operations to LOS C. If Sacramento County and the City of Rancho Cordova implement the improvement, the impact would be reduced to a less-than-significant level.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation of the proposed improvements will require the cooperation of Sacramento County and the City of Rancho Cordova, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4k. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4k, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4I **Unacceptable LOS on Hazel Avenue between Curragh Downs Drive and U.S. 50 Westbound Ramps (Sacramento County Roadway Segment s 12-13) under Cumulative (2030) Conditions.** *Operation of these deficient roadway segments degrade with the V/C ratio increasing by more than 0.05 with project and alternative traffic under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4I: Participate in Fair Share Funding of Improvements to Reduce Impacts on Hazel Avenue between Curragh Downs Drive and U.S. 50 Westbound Ramps (Sacramento County Roadway Segment s 12-13).

To improve operation on Hazel Avenue between Curragh Downs Drive and the U.S. 50 westbound ramps, this roadway segment could be widened to eight lanes. This improvement is inconsistent with Sacramento County's general plan because the county's policy requires a maximum roadway cross section of six lanes.

Analysis shown later indicates that improvements at the impacted intersection in this segment can be mitigated (see Mitigation Measure 3A.15-4p). Improvements to impacted intersections on this segment will improve operations on this roadway segment and, therefore, mitigate this segment impact. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to Hazel Avenue between Curragh Downs Drive and U.S. 50 Westbound Ramps (Sacramento County Roadway Segments 12-13).

Implementation: Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Operation of these roadway segments would operate at an unacceptable LOS F with or without the Proposed Project Alternative, and the V/C ratio would increase by more than 0.05 with Proposed Project Alternative traffic under cumulative (2030) conditions. This is a **significant impact**.

Implementation of Mitigation Measure 3A.15-4l would reduce the significant impact on Hazel Avenue between Curragh Downs Drive and U.S. 50 Westbound Ramps from the Proposed Project Alternative under cumulative (2030) conditions, by offsetting impacts of project traffic. The mitigated intersection LOS is shown later in this section. If Sacramento County and Caltrans implements the intersection improvement, the impact would be reduced to a less than significant.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Sacramento County and Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4l. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4l, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4m **Unacceptable LOS on White Rock Road between Grant Line Road and Prairie City Road (Sacramento County Roadway Segment 22) under Cumulative (2030) Conditions.** *Operation of this roadway segment would degrade this LOS F segment by increasing the V/C ratio by more than 0.05 with project and alternative traffic under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4m: Participate in Fair Share Funding of Improvements to Reduce Impacts on White Rock Road between Grant Line Road and Prairie City Road (Sacramento County Roadway Segment 22).

To improve operation on White Rock Road between Grant Line Road and Prairie City Road, this roadway segment must be widened to six lanes. This improvement is included in the 2035 MTP but is not included in the Sacramento County General Plan. Improvements to this roadway segment must be implemented by Sacramento County.

The identified improvement would more than offset the impacts specifically related to the Folsom South of U.S. 50 project on this roadway segment. However, because of other development in the region that would substantially increase traffic levels, this roadway segment would continue to operate at an unacceptable LOS F even with the capacity improvements identified to mitigate Folsom South of U.S. 50 impacts. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to White Rock Road between Grant Line Road and Prairie City Road (Sacramento County Roadway Segment 22).

Implementation: Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

The addition of traffic on this roadway segment already operating at an unacceptable LOS F would increase the V/C ratio by more than 0.05 with Proposed Project Alternative traffic under cumulative (2030) conditions. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4m would reduce the significant impact on White Rock Road between Grant Line Road and Prairie City Road from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by offsetting impacts of project traffic. If Sacramento County implements the improvement, the impact would be reduced to less than significant.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Sacramento County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4m. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4m, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4n **Unacceptable LOS on White Rock Road between Empire Ranch Road and Carson Crossing Road (Sacramento County Roadway Segment 28) under Cumulative (2030) Conditions.** *Operating conditions on this roadway segment would deteriorate from an acceptable LOS D to an unacceptable LOS F with the Centralized Development, Reduced Hillside Development alternative under cumulative (2030) conditions, and deteriorate from an acceptable LOS D to an unacceptable LOS E with the No USACE Permit, Proposed Project, and Resource Impact Minimization alternatives under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4n: Participate in Fair Share Funding of Improvements to Reduce Impacts on White Rock Road between Empire Ranch Road and Carson Crossing Road (Sacramento County Roadway Segment 28).

To improve operation on White Rock Road between Empire Ranch Road and Carson Crossing Road, this roadway segment must be widened to six lanes. Improvements to this roadway segment must be implemented by Sacramento County. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to White Rock Road between Empire Ranch Road and Carson Crossing Road (Sacramento County Roadway Segment 28).

Implementation: Sacramento County Department of Transportation.

- Timing:** Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.
- Enforcement:** Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Operation of this roadway segment would deteriorate from an acceptable LOS D to an unacceptable LOS E with the Proposed Project Alternative under cumulative (2030) conditions. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4n would reduce the significant impact on White Rock Road between Empire Ranch Road and Carson Crossing Road from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by improving operations to LOS A. If Sacramento County implements the improvement, the impact would be reduced to less than significant.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Sacramento County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4n. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4n, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4o **Unacceptable LOS at the White Rock Road / Carson Crossing Road Intersection (El Dorado County 1) under Cumulative (2030) Conditions.** *This signalized intersection would degrade to an unacceptable LOS F during the a.m. peak traffic hour under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4o: Participate in Fair Share Funding of Improvements to Reduce Impacts on the White Rock Road / Carson Crossing Road Intersection (El Dorado County 1).

To ensure that the White Rock Road / Carson Crossing Road intersection operates at an acceptable LOS, the eastbound right turn lane must be converted into a separate free right turn lane, or double right. Improvements to this intersection must be implemented by El Dorado County. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to the White Rock Road/Carson Crossing Road Intersection (El Dorado County 1).

Implementation: El Dorado County Department of Public Works.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: El Dorado County Department of Public Works.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This signalized intersection would degrade from an acceptable LOS C to an unacceptable LOS F during the a.m. peak traffic hour under the Proposed Project Alternative under cumulative (2030) conditions. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4o would reduce the significant impact on the White Rock Road / Carson Crossing Road intersection from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS C. If El Dorado County implements the improvement, the impact would be reduced to a less-than-significant level.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of El Dorado County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4o. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4o, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4p **Unacceptable LOS at the Hazel Avenue/U.S. 50 Westbound Ramps Intersection (Caltrans Intersection 1) under Cumulative (2030) Conditions.** *This signalized intersection would degrade from an unacceptable LOS F during the a.m. and p.m. peak traffic hours with an increase in the delay at this intersection during the a.m. and p.m. peak traffic hours by more than 5 seconds under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4p: Participate in Fair Share Funding of Improvements to Reduce Impacts on the Hazel Avenue/U.S. 50 Westbound Ramps Intersection (Caltrans Intersection 1).

To ensure that the Hazel Avenue/U.S. 50 westbound ramps intersection operates at an acceptable LOS, the westbound approach must be reconfigured to consist of one dedicated left turn lane, one shared left-through lane and three dedicated right-turn lanes. Improvements to this intersection must be implemented by Caltrans and Sacramento County. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to the Hazel Avenue/U.S. 50 Westbound Ramps Intersection (Caltrans Intersection 1)

Implementation: Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without Proposed Project Alternative traffic under cumulative (2030) conditions. Proposed Project Alternative traffic would increase the delay at this intersection during the a.m. and p.m. peak traffic hours by more than 5 seconds. This is a **significant impact**.

Implementation of Mitigation Measure 3A.15-4p would reduce the significant impact on the Hazel Avenue/U.S. 50 Westbound Ramps Intersection from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by reducing the intersection delay below Cumulative No Project levels. If Sacramento County implements the improvements, the impact would be reduced to less than significant.

Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans and Sacramento County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4p. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4p, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4q **Unacceptable LOS on Eastbound U.S. 50 between Zinfandel Drive and Sunrise Boulevard (Freeway Segment 1) under Cumulative (2030) Conditions.** *Project traffic would increase on this LOS F freeway segment under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4q: Participate in Fair Share Funding of Improvements to Reduce Impacts on Eastbound U.S. 50 between Zinfandel Drive and Sunrise Boulevard (Freeway Segment 1).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS between Zinfandel Drive and Sunrise Boulevard, an additional eastbound lane could be constructed. This improvement is not consistent with

the Concept Facility in Caltrans State Route 50 Corridor System Management Plan; therefore, it is not likely to be implemented by Caltrans by 2030.

Construction of the Capitol South East Connector, including widening White Rock Road and Grant Line Road to six lanes with limited access, could divert some traffic from U.S. 50 and partially mitigate the project's impact. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to Eastbound U.S. 50 between Zinfandel Drive and Sunrise Boulevard (Freeway Segment 1).

Implementation: Capitol Southeast Connector Joint Powers Authority.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Capitol Southeast Connector Joint Powers Authority.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway segment would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without Proposed Project Alternative traffic under cumulative (2030) conditions. Proposed Project Alternative traffic would increase at this freeway segment volume under all build alternatives. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4q would partially reduce the significant impact on Eastbound U.S. 50 between Zinfandel Drive and Sunrise Boulevard from the Proposed Project Alternative under cumulative (2030) conditions. A mitigated LOS cannot be calculated because the design of the Capitol South East Connector is not known at this time; therefore, it is not known how much traffic would be diverted off of U.S. 50 and what LOS that reduced U.S. 50 volume would produce.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation of the proposed improvements will require the cooperation of Capital Southeast, the City of Rancho Cordova and Sacramento County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4q. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4q, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4r **Unacceptable LOS on Eastbound U.S. 50 between Rancho Cordova Parkway and Hazel Avenue (Freeway Segment 3) under Cumulative (2030) Conditions.** *Project traffic would increase on this LOS F freeway segment under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4r: Participate in Fair Share Funding of Improvements to Reduce Impacts on Eastbound U.S. 50 between Rancho Cordova Parkway and Hazel Avenue (Freeway Segment 3).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS between Rancho Cordova Parkway and Hazel Avenue, an additional eastbound lane could be constructed. This improvement is not consistent with the Concept Facility in Caltrans State Route 50 Corridor System Management Plan; therefore, it is not likely to be implemented by Caltrans by 2030.

Construction of the Capitol South East Connector, including widening White Rock Road and Grant Line Road to six lanes with limited access, could divert some traffic off of U.S. 50 and partially mitigate the project's impact. The applicant shall pay its proportionate share of funding of improvements to the agency responsible for improvements, based on a program established by that agency to reduce the impacts to Eastbound U.S. 50 between Rancho Cordova Parkway and Hazel Avenue (Freeway Segment 3).

Implementation: Capitol Southeast Connector Joint Powers Authority.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Capitol Southeast Connector Joint Powers Authority.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway segment would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without Proposed Project Alternative traffic under cumulative (2030) conditions. Proposed Project Alternative traffic would increase at this freeway segment under all build alternatives. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4r would partially reduce significant impact on Eastbound U.S. 50 between Rancho Cordova Parkway and Hazel Avenue from the Proposed Project Alternative under cumulative (2030) conditions. A mitigated LOS cannot be calculated because the design of the Capitol South East Connector is not known at this time; therefore, it is not known how much traffic would be diverted off of U.S. 50 and what LOS that reduced U.S. 50 volume would produce.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation of the proposed improvements will require the cooperation of Capital Southeast, the City of Rancho Cordova and Sacramento County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4r. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4r, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4s Unacceptable LOS on Eastbound U.S. 50 between Folsom Boulevard and Prairie City Road (Freeway Segment 5) under Cumulative (2030) Conditions. *This freeway segment would deteriorate from LOS E to LOS F during the a.m. and p.m. peak traffic hours with project and build alternative traffic under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4s: Participate in Fair Share Funding of Improvements to Reduce Impacts on Eastbound U.S. 50 between Folsom Boulevard and Prairie City Road (Freeway Segment 5).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS between Folsom Boulevard and Prairie City Road, the eastbound auxiliary lane should be converted to a mixed flow lane that extends to and drops at the Oak Avenue Parkway off ramp (see mitigation measure 3A.15-4t). Improvements to this freeway segment must be implemented by Caltrans. This improvement is not consistent with the Concept Facility in Caltrans State Route 50 Corridor System Management Plan; therefore, it is not likely to be implemented by Caltrans by 2030.

Construction of the Capitol South East Connector, including widening White Rock Road and Grant Line Road to six lanes with limited access, could divert some traffic off of U.S. 50 and partially mitigate the project's impact.

The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to Eastbound U.S. 50 between Folsom Boulevard and Prairie City Road (Freeway Segment 5).

Implementation: Capitol Southeast Connector Joint Powers Authority.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: Capitol Southeast Connector Joint Powers Authority.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Traffic associated with the Proposed Project Alternative would deteriorate operating conditions on this segment from LOS E to F during both the a.m. and p.m. peak hours under cumulative (2030) conditions. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4s would partially reduce the significant impact on Eastbound U.S. 50 between Folsom Boulevard and Prairie City Road from the Proposed Project Alternative under cumulative (2030) conditions. A mitigated LOS cannot be calculated because the design of the Capitol South East Connector is not known at this time; therefore, it is not known how much traffic would be diverted off of U.S. 50 and what LOS that reduced U.S. 50 volume would produce.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality

that successful implementation the proposed improvements will require the cooperation of Capital Southeast, the City of Rancho Cordova and Sacramento County, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4s. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4s, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4t **Unacceptable LOS on Eastbound U.S. 50 between Prairie City Road and Oak Avenue Parkway (Freeway Segment 6) under Cumulative (2030) Conditions.** *This freeway segment would degrade to an unacceptable LOS F during the a.m. peak traffic hour with project and build alternative traffic, and this deficient freeway segment (LOS F) would experience higher volumes during the p.m. peak traffic hour with the addition of traffic under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4t: Participate in Fair Share Funding of Improvements to Reduce Impacts on Eastbound U.S. 50 between Prairie City Road and Oak Avenue Parkway (Freeway Segment 6).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS between Prairie City Road and Oak Avenue Parkway, the northbound Prairie City Road slip on ramp should merge with the eastbound auxiliary lane that extends to and drops at the Oak Avenue Parkway off ramp (see Mitigation Measures 3A.15-4u, v and w), and the southbound Prairie City Road flyover on ramp should be braided over the Oak Avenue Parkway off ramp and start an extended full auxiliary lane to the East Bidwell Street – Scott Road off ramp. Improvements to this freeway segment must be implemented by Caltrans. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to Eastbound U.S. 50 between Prairie City Road and Oak Avenue Parkway (Freeway Segment 6).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway segment would degrade from an acceptable LOS E to an unacceptable LOS F during the a.m. peak traffic hour with the Proposed Project Alternative traffic under cumulative (2030) conditions. This freeway segment would operate at an unacceptable LOS F during the p.m. peak traffic hour with or without the Proposed Project Alternative under cumulative (2030) conditions. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4t would reduce the significant impact on Eastbound U.S. 50 between Prairie City Road and Oak Avenue Parkway from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by allowing this freeway segment to operate at an acceptable LOS. If the City of Folsom Public Works Department implements the improvements, the impact would be reduced to less than significant.

City of Folsom Public Works Department will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4t. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4t, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4u **Unacceptable LOS at the U.S. 50 Eastbound / Prairie City Road Slip Ramp Merge (Freeway Merge 6).**
Project and alternative traffic would increase at this LOS F freeway merge during the a.m. and p.m. peak traffic hours with project and build alternative traffic under cumulative (2030) conditions.

Mitigation

Mitigation Measure 3A.15-4u: Participate in Fair Share Funding of Improvements to Reduce Impacts on the U.S. 50 Eastbound / Prairie City Road Slip Ramp Merge (Freeway Merge 6).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS, the northbound Prairie City Road slip on ramp should start the eastbound auxiliary lane that extends to and drops at the Oak Avenue Parkway off ramp (see mitigation measure 3A.15-4u, w and x), and the southbound Prairie City Road flyover on ramp should be braided over the Oak Avenue Parkway off ramp and start an extended full auxiliary lane to the East Bidwell Street – Scott Road off ramp. Improvements to this freeway segment must be implemented by Caltrans. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Eastbound/Prairie City Road slip ramp merge (Freeway Merge 6).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be build.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and

not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway merge would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without Proposed Project Alternative traffic under cumulative (2030) conditions. Proposed Project Alternative traffic would increase at this freeway merge under all build alternatives. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4u would reduce the significant impact on the U.S. 50 Eastbound / Prairie City Road Slip Ramp Merge from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by allowing this merge to operate at an acceptable LOS. If the City of Folsom Public Works Department implements the improvements, the impact would be reduced to less than significant.

City of Folsom Public Works Department will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4u. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4u, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4v **Unacceptable LOS at the U.S. 50 Eastbound / Prairie City Road Flyover On Ramp to Oak Avenue Parkway Off Ramp Weave (Freeway Weave 7).** *Project and alternative traffic would increase at this LOS F freeway weave during the a.m. and p.m. peak traffic hours with project and build alternative traffic under cumulative (2030) conditions.*

Finding

Mitigation Measure 3A.15-4v: Participate in Fair Share Funding of Improvements to Reduce Impacts on the U.S. 50 Eastbound / Prairie City Road Flyover On Ramp to Oak Avenue Parkway Off Ramp Weave (Freeway Weave 7).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS, the northbound Prairie City Road slip on ramp should start the eastbound auxiliary lane that extends to and drops at the Oak Avenue Parkway off ramp (see mitigation measure 3A.15-4u, v and x), and the southbound Prairie City Road flyover on ramp should be braided over the Oak Avenue Parkway off ramp and start an extended full auxiliary lane to the East Bidwell Street – Scott Road off ramp. Improvements to this freeway segment must be implemented by Caltrans. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Eastbound/Prairie City Road Flyover On Ramp to Oak Avenue Parkway Off Ramp Weave (Freeway Weave 7).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway weave would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without Proposed Project Alternative traffic under cumulative (2030) conditions. Proposed Project Alternative traffic would increase at this freeway weave under all build alternatives. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4v would reduce the significant impact on Freeway Weave 7 from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by allowing this merge to operate at an acceptable LOS. If the City of Folsom Public Works Department implements the improvements, the impact would be reduced to less than significant.

City of Folsom Public Works Department will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4v. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4v, which would mitigate this potential impact to a less than significant level.

IMPACT **Unacceptable LOS at the U.S. 50 Eastbound / Oak Avenue Parkway Loop Ramp Merge (Freeway Merge 8).**
3A.15-4w *Project and alternative traffic would increase at this LOS F freeway merge during the a.m. and p.m. peak traffic hours with project traffic under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4w: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Eastbound / Oak Avenue Parkway Loop Ramp Merge (Freeway Merge 8).

To ensure that Eastbound U.S. 50 operates at an acceptable LOS, the southbound Oak Avenue Parkway loop on ramp should merge with the eastbound auxiliary lane that starts at the southbound Prairie City Road braided flyover on ramp and ends at the East Bidwell Street – Scott Road off ramp (see mitigation measure 3A.15-4u, v and w). Improvements to this freeway segment must be implemented by Caltrans. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to U.S. 50 Eastbound/Oak Avenue Parkway Loop Ramp Merge (Freeway Merge 8).

Implementation: City of Folsom Public Works Department.

- Timing:** Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.
- Enforcement:** City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway merge would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without Proposed Project Alternative traffic under cumulative (2030) conditions. Proposed Project Alternative traffic would increase at this freeway merge under all build alternatives. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4w would reduce the significant impact on Freeway Merge 8 from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by allowing this merge to operate at LOS C. If the City of Folsom Public Works Department implements the improvements, the impact would be reduced to less than significant.

City of Folsom Public Works Department will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4w. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4w, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4x **Unacceptable LOS at the U.S. 50 Westbound / Empire Ranch Road Loop Ramp Merge (Freeway Merge 27).** *This freeway merge would degrade to an unacceptable LOS F during the a.m. and p.m. peak traffic hours with the project and build alternative traffic under cumulative (2030) conditions.*

Mitigation

Mitigation Measure 3A.15-4x: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Westbound / Empire Ranch Road Loop Ramp Merge (Freeway Merge 27).

To ensure that Westbound U.S. 50 operates at an acceptable LOS, the northbound Empire Ranch Road loop on ramp should start the westbound auxiliary lane that ends at the East Bidwell Street – Scott Road off ramp. The slip on ramp from southbound Empire Ranch Road slip ramp would merge into this extended auxiliary lane. Improvements to this freeway segment must be implemented by Caltrans. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus

study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Westbound/Empire Ranch Road loop ramp merge (Freeway Merge 27).

Implementation: City of Folsom Public Works Department.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway merge would degrade from an acceptable LOS D to an unacceptable LOS F during the a.m. and p.m. peak traffic hours with the Proposed Project Alternative traffic under cumulative (2030) conditions. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4x would reduce the significant impact on Freeway Merge 27 from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by allowing this on ramp to enter into its own lane and eliminating the direct merge to the freeway mainline. With the elimination of the direct merge movement there is no specific LOS for the mitigated condition. If the City of Folsom Public Works Department implements the improvements, the impact would be reduced to a less-than-significant level.

City of Folsom Public Works Department will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though, the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4x. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4x, which would mitigate this potential impact to a less than significant level.

IMPACT 3A.15-4y **Unacceptable LOS at the U.S. 50 Westbound / Prairie City Road Loop Ramp Merge (Freeway Merge 35).**
Project and alternative traffic would increase at this LOS F freeway merge during the a.m. and p.m. peak traffic hours with project and build alternative traffic under cumulative (2030) conditions.

Mitigation

Mitigation Measure 3A.15-4y: Participate in Fair Share Funding of Improvements to Reduce Impacts on U.S. 50 Westbound / Prairie City Road Loop Ramp Merge (Freeway Merge 35).

To ensure that Westbound U.S. 50 operates at an acceptable LOS, the northbound Prairie City Road loop on ramp should start the westbound auxiliary lane that continues beyond the Folsom Boulevard off ramp. The slip on ramp from southbound Prairie City Road slip ramp would merge into this extended auxiliary lane. Improvements to this freeway segment must be implemented by Caltrans. The applicant shall pay its proportionate share of funding of improvements, as may be determined by a nexus study or other appropriate and reliable mechanism paid for by applicant, to reduce the impacts to the U.S. 50 Westbound/Prairie City Road Loop Ramp Merge (Freeway Merge 35).

Implementation: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Timing: Before project build out. A phasing analysis should be performed prior to approval of the first subdivision map to determine during which project phase the improvement should be built.

Enforcement: City of Folsom Public Works Department and Sacramento County Department of Transportation.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

This freeway merge would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without Proposed Project Alternative traffic under cumulative (2030) conditions. Proposed Project Alternative traffic would increase at this freeway merge under all build alternatives. This is a **significant** impact.

Implementation of Mitigation Measure 3A.15-4y would reduce the significant impact on Freeway Merge 35 from the Proposed Project Alternative under cumulative (2030) conditions to a less-than-significant level, by allowing this on ramp to enter into its own lane and eliminating the direct merge to the freeway mainline. There is no specific resulting mitigated merge LOS because with the on ramp entering its own exclusive lane at the beginning of an auxiliary lane there is no longer a merge. If the City of Folsom Public Works Department and Sacramento County Department of Transportation implements the improvements, the impact would be reduced to a less-than-significant level.

City of Folsom Public Works Department and Sacramento County Department of Transportation will be responsible for funding of this improvement while Caltrans oversight is required for the design/approval of an appropriate improvement.

As discussed above, the requirement that the Applicant participate in funding these transportation improvements that are located outside the City of Folsom would mitigate or substantially lessen the project's significant impact on this intersection but the impact would remain **significant and unavoidable**. This conclusion reflects the reality that successful implementation the proposed improvements will require the cooperation of Caltrans, over which the City of Folsom has no control. For this reason, the City of Folsom is conservatively acknowledging the possibility that, despite its own commitment to work with these other agencies, mutually acceptable accommodation may not be reached. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), though,

the City of Folsom concludes that these other agencies can and should cooperate with the City in implementing the mitigation. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.15-4y. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.15-4y, which would mitigate this potential impact to a less than significant level.

TRAFFIC AND TRANSPORTATION – WATER

IMPACT 3B.15-1 **Temporary and Short-Term Reduction in Roadway Capacity during Construction.** *Off-site Water Facility Alternatives construction could result in temporary reductions in roadway capacities, which could be substantial in relation to existing volume-to-capacity ratios on local roadways and congestion at intersections.*

Mitigation

Mitigation Measure 3B.15-1a: Prepare Traffic Control Plan.

Prior to construction, the City shall prepare a Traffic Control Plan for roadways and intersections affected by Off-site Water Facilities-related construction. The Traffic Control Plan shall designate haul routes and comply with requirements in the encroachment permits issued by the City of Rancho Cordova, Sacramento County, and Caltrans. The Traffic Control Plan to be prepared by the construction contractor(s) shall, at minimum, include the following measures:

- ▶ Maintaining the maximum amount of travel lane capacity during non-construction periods, possible, and advanced notice to drivers through the provision of construction signage.
- ▶ Maintaining alternate one-way traffic flow past the lay down area and site access when feasible.
- ▶ Heavy trucks and other construction transport vehicles shall avoid the busiest commute hours (7 a.m. to 8 a.m. and 5 p.m. to 6 p.m. on weekdays).
- ▶ The City shall provide a minimum 72-hour advance notice of access restrictions for residents, businesses, and local emergency response agencies. This shall include the identification of alternative routes and detours to enable for the avoidance of the immediate construction zone.
- ▶ The City, in cooperation with its contractor(s), shall provide a phone number and community contact for inquiries about the schedule of the Off-site Water Facilities throughout the construction period. This information will be posted in a local newspaper, via the City’s web site, or at City Hall and will be updated on a monthly basis.
- ▶ To the extent practical depending the alignment of the selected Off-site Water Facility Alternative, the City shall maximize opportunities for coordinated construction and installation of the conveyance pipeline with other planned roadway improvement projects.

Implementation: City of Folsom Utilities Department.

Timing: Prior to and during construction of all Off-site Water Facilities.

Enforcement: 1. For structural improvements that would be located within the City of Folsom:
City of Folsom Neighborhood Services Department and City of Folsom
Community Development Department.

2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.
3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Mitigation Measure 3B.15-1b: Assess Pre-Off-site Water Facilities Roadway Conditions.

Prior to construction, the City’s construction contractor(s) shall be responsible for assessing current road conditions for Off-site Water Facilities-related haul routes including the local access roads and develop post construction road restoration requirements. As part of the encroachment permitting process, an agreement shall be entered into with applicable jurisdictions prior to construction that details post construction road restoration requirements. Staff with the City of Rancho Cordova and Sacramento County shall review the post construction restoration standards for each of the affected roadways. The City shall perform roadway repairs or rehabilitation as necessary such that post construction requirements are met.

Implementation: City of Folsom Utilities Department.

Timing: Prior to and during construction of all Off-site Water Facilities.

- Enforcement:**
1. For structural improvements that would be located within the City of Folsom: City of Folsom Neighborhood Services Department and City of Folsom Community Development Department.
 2. For structural improvements that would be located within unincorporated Sacramento County: Sacramento County Planning and Community Development Department.
 3. For structural improvements that would be located within the City of Rancho Cordova: City of Rancho Cordova Planning Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Under the Proposed Off-site Water Facility Alternative, construction-generated traffic would be temporary, approximately 36 months in duration, and therefore would not result in any long-term degradation in operating conditions or LOS on any roadways within the Zone 4 of the “Water” Study Area. The primary impacts from Off-site Water Facilities construction vehicle traffic would include temporary, short-term, and intermittent reductions of roadway capacities associated with the movement of construction equipment. Lane blockage caused by construction traffic would be temporary and limited to within the immediate vicinity of pipeline construction.

Pipeline construction would affect the roadway network in two ways. Construction would either cross a roadway or it would run parallel to a roadway within the public right-of-way. As proposed, these Off-site Facility Alternatives pipeline would run parallel to or longitudinally within the public road right-of-way and, as a result, portions of the roadway that would normally be used for traffic circulation or parking would be temporarily unavailable. This displacement could block two travel lanes, one travel lane and the adjacent shoulder/parking area, or just the shoulder/parking area, depending upon the pipeline's lateral placement within the road right-of-

way. It is estimated that lane blockages would last for durations varying between a few days for perpendicular encroachments to 2–3 weeks for parallel or longitudinal encroachments at any given segment of Grant Line Road, Gerber Road, and White Rock Roads. These **direct** and **indirect** impacts are considered **potentially significant**.

In addition to the above impacts, the use of large trucks to transport equipment and material to and from the Off-site Water Facilities work site could affect road conditions on the access routes by increasing the rate of road wear. The degree to which this impact would occur depends on the design (pavement type and thickness) and the existing condition of the road. Major arterials and collectors are designed to accommodate a mix of vehicle types, including heavy trucks. The potential impacts are expected to be negligible on those roads. However, lower-capacity roadways could be significantly impacted by construction equipment within the roadway. Therefore, this **direct** impact is considered **significant**.

Implementation of Mitigation Measures 3B.15-1a and 3B.15-1b would ensure that temporary and short-term impacts to traffic and roadway LOS would be reduced to a **less-than-significant** level by ensuring the continued movement of traffic during construction, minimizing disruption to adjacent residences and bike access, and providing sufficient notification to the affected population of alternate travel routes.

IMPACT 3B.15-2 Exceedance of Established Level of Service Standards for Local Roadways. *The implementation of Off-site Water Facility Alternatives could cause traffic conditions to exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways.*

Mitigation

Implement Mitigation Measure 3B.15-1a.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

During construction, traffic would be generated from two sources: truck trips to and from the work site, and construction work crews and supervisor staff commuting to and from the work site. Based on a maximum of three construction crews, the maximum number of crew members accessing portions of Zone 4 of the “Water” Study Area at any one time would be up to 66 individuals or up to 66 additional vehicle trips per day for both the morning and evening peak hours. In addition, during peak excavation and earthwork activities, the Off-site Water Facility Alternatives could generate up to 20 round-trip truck trips per day. However, average daily earthwork truck trips would be less and range from about 1 to 4 round trips per day during much of construction and could be scheduled to avoid the peak traffic hours. Additional trips to or from the construction site would occur during project initiation with the delivery of various equipment to the site such as excavators, tracked excavators, wheel loaders, concrete pump trucks, graders, backhoes and other equipment (see Chapter 2, “Alternatives,” of the DEIR/DEIS). All construction-generated fill and excavated spoils would be used as fill material for the WTP site or transported to the Kiefer Landfill for disposal. For this reason, it is reasonable to conclude that no transportation of fill to areas outside of Zone 4 of the “Water” Study Area would occur in conjunction with the Off-site Water Facility Alternatives.

If all the construction-related equipment and the construction crews accessed or exited the site during the evening peak-hour the maximum number of vehicles would be up to 86 at any one time. In recognizing the poor operating conditions on portions of local roadways during the peak traffic hours (e.g., Sunrise Boulevard), the addition of project-related construction traffic could temporarily lead to further degradation in traffic movements. **Potentially significant direct** and **indirect** transportation impacts associated with the Off-site Water Facilities would occur.

As provided in Chapter 2, “Alternatives,” of the DEIR/DEIS, the operation of the WTP under any of the alternatives are expected to require up to 10 employees, on average, each of which could produce 4 daily vehicle trips for a total of 40 daily trips or less. Given that these trips would be dispersed throughout the day and the roadway network, they would not be expected to not result in any long-term degradation in operating conditions or LOS on any local roadways or intersections. For these reasons, long-term, **direct** and **indirect** traffic-related impacts associated with the Off-site Water Facility Alternative are considered **less than significant**.

Implementation of Mitigation Measure 3B.15.1a would ensure that temporary and short-term impacts to roadway and intersection LOS would be reduced to a **less-than-significant** level by ensuring the continued movement of traffic past the construction zone and provision of alternative routes. Because of the low volume of daily trips generated by the combined operation of the Off-site Water Facility Alternatives, a **less than significant**, long-term operational impact is expected.

IMPACT 3B.15-3 **Increased Traffic Hazards on Local Roadways.** *Implementation of the Off-site Water Facility Alternatives could substantially increase hazards on local roadways due to the presence of incompatible uses, such as construction equipment.*

Mitigation

Implement Mitigation Measure 3B.15-1a.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Haul trucks and heavy equipment used during the construction of the Off-site Water Facilities would interact with vehicle movements on existing roadways. The creation of a construction work zone on high-volume or high-speed roadways would increase the potential for traffic safety hazards because of the need to safely transition traffic into the travel lane(s) adjacent to the work zone. Because of the temporary disruption to traffic flow, the removal of lanes, the presence of construction equipment in the public right-of-way, and the localized increase in traffic congestion, drivers would be presented with unexpected driving conditions and obstacles. This could potentially result in an increased occurrence of automobile or haul truck accidents and would be considered a **potentially significant direct** impact. **No indirect** impacts would occur.

Implementation of Mitigation Measure 3B.15.1a would ensure that construction-related hazards on local roadways would be reduced to a **less-than-significant** level by ensuring proper notification to drivers of construction zones. All roadway-related improvements (e.g., pipelines) would be located sub-surface and would not contribute to any significant roadway design hazards and no long-term impacts are anticipated.

UTILITIES AND SERVICE SYSTEMS – LAND

IMPACT 3A.16-1 **Increased Demand for On-Site Wastewater Collection and Conveyance Facilities and the Off-Site Force Main.** *Project implementation would result in increased generation of wastewater.*

Mitigation

Mitigation Measure 3A.16-1: Submit Proof of Adequate On- and Off-Site Wastewater Conveyance Facilities and Implement On- and Off-Site Infrastructure Service Systems or Ensure That Adequate Financing Is Secured.

Before the approval of the final map and issuance of building permits for all project phases, the project applicant(s) of all project phases shall submit proof to the City of Folsom that an adequate wastewater conveyance system either has been constructed or is ensured through payment of the City's facilities augmentation fee as described under the Folsom Municipal Code Title 3, Chapter 3.40, "Facilities Augmentation Fee – Folsom South Area Facilities Plan," or other sureties to the City's satisfaction. Both on-site wastewater conveyance infrastructure and off-site force main sufficient to provide adequate service to the project shall be in place for the amount of development identified in the tentative map before approval of the final map and issuance of building permits for all project phases, or their financing shall be ensured to the satisfaction of the City.

Implementation: The project applicant(s) of all project phases.

Timing: Before approval of final maps and issuance of building permits for any project phases.

Enforcement: City of Folsom Community Development Department and City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

The SPA is presently not served by municipal wastewater collection and treatment systems, and therefore the project would require construction of on-site wastewater collection and conveyance facilities and an off-site force main.

The wastewater infrastructure plan prepared for the Proposed Project Alternative (MacKay & Somps 2008a) addressed the viability of providing sewer service to the SPA, identified on- and off-site facility needs and design, and evaluated designs for consistency with existing interceptor sewer master plans. The wastewater infrastructure plan presents options for the ultimate sewer conveyance facilities. However, detailed sewer master plans have not been completed. It is anticipated that additional work would be performed to define force mains, trunk, and major collectors; identify phased construction of facilities; and design tentative maps, including collector and lateral systems, to serve each lot. The following discussion provides an overview of the future facilities identified by the conceptual wastewater infrastructure plan (attached as Appendix K of the DEIR/DEIS).

Because the SPA is not served by a municipal wastewater collection system and sufficient on-site wastewater collection and conveyance infrastructure and the off-site force main necessary to serve the project have not been constructed, nor have final design plans and specifications been submitted, this is a **direct, potentially significant** impact. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development.

Implementation of Mitigation Measure 3A.16-1 would reduce significant impacts associated with increased demand for on-site wastewater collection facilities under the Proposed Project Alternative to a **less-than-significant** level because adequate wastewater conveyance facilities would be documented or adequate financing would be secured before approval final maps and issuance of building permits.

IMPACT 3A.16-3 **Increased Demand for SRWTP Wastewater Treatment Plant Facilities.** *Project implementation would result in increased generation of wastewater. Collected wastewater flows from the 3,313-acre SRCSD portion of the SPA would ultimately be transported to the SRWTP for treatment and disposal.*

Mitigation

Mitigation Measure 3A.16-3: Demonstrate Adequate SRWTP Wastewater Treatment Capacity.

The project applicant(s) of all project phases shall demonstrate adequate capacity at the SRWTP for new wastewater flows generated by the project. This shall involve preparing a tentative map-level study and paying connection and capacity fees as identified by SRCSD. Approval of the final map and issuance of building permits for all project phases shall not be granted until the City verifies adequate SRWTP capacity is available for the amount of development identified in the tentative map.

Implementation: The project applicant(s) of all project phases.

Timing: Before approval of final maps and issuance of building permits for any project phases.

Enforcement: City of Folsom Community Development Department and City of Folsom Public Works Department.

Finding

Changes or alterations which avoid or substantially lessen the significant environmental effect as identified in the FEIR/FEIS are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Implementation of Mitigation Measure 3A.16-3 would reduce direct significant impacts associated with increased demand for wastewater treatment plant facilities under the Proposed Project Alternative to a **less-than-significant** level because an adequate wastewater treatment facilities would be documented before approval final maps and issuance of building permits.

Implementation of the Proposed Project Alternative would generate 5.58 mgd of average dry-weather flow and 11.99 mgd peak wet-weather flow within the SRCSD service area (MacKay & Soms 2008b).

The wastewater flows generated by the Proposed Project Alternative, including the 189-acre portion of the SPA that would be served by EID, have been planned for in the SRCSD Master Plan 2000. The master plan estimates that buildout of the SPA would generate an average dry-weather flow of 6.82 mgd and a peak wet-weather flow of 14.48 mgd (SRCSD 2003b:Table 3-1). Because 189 acres of the SPA would be served by EID, the project-related average-dry weather flow would be 1.24 mgd and peak-wet weather flow would be 2.59 mgd less than those identified in the SRCSD Master Plan 2000.

Collected wastewater flows from the 3,313-acre SRCSD portion of the SPA would ultimately be transported to the SRWTP for treatment and disposal. The SRWTP receives and treats an average of 141 mgd (as of 2008) and has a permitted dry-weather flow design capacity of 181 mgd. Flows to the SRWTP would increase over time as the population in the SRCSD service area increases. At the time the 2020 Master Plan EIR was prepared, it was assumed that flows would increase from 155 mgd and would surpass 181 mgd by 2007. However, flows to the SRWTP have decreased between 2000 and 2008 from 155 mgd to 141 mgd.

SCRSD prepared the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (SRCSD 2004), which was determined to be legally deficient by the Sacramento Superior Court.

The judgment has been appealed, and a decision by the 3rd District Court of Appeals on the adequacy of the EIR is not expected until 2010. The Court of Appeal could overturn or uphold the Superior Court's determination in whole or in part. The legal effect of the pending appeal is to stay the Superior Court's determination of legal deficiency. Thus, this EIR/EIS summarizes below and incorporates by reference the significant impacts that were identified in the 2020 Master Plan EIR as they relate to this project.

The 2020 Master Plan, which was approved in 2004, provides for expansion of the SRWTP to 218 mgd based on growth rates expected to be achieved in the Sacramento County region by 2020. This projected capacity specifically includes project-related wastewater flows through 2020. Note that this total does not represent a buildout population total for SRCSD; rather, it represents the amount of growth expected within SRCSD based on projections. The SRCSD has determined that growth within the district is less than what was projected in the 2020 master plan and the SRWTP can provide capacity to future development beyond what was originally anticipated. If substantial population growth or new development occurs before 2020, the SRCSD will reevaluate expansion needs and phase treatment plant expansion to provide for sufficient long-term capacity.

Because there is a relationship between the project and the need for expansion of the SRWTP, implementation of the Proposed Project Alternative would contribute indirectly and incrementally to the related impacts. As described in the 2020 Master Plan EIR (which is incorporated by reference herein), construction and operation of the expanded SRWTP would result in several environmental impacts, and all but one impact would be reduced to a less-than-significant level through implementation of mitigation measures (including impacts on water quality, hydrology, fisheries, traffic, and noise). The only significant and unavoidable impact related to the treatment plant that was identified would be from short-term increases in nitrogen oxide (NO_x) during construction of SRWTP facilities.

In addition to these impacts, there is a potential that new significant impacts to water quality could be identified if the EIR for the SRWTP is found inadequate and impacts are reanalyzed. It is too speculative to draw any such conclusion at this point since additional studies would be required to substantiate any new significant impacts.

Because the SRWTP is planned to accommodate growth in Sacramento regional area by 2020, development in the SPA that occurs by 2020 would be accommodated by planned SRWTP capacity. Over time, additional planning at the SRWTP would occur, and overall capacity would be assessed and additional capacity planned for and added. The SRWTP site has sufficient land area to accommodate a substantially higher flow than 218 mgd; however, future plans beyond the next 12 years are speculative.

There is expected to be sufficient SRWTP capacity to accommodate project flows under the Proposed Project Alternative through 2020. There would be no assurances that the SRWTP would have adequate capacity for new wastewater flows for project development occurring after 2020. Therefore, the potential lack of treatment capacity past 2020 at full project buildout is a **direct, potentially significant** impact. The project would also contribute to the need to expand the facility and therefore would contribute **indirectly** to the **significant and unavoidable** short-term impact related to air quality from expansion of the SRWTP identified in the 2020 Master Plan EIR.

Regarding expansion of the SRWTP, implementation of mitigation measures to reduce air quality impacts is the responsibility of SRCSD. Such measures would be implemented in accordance with the certified SRWTP 2020 Master Plan EIR. The Proposed Project Alternative would indirectly contribute to impacts on air quality that would be **significant and unavoidable** after implementation of all feasible mitigation measures. The City of Folsom would not have control or authority over the timing or implementation of Mitigation Measure 3A.16-3. The agency(ies) with jurisdiction over these off-site elements can and should implement Mitigation Measure 3A.16-3, which would mitigate this potential impact to a less than significant level.

IMPACT **Increased Demand for EID Off-Site Wastewater Collection and Conveyance Facilities.** *The wastewater generated within the 189-acre EID service area would require off-site wastewater collection and conveyance facilities to the EID facility.*

Mitigation

Mitigation Measure 3A.16-4: Submit Proof of Adequate EID Off-Site Wastewater Conveyance Facilities and Implement EID Off-Site Infrastructure Service Systems or Ensure That Adequate Financing Is Secured.

Before the approval of the final map and issuance of building permits for all project phases, the project applicant(s) of all project phases shall obtain proof from EID that an adequate wastewater conveyance system either has been constructed or is ensured through the use of bonds or other sureties. The project applicants of all project phases shall submit this proof to the City of Folsom. EID off-site wastewater conveyance infrastructure sufficient to provide adequate service to project shall be in place for the amount of development identified in the tentative map before approval of the final map and issuance of building permits for all project phases, and before issuance of occupancy permits, or their financing shall be ensured to the satisfaction of the City.

Implementation: The project applicant(s) of all project phases.

Timing: Before approval of final maps and issuance of building permits for any project phase.

Enforcement: City of Folsom Community Development Department and City of Folsom Public Works Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Approximately 189 acres of the SPA east of Empire Ranch Road is within the EID service area and off-site wastewater collection and conveyance facilities would be provided by EID. The wastewater infrastructure plan (MacKay & Soms 2008a) has identified three possible points of connection (POCs) to the existing EID conveyance system as described below.

POC 1 would be to an existing 6-inch sewer main at Winterfield Court approximately 100 feet east of the SPA boundary. POC 1 would eliminate the need for Pump Station 4.

POC 2 would be to an existing 6-inch sewer main at the intersection of Stonebriar Drive and Prima Way. POC 2 would eliminate the need for Pump Station 3.

POC 3 would be to an existing 6-inch sewer main at Ranch Bluff Way south of White Rock Road. POC 3 would reduce flow to the East Sanitary Sewer Pump Station.

Sewer flows from the EID service area would be conveyed to an existing pump station at the intersection of White Rock Drive and Winterfield Drive and ultimately conveyed to the El Dorado Hills WWTP.

The existing collection and conveyance facilities may not have the capacity to accommodate wastewater flows generated by the project and could require improvements to meet project demands. Potential improvements include expanding the capacity of existing sewer pipelines, upgrading or replacing the existing pump, and installing an additional manhole; however, it is not known at this time what specific improvements would be required. Any improvements to these facilities would require additional analysis in a subsequent CEQA document

to identify specific impacts and any required mitigation measures. Impacts resulting from improvements to EID collection and conveyance facilities could include: temporary, short-term generation of criteria air pollutants, such as PM₁₀ (e.g., respirable particulate matter with a diameter smaller than 10 microns) and emissions of ozone precursors (e.g., reactive organic gases and oxides of nitrogen) during construction; temporary lane closures; increased truck traffic and other roadway impacts during construction; exposure of sensitive receptors to noise levels above noise ordinances during construction; exposure of sensitive noise receptors to new stationary-source noise from potential pump station improvements; and exposure of construction crews and the public to hazardous materials used in construction.

Because it is not known at this time if existing EID collection and conveyance facilities have the capacity to accommodate wastewater flows generated by project development and what improvements would be required, the Proposed Project Alternative could result in **direct and indirect, potentially significant** impacts related to improvements to off-site EID collection and conveyance facilities.

Implementation of Mitigation Measure 3A.16-4 would reduce significant impacts associated with increased demand for EID off-site wastewater collection facilities under the Proposed Project Alternative to a **less-than-significant** level because adequate EID off-site wastewater conveyance facilities would be documented or adequate financing would be secured before approval final maps and issuance of building permits.

However, it is unknown if existing collection and conveyance facilities have the capacity to accommodate wastewater flows generated by project development and the project could directly and indirectly contribute to the need for off-site EID wastewater facility improvements. Therefore, the Proposed Project Alternative would contribute to the potentially significant environmental effects associated with improvements to these facilities for which feasible mitigation may not be available to reduce impacts to a less-than-significant level. Therefore, this would be a **potentially significant and unavoidable** impact.

No other feasible mitigation measures are available to reduce impacts associated with increased demand for EID facilities to a less-than-significant level because it is not yet known whether EID facilities would require expansion. Furthermore, if EID facilities do require expansion, the City would not have jurisdiction to implement and mitigation to reduce impacts of such an expansion to a less than significant level. However, implementation of Mitigation Measure 3A.16-4 requires the project developer to provide to the City proof of EID capacity or a funding contribution. There are no other feasible mitigation measures available to mitigate impacts related to potential increase in demand for EID facilities because the City does not have direct control over EID facilities. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to this impact.

IMPACT 3A.16-5 **Increased Demand for El Dorado Hills Wastewater Treatment Plant Facilities.** *Project implementation would result in increased generation of wastewater. Collected wastewater flows from the 189-acre EID portion of the SPA would ultimately be transported to the El Dorado Hills WWTP for treatment and disposal.*

Mitigation

Mitigation Measure 3A.16-5: Demonstrate Adequate El Dorado Hills Wastewater Treatment Plant Capacity.

The project applicant(s) of all project phases shall demonstrate adequate capacity at the El Dorado Hills WWTP for new wastewater flows generated by project development. This shall involve preparing a tentative map–level study and paying connection and capacity fees as identified by EID. Approval of the final map and issuance of building permits for all project phases shall not be granted until the City verifies adequate El Dorado Hills WWTP capacity is available for the amount of development identified in the tentative map.

Implementation: The project applicant(s) of all project phases.

- Timing:** Before approval of final maps and issuance of building permits for any project phases involving the El Dorado Hills WWTP.
- Enforcement:** City of Folsom Community Development Department and City of Folsom Public Works Department.

Finding

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR/FEIS.

Implementation of the Proposed Project Alternative would generate 0.28 mgd of average dry-weather flow and 0.70 mgd peak wet-weather flow within the EID service area (MacKay & Somps 2008b). Collected wastewater flows from the EID portion of the SPA would ultimately be transported to the El Dorado Hills WWTP for treatment and disposal.

Currently, the design capacity of the El Dorado Hills WWTP is 3.0 mgd average dry-weather flow and 7.6 mgd peak wet-weather flow. As of 2007, the average dry weather flow is approximately 2.86 and the peak wet-weather flow is 8.04 mgd. Expansion of the WWTP is required to provide wastewater treatment capacity for land uses in El Dorado Hills as identified by the El Dorado County General Plan (2003), to meet anticipated regulatory requirements for water quality, and to help meet recycled water demands. The treatment plant is currently being expanded to 4.0 mgd, which is anticipated to be completed in December 2009. The full buildout of the treatment plant to 5.4 mgd is expected to occur by 2025.

The SPA was not included in the planned future capacity of the El Dorado Hills WWTP; therefore, the Proposed Project Alternative would potentially result in increased in wastewater flows that exceed treatment plant capacity. Any improvements the treatment plant would require additional analysis in a separate CEQA document to identify specific impacts and any required mitigation measures. Impacts resulting from improvements to the El Dorado Hills WWTP could include: temporary, short-term generation of criteria air pollutants, such as PM₁₀ and emissions of ozone precursors (e.g., reactive organic gases and oxides of nitrogen) during construction; generation of new odors from operation of expanded treatment plant facilities; degradation of water quality from increased discharges to Carson Creek; temporary roadway lane closures, increased truck traffic, and other roadway impacts during construction; exposure of sensitive receptors to noise levels above noise ordinances during construction; and exposure of construction crews and the public to hazardous materials used in construction.

Because it is not known at this time if the existing El Dorado Hills WWTP has the capacity to treat wastewater flows generated by project development and what improvements would be required, the Proposed Project Alternative could result in **direct and indirect, potentially significant** impacts related improvements to the El Dorado Hills WWTP.

Implementation of Mitigation Measure 3A.16-5 would reduce significant impacts associated with increased demand for wastewater treatment plant facilities under the Proposed Project Alternative to a **less-than-significant** level because adequate wastewater treatment facilities would be documented before approval final maps and issuance of building permits.

However, it is unknown if existing the El Dorado Hills WWTP has the capacity to accommodate wastewater flows generated by project development, and the project could directly and indirectly contribute to the need for El Dorado Hills WWTP improvements. Therefore, the Proposed Project Alternative could contribute to the potentially significant environmental effects associated with improvements to treatment plant facilities for which feasible mitigation may not be available to reduce impacts to a less-than-significant level. Therefore, this would be a **potentially significant and unavoidable** impact.

No other feasible mitigation measures are available to reduce impacts associated with increased demand for El Dorado Hills WWTP facility to a less-than-significant level because it is not yet known whether the El Dorado Hills WWTP would require expansion. Furthermore, if the El Dorado Hills WWTP does require expansion, the City would not have jurisdiction to implement and mitigation to reduce impacts of such an expansion to a less than significant level. However, implementation of Mitigation Measure 3A.16-5 requires the project developer to provide to the City proof of capacity. There are no other feasible mitigation measures available to mitigate impacts related to potential increased demand for the El Dorado Hills WWTP facility because the City does not have direct control over EID facilities. As explained in Section 4, “Statement of Overriding Considerations”, the environmental, economic, legal, social, technological, and other benefits outweigh and override the remaining significant impacts related to this impact.

UTILITIES AND SERVICE SYSTEMS – WATER

IMPACT 3B.16-3 **Potential Disruption to Existing Utilities and Infrastructure.** *Construction of the Off-site Water Facilities has the potential to disrupt existing public and private utilities and infrastructure.*

Mitigation

Mitigation Measure 3B.16-3a: Minimize Utility Conflicts by Implementing an Underground Services Alert.

Underground utilities and service connections shall be identified prior to commencing any excavation work through the implementation of an Underground Services Alert (USA). The exact utility locations will be determined by hand-excavated test pits dug at locations determined and approved by the construction manager (also referred to as “pot-holing”). Temporary disruption of service may be required to allow for construction. No service on such lines would be disrupted until prior approval is received from the construction manager and the service provider.

Implementation: City of Folsom Utilities Department.

Timing: Prior to construction of all Off-site Water Facilities.

Enforcement: Public and Private Utilities, where applicable, including: Sacramento County Sanitation District, Pacific Gas and Electric, Sacramento Municipal Utility District, City of Folsom Public Works Department, Sacramento County Department of Water Resources, Sacramento County Water Agency, City of Rancho Cordova Public Works Department, Sacramento County Roads and Airports, and Aerojet Corporation.

Mitigation Measure 3B.16-3b: Coordinate with Utility Providers and Implement Appropriate Installation Methods to Minimize Potential Utility Service Disruptions.

Prior to installation, the City shall consult with SCWA, SRCSD, CSD-1, and PG&E to determine proper installation methods and final design criteria to minimize the potential for disruptions to existing and planned utilities.

Implementation: City of Folsom Utilities Department.

Timing: Prior to construction of all Off-site Water Facilities.

Enforcement: Public and Private Utilities, where applicable, including: Sacramento County Sanitation District, Pacific Gas and Electric, Sacramento Municipal Utility District, City of Folsom Public Works Department, Sacramento County Department of Water

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Several municipal and private utilities, including those owned and operated by SCWA, PG&E, SMUD, SRCSD, and CSD-1, have existing underground utilities and future projects proposed within Zone 4 of the Off-site Water Facilities Study Area. Construction activities associated with the Off-site Water Facility Alternatives could potentially result in a disturbance of existing utilities or conflict with planned utility projects. Without a clear understanding of the location and placement of existing utilities, including existing sanitary sewer, natural gas, and potable water lines, Off-site Water Facilities-related trenching operations could come into contact with such utilities thereby disrupting service and potentially endangering construction workers. This **direct** impact is considered **potentially significant**. **Indirect** impacts from potential service disruptions would also be **potentially significant** if the duration of the outage extend for longer than few days.

Implementation of Mitigation Measures 3B.16-3a and 3B.16-3b would reduce potentially significant impacts under the Proposed Off-site Water Facility Alternative to a **less-than-significant** level by requiring consultation with the respective utility operators to determine potential utility conflicts.

IMPACT 3B.16-5 **Potential Inefficient Energy Consumption.** *Construction and operation of the Off-site Water Facilities could result in the inefficient consumption of energy thereby adversely affecting current and future energy conservation efforts.*

Mitigation

Implement Mitigation Measure 3B.4-1a: Implement GHG Reduction Measures during Construction.

Implement Mitigation Measure 3B.4-1b: Prepare and Implement an Off-site Water Facilities Climate Action Plan.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

During construction, the Off-site Water Facility Alternatives would consume energy in two general forms: 1) the fuel energy consumed by construction vehicles and equipment; and 2) bound energy used in the manufacturing and processing of construction materials such as steel, concrete, pipes, lumber, and glass. Energy in the form of fuels used for construction vehicles and other equipment would be used during site clearing, grading, and construction. Such fuel energy use would be temporary and not represent a significant or permanent commitment to the use of energy. In addition, given high fuel prices, contractors have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Though Off-site Water Facilities construction is not anticipated to occur until 2010, substantial reductions in energy inputs for construction materials can be achieved by selecting building and construction materials composed of recycled materials, which require substantially less energy to produce than from non-recycled materials. Examples of recycled building materials include the use of: 1) recycled nylon in interior carpeting;

2) recycled plastic for moldings and interior finishes; 3) fly ash in concrete; and 4) recycled rubber in asphalt. The extent to which recycled materials would be used during construction of the Off-site Water Facilities has not yet been determined.

There would also be some non-renewable petroleum-based fuel savings resulting from Mitigation Measures 3B.2-1a and 3B.2-1b in Section 3B.2, “Air Quality – Water,” which would prevent the unnecessary idling of vehicles and equipment and require that vehicles and equipment be properly maintained. In addition, a Solid Waste Diversion and Recycling Plan (or such other documentation to the satisfaction of the City) would be required to be in place that demonstrates the diversion from landfills and recycling of all non-hazardous, salvageable, and re-useable wood, metal, plastic, and paper products during construction and demolition activities. This would minimize the waste of bound energy used in the original manufacturing and processing of construction materials. Taken together, these Off-site Water Facilities characteristics and mitigation measures demonstrate that the proposed Off-site Water Facilities would assist the region in increasing its reliance on renewable, non-petroleum-based energy resources. This **direct** impact would be **potentially significant**.

Off-Site Water Facilities Operations

The Off-site Water Facilities WTP, booster pump station, and distribution infrastructure would increase demands for electricity within the “Water” Study Area. Based on energy consumption calculations used to quantify greenhouse gas emissions (GHGs) and provided in Appendix M, operations of the collective Off-site Water Facilities at build-out within the SPA could require upwards of 20.7 megawatts hours (MWh) annually. This increase in energy use would represent a new demand for electricity. With the implementation of measures recommended in Mitigation Measure 3B.4-1b to minimize the generation of GHGs, these measures would also promote energy efficiency consistent with standards contained in Title 24 of the California Code of Regulations (2007) and CALGREEN, aimed at the incorporation of energy-conserving design and construction.

Existing electrical distribution infrastructure exists adjacent each of the WTP sites, and any improvements and extensions required to accommodate the Off-site Water Facilities would be limited to on-site locations and performed in consultation with SMUD prior to installation.

Because the Off-site Water Facilities would not result in an extended disruption in service provided by a utility and would be operated in the most efficient manner possible, the **potentially significant direct** impact generated by additional power supply requirements and would be reduced to a less-than-significant level.

With the application of Mitigation Measures 3B.4-1a and 3B.4-1b, the City’s energy usage during construction and operation of the Off-site Water Facilities would be minimized to the maximum extent feasible and therefore the impact would be reduced to a **less-than-significant** level.

GROUNDWATER RESOURCES – WATER

IMPACT 3B.17-1 **Exceedance of Water Quality Standards and Requirements for Groundwater.** *The Off-site Water Facility Alternatives could generate discharges to or contribute to the depletion of groundwater resources thereby potentially directly and indirectly violating water quality standards or waste discharge requirements.*

Mitigation

Mitigation Measure 3B.17-1a: Implement Construction Dewatering Best Management Practices.

During construction at site locations containing high groundwater, if groundwater from dewatering activities cannot be contained within the construction area (e.g., pipeline corridor, WTP), it shall be pumped to an authorized onsite land area, existing detention facilities, or Baker tanks or equivalent with sufficient capacity to control the volume of groundwater. Tanks shall be

equipped with either a gel coagulant, a filter system, or other containment to remove sediment. The Off-site Water Facilities Stormwater Pollution Prevention Plan (SWPPP) shall include BMPs, as appropriate, to retain, treat, and dispose of groundwater from dewatering activities. Measures shall include, but not limited to, the following:

- ▶ temporarily retain pumped groundwater, as appropriate, to reduce turbidity and concentrations of suspended sediments before discharge to surface waterways;
- ▶ convey pumped groundwater to a suitable land disposal area capable of percolating flows; and/or
- ▶ incorporate other applicable measures from the Caltrans Storm Water Quality Handbook, Section 7: Dewatering Operations (2004).

Implementation: City of Folsom Utilities Department.

Timing: Prior to and during construction.

- Enforcement:**
1. California Department of Fish and Game or Regional Water Quality Control Board
 2. City of Folsom Community Development Department.
 3. Sacramento County Planning Department or City of Rancho Cordova Planning Department for improvements within their respective jurisdictions.

Mitigation Measure 3B.17-1b: Implement a Dewatering Discharge Monitoring Program.

A groundwater discharge monitoring program shall be implemented to ensure that receiving water quality does not exceed levels that would impact aquatic resources and agricultural use. If monitoring reveals that water quality would impact these beneficial uses, discharges to surface waterways shall be reduced or diluted to acceptable levels, or terminated. If discharges are reduced or terminated, groundwater shall be disposed through land application. Groundwater collected during dewatering shall be tested for contamination prior to disposal and comply with Central Valley RWQCB requirements.

Implementation: City of Folsom Utilities Department.

Timing: Prior to and during construction.

- Enforcement:**
1. California Department of Fish and Game or Regional Water Quality Control Board.
 2. City of Folsom Community Development Department.
 3. Sacramento County Planning Department or City of Rancho Cordova Planning Department for improvements within their respective jurisdictions.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Construction of the Off-Site Water Facilities pipelines, pump stations, and WTP would, at times, require dewatering of shallow, perched groundwater in the immediate vicinities of excavations and installation of underground features at a limited number of areas where groundwater depths are shallow. In order to create safe working conditions, free of standing water, when needed, shallow groundwater wells would be installed to lower groundwater elevations in the immediate vicinity of boring shafts to about 15 to 30 feet below the ground surface. During trenchless construction, dewatering would be necessary to remove water from tunnel, launching, and receiving pits. It is not known how much water would be withdrawn because the volume would be influenced by the local shallow aquifer character, the depth of excavation, and the duration that subsurface work is conducted.

Groundwater withdrawn from the construction areas would be subsequently discharged to local waterways or drainage ditches, or via land application. These discharges may contain sediments, dissolved solids, salts, and other water quality constituents found in the shallow groundwater, which could degrade the quality of receiving waters. Degradation of local receiving waters from the introduction of shallow groundwater during construction dewatering could result in a **potentially significant direct** and **indirect** impact to receiving waters.

With the implementation of the above mitigation measures, impacts to groundwater quality under the Proposed Off-site Water Facility Alternative would be reduced to a **less-than-significant** level by ensuring that all dewatering discharges are properly managed in accordance with RWQCB requirements and, if determined necessary, receive appropriate treatment prior to off-site discharge.

WATER SUPPLY – LAND

IMPACT 3A.18-1 **Increased Demand for Water Supplies.** *Project water demands would require the acquisition of surface water entitlements from the Natomas Central Mutual Water Company to provide a reliable water supply.*

Mitigation

Mitigation Measure 3A.18-1: Submit Proof of Surface Water Supply Availability.

- a. Prior to approval of any small-lot tentative subdivision map subject to Government Code Section 66473.7 (SB 221), the City shall comply with that statute. Prior to approval of any small-lot tentative subdivision map for a proposed residential project not subject to that statute, the City need not comply with Section 66473.7, or formally consult with any public water system that would provide water to the affected area; nevertheless, the City shall make a factual showing or impose conditions similar to those required by Section 66473.7 to ensure an adequate water supply for development authorized by the map.
- b. Prior to recordation of each final subdivision map, or prior to City approval of any similar project-specific discretionary approval or entitlement required for nonresidential uses, the project applicant(s) of that project phase or activity shall demonstrate the availability of a reliable and sufficient water supply from a public water system for the amount of development that would be authorized by the final subdivision map or project-specific discretionary nonresidential approval or entitlement. Such a demonstration shall consist of information showing that both existing sources are available or needed supplies and improvements will be in place prior to occupancy.

Implementation: The project applicant(s) of all project phases.

Timing: Before approval of final maps and issuance of building permits for any project phases.

Enforcement: City of Folsom Community Development Department and City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Presently, there are no public water supply facilities on the “Land” portion of the project site. Approximately 3,330 acres of the “Land” portion of the project site would be within the City of Folsom’s service area and the remaining 172 acres generally east of Empire Ranch Road would be within the El Dorado Irrigation District (EID) service area. It is assumed that the City would provide treated water to EID for its service area within the project site; however, water supplies delivered in EID’s service area would be controlled by EID (Tully & Young 2010: 8). The water supply identified for the project is an entirely new source for both service areas and would therefore not affect any existing water supply operations in the City of Folsom or EID service areas (Tully & Young 2010: 7).

Proposed Project Alternative’s Water Demand

In compliance with SB 610, a WSA has been prepared to determine whether the projected available water supplies would meet the Proposed Project Alternative’s water demand, in addition to the existing and planned future uses. For purposes of calculating water supply and demand for the project, the WSA assumed water supplies would be required in 2013 and that implementation of the project would occur in five phases over a 20-year period (See Section 2.3.1, “Project Phasing” for further information on project phasing.).

The SPA’s water demands at full buildout were estimated by applying water demand factors to each proposed land use. These demand factors were derived based on a review of meter data for the City of Folsom and other water purveyors in the region as well as pending conservation measures (Tully & Young 2010: 11). Water demands are assumed to increase by 5% from normal-year levels during single-dry and multiple-dry years as a result of increases in outdoor demands for all residential and nonresidential demand categories (Tully & Young 2010: 30). In addition, the total estimated water demands in normal, single-dry, and multiple-dry years assume a non-revenue water loss (i.e., water lost through leaks, meter inaccuracies, or unknown or unbilled connections and uses [e.g., fire hydrant flushing and construction water]) of 10%.

The project would conform to the 2007 requirements of Best Management Practices (BMPs) from the California Urban Water Conservation Memorandum of Understanding (or later edition if applicable). These BMPs could include: performing site-specific landscape and interior water surveys; conducting public information campaigns and school education programs; adopting a water waste ordinance; and identifying opportunities for installation of dedicated irrigation meters, monitoring progress through billing, and providing site-specific assistance for accounts 20% over budget. The California Urban Water Conservation BMPs would have a long-term affect on the City’s ability to manage water use throughout the project site. To the extent that the City requires installation of dedicated irrigation meters in the project site, a monitoring and survey program would provide an opportunity to ensure that landscape water demands are achieving desired water conservation targets. The City’s water conservation coordinator would be assigned to manage water conservation programs and City staff will be authorized to enforce the water waste ordinance. Through targeted outreach, the City can encourage continued customer use of highly efficient appliances and irrigation systems, emphasize the need to retain efficient landscape plantings, and minimize otherwise wasteful uses. (Tully & Young 2010: 19).

As of 2009, urban water suppliers are required to select one of four water conservation targets with the statewide goal of achieving a 20% reduction in urban per capita water use by 2020. While the City has yet to select a water conservation target, the city intends to select a target that would require the City to reduce water use by 20% by 2020. (Tully & Young 2010: 15.)

The WSA assumes that a 20% reduction in total demand is a long-term citywide goal. In the near term, it is assumed the City’s water conservation efforts related to efficient infrastructure requirements and landscape features support at least a 10% reduction in historic per capita unit demand factors. (Tully & Young 2010: 15.)

Table 3-15 below (Table 3A.18-6 on page 3A.18-11 of the DEIR/DEIS) shows projected water demands for the Proposed Project Alternative during normal, single-dry, and multiple-dry years. The total projected water demands for the Proposed Project Alternative at buildout are 5,422 AFY during normal years and 5,577 AFY during single-dry and multiple-dry years.

Land Use Type	Normal-Year Water Demands (AFY) ¹			Single-Dry and Multiple-Dry Year Water Demands (AFY) ²		
	City of Folsom	EID	Total	City of Folsom	EID	Total
Single Family	1,028	69	1,097	1,061	71	1,132
Single-Family High Density	1,108	69	1,177	1,132	70	1,202
Multi-family Low Density	556	65	621	567	66	633
Multi-family Medium Density	249	--	249	252	--	252
Multi-family High Density	247	--	247	249	--	249
Mixed-Use District ³	160	--	160	162	--	162
Office Park	195	--	195	203	--	203
Community Commercial	66	--	66	69	--	69
General Commercial	313	50	363	324	52	376
Regional Commercial	180	--	180	186	--	186
Parks	481	--	481	505	--	505
Public/Quasi-Public	514	--	514	533	--	533
Circulation Improvements	68	3	71	72	3	75
Open Space	--	--	--	--	--	--
Total Demand	5,166	255	5,422	5,315	262	5,577

Notes: AFY = acre-feet per year
¹ The total estimated water demand in a normal year assumes a 10% non-revenue water factor.
² The total estimated water demand in single and multiple dry years assumes an increase of 5% for outdoor water demands and then applies a 10% non-revenue water factor.
³ The Mixed-Use District assumes residential and commercial land uses.
⁴ Minor discrepancies in totals are a result of rounding.
Source: Tully & Young 2010: 31

Proposed Water Supply

Water demands for the project would be met by securing a permanent assignment of long-term, CVP “Project Water” from the NCMWC under Contract No. 14-06-200-885A-R-1 (NCMWC CVP Contract) with the Bureau of Reclamation (Tully & Young 2010: 33). The normal year supply contractually available to the City would be not less than 8,000 AFY; however, the maximum diversion would be 6,000 AFY (Tully & Young 2010: 43). This higher quantity of water is required to factor in the 25% reduction that could occur in single-dry and multiple-dry years thereby reducing the quantity delivered to 6,000 AFY.

The “Project Water” would be made available by NCMWC reducing its surface water diversions/pumping during the irrigation season at the Riverside Pumping Plant. This water supply would then remain in the Sacramento River and would flow approximately 20 miles downstream, where it would be removed from the river at the FRWA’s diversion facility. This diverted surface water would be conveyed to the project site via both FRWA diversion facilities and the off-site conveyance facilities that are proposed as part of the “Water” portion of this project. (See Chapter 2, “Alternatives” of the DEIR/DEIS for a detailed description of the proposed off-site water facilities.) The water may be either treated by SCWA’s Vineyard Surface WTP or through construction of a different WTP proposed as part of the “Water” portion of this project (see Chapter 2, “Alternatives” and Impact 3A.18-2 in the DEIR/DEIS).

The CVP “Project Water,” by contract, is currently limited to use for irrigation during the growing season (July and August) in the NCMWC service area. The water rights permits issued to the Bureau of Reclamation by the SWRCB include M&I as a permitted use. Therefore, CVP “Project Water” can be used for M&I purposes within the project site.

For the CVP “Project Water” to serve as an effective water supply, it would be necessary for Bureau of Reclamation to modify the existing delivery schedule to a year-round M&I schedule, which would allow for a more consistent diversion of 6,000 AFY of the 8,000 AFY over the course of a given year.

Discretionary approval from the Bureau of Reclamation would be required for the use of CVP “Project Water” for M&I purposes and for modification of the existing delivery schedule. The City would be responsible for obtaining approvals from the Bureau of Reclamation. The City is serving as the lead agency under CEQA. The Bureau of Reclamation is a NEPA cooperating agency in relation to this project and would be required to comply with all applicable ESA requirements.

Water Supply Agreements

Surface water would be obtained from the NCMWC pursuant to a series of agreements between South Folsom Properties LLC (SFP) and NCMWC, the City and SFP, and the City and SCWA.

SFP and NCMWC Agreement

The SFP and NCMWC have executed *Terms and Conditions of Purchase and Sale of Water Entitlements* on December 17, 2007 for the initial purchase and sale of surface water from NCMWC (see Appendix E of the WSA). Under the SFP-NCMWC Agreement, NCMWC has agreed to permanently assign to the City, through SFP, not less than 8,000 AFY of CVP “Project Water” to which NCMWC has rights under its Renewal Contract with the Bureau of Reclamation and provides that the assigned water will be subject to a 25% reduction in a “Critical Year.” The agreement identifies the conditions that are required by both parties to finalize the sale, which will ultimately lead to a permanent assignment of CVP “Project Water” to the City (see City of Folsom-SFP MOU, below). (Tully & Young 2010: 38).

The SFP-NCMWC Agreement is effective until April 1, 2012, unless extended by SFP. During the period that the SFP-NCMWC Agreement is effective, both SFP and NCMWC must satisfy specific obligations to ensure that water can ultimately be made available for use as a M&I supply. Those obligations include: (1) preparation of an engineering study to ensure NCMWC may meet its future demands in the absence of the assigned supply; (2) approval from the Bureau of Reclamation to reschedule the assigned supply from an irrigation demand schedule to a M&I schedule; and (3) completion of all state and Federal environmental review. (Tully & Young 2010: 39.)

City of Folsom and SFP Agreement

The City of Folsom and SFP executed a non-binding MOU on August 26, 2008, which contemplates the assignment to the City of NCMWC water supplies acquired under the SFP-NCMWC Agreement (see Appendix F of the WSA). The MOU requires the City to evaluate the technical feasibility of delivering water on a year-round M&I schedule, diverting water from the Sacramento River at the FRWA facilities, and conveying water to the project site using FRWA facilities. The City and SFP cannot sign a binding legal agreement until after the environmental review is completed. (Tully & Young 2010: 39.)

City of Folsom and SCWA Capacity Agreement

The City of Folsom and the SCWA signed the *Memorandum of Understanding between the City of Folsom and Sacramento County Water Agency Concerning the Folsom Sphere of Influence Area and Sharing of Freeport Project Capacity* on December 15, 2009 (see Appendix M3 of the DEIR/DEIS). The MOU establishes principles and parameters to govern negotiations between the City and SCWA for purchase of a portion of SCWA’s capacity

in FRWA’s diversion facilities for conveyance of NMCWC water to the project site. The City and SCWA will cooperate during the MOU’s term limits with the goal of eventually executing a binding agreement. (Tully & Young 2010: 39.)

Reasonable Likelihood of Water Supplies to Meet Project Demands

It is the intent of the City of Folsom to obtain 8,000 AFY surface water from NCMWC. In each single-dry and multiple-dry years, it is assumed that the water supply is restricted by 25% resulting in a total supply of 6,000 AFY. Although 8,000 AFY is anticipated to be available through contract, for every normal water year between 2013 and 2033, the City would divert a maximum of 6,000 AFY to serve the project. (Tully & Young 2010: 45.)

The Proposed Project Alternative’s water demands under normal and critically dry year conditions were compared to available water supplies to determine whether a reliable water supply is available to serve the Proposed Project Alternative and existing water demands during normal and dry years. As shown in Table 3-16 below (Table 3A.18-7 on page 3A.18-13 of the DEIR/DEIS), adequate water supplies are available to meet projected water demands of the Proposed Project Alternative, even in critically-dry years.

Table 3-16 Normal-Year and Dry-Year Comparison of Water Supply and Demand for the Proposed Project Alternative		
Surface Water Supply and Demand	Normal-Year	Dry-Year
Supply	6,000	6,000
Demand	5,421	5,577
Total surplus	579	423
Notes: AFY = acre-feet per year Source: Tully & Young 2010: 46		

Impact Conclusion

Based on the above analysis and as shown in Table 3-16 above (Table 3A.18-7 on page 3A.18-13 of the DEIR/DEIS), the proposed water supply from NCMWC would be sufficient to meet projected water demands under the Proposed Project Alternative in normal and critically dry years. Those water supplies are considered reliable, and, as a physical matter, there is reasonable certainty that surface water supplies needed to serve the Proposed Project Alternative at buildout would be available. Although there is no complete certainty as to the legal and regulatory approvals required for the “Water” portion of the project or Off-site Water Facility Alternatives, including those from Reclamation and SCWA; the draft agreements and MOUs entered into between the City and/or project applicants and some of these critical approval entities (see Appendix M-I, M-II, and M-III of the DEIR/DEIS) establish a solid initial framework for these approvals. This fact combined with the development the City’s proposed Off-site Water Facility Alternatives as presented in Chapter 2, “Alternatives,” of the DEIR/DEIS provide a high level of certainty for the reliability of the proposed CVP water supply, conveyance mechanisms, and water treatment capacity. Based on these circumstances, the project would have sufficient water supplies available to serve projected demand from CVP water supplies acquired as part of the City’s Off-site Water Facility Alternatives and, therefore, the **direct** and **indirect** impacts of an insufficient water supply for the project are considered **less-than-significant**.

Indirect impacts from use of NCMWC surface water supplies to meet project demand, SCWA’s dedication of up to 6.5 mgd in Segments 1 and 2 in the Freeport Project, and effects of changing the delivery CVP schedule from agriculture to M&I are evaluated throughout the “B”, or “Water” sections of Chapter 3 and Chapter 4, “Other Statutory Requirements” contained in the DEIR/DEIS. It is assumed that once these entitlements are approved,

the surface water supplies would continue to flow to City through the Freeport Project without interruption, barring a major shift in climate or policy, or unless current California water law principles are applied in a substantially more restrictive manner. However, given that the water supply cannot be secured and water conveyance and treatment facilities constructed in advance of approval of the project, without additional contingencies placed on the project applicants to confirm the availability of water and related infrastructure for the Folsom SPA, a **potentially significant direct** impact could result if no “Water” project were implemented in a timely manner following approval of the Specific Plan.

This project includes a water supply to serve the proposed development of the SPA. Implementation of Mitigation Measure 3A.18-1 therefore would reduce significant impacts related to the need for surface water supplies under the Proposed Project Alternative to a **less-than-significant** level because the City would require written certification verifying the availability of a long-term, reliable surface water supply for the project or would require that needed improvements be in place prior to occupancy.

IMPACT 3A.18-2 **Increased Demand for Off-Site Water Conveyance and Treatment Facilities.** *Project implementation would result in increased demand for off-site water treatment facilities to deliver water to customers on the project site.*

Mitigation

Mitigation Measure 3A.18-2a: Submit Proof of Adequate Off-Site Water Conveyance Facilities and Implement Off-Site Infrastructure Service System or Ensure That Adequate Financing Is Secured.

Before the approval of the final subdivision map and issuance of building permits for all project phases, the project applicant(s) of any particular discretionary development application shall submit proof to the City of Folsom that an adequate off-site water conveyance system either has been constructed or is ensured or other sureties to the City’s satisfaction. The off-site water conveyance infrastructure sufficient to provide adequate service to the project shall be in place for the amount of development identified in the tentative map before approval of the final subdivision map and issuance of building permits for all project phases, or their financing shall be ensured to the satisfaction of the City. A certificate of occupancy shall not be issued for any building within the SPA until the water conveyance infrastructure sufficient to serve such building has been constructed and is in place.

Implementation: The project applicant(s) for any particular discretionary development application.

Timing: Before approval of final maps and issuance of building permits for any project phases.

Enforcement: City of Folsom Community Development Department and City of Folsom Public Works Department.

Mitigation Measure 3A.18-2b: Demonstrate Adequate Off-Site Water Treatment Capacity (if the Off-Site Water Treatment Plant Option is Selected).

If an off-site water treatment plant (WTP) alternative is selected (as opposed to the on-site WTP alternative), the project applicant(s) for any particular discretionary development application shall demonstrate adequate capacity at the off-site WTP. This shall involve preparing a tentative map-level study and paying connection and capacity fees as determined by the City. Approval of the final project map shall not be granted until the City verifies adequate water treatment capacity either is available or is certain to be available when needed for the amount of development identified in the tentative map before approval of the final map and issuance of building permits for all project phases. A certificate of

occupancy shall not be issued for any building within the SPA until the water treatment capacity sufficient to serve such building has been constructed and is in place.

Implementation: The project applicant(s) for any particular discretionary development application.

Timing: Before approval of final maps and issuance of building permits for any project phases.

Enforcement: City of Folsom Community Development Department and City of Folsom Public Works Department.

Finding

Changes or alterations have been required in, or incorporated into, the Proposed Project Alternative which would avoid or substantially lessen this potentially significant environmental effect as identified in the FEIR/FEIS.

Surface water would be diverted from the Sacramento River at FRWA's diversion facilities and conveyed to the SPA via both FRWA diversion facilities and the off-site conveyance facilities proposed in the "Water" portion of the DEIR/DEIS. (See Chapter 2, "Alternatives," of the DEIR/DEIS for a detailed discussion of off-site conveyance pipeline alternatives and off-site WTP alternatives.)

The project would include purchasing from SCWA dedicated capacity within the FRWP, which would serve as the point of diversion on the Sacramento River and partial conveyance pathway for not more than 6,000 AFY of CVP "Project Water" purchased from NCMWC. CVP "Project Water" would be pumped and conveyed through the FRWA diversion facilities and conveyance pipeline to the SCWA and EBMUD pipeline bifurcation point. New off-site water supply conveyance infrastructure would be constructed from the bifurcation point to the project site. (The impacts of constructing this new water supply conveyance infrastructure are evaluated throughout the "B", or "Water" sections of Chapter 3 of the DEIR/DEIS.)

As discussed above, the City and SCWA have entered into a MOU to develop conditions under which the City may convey surface water using SCWA's capacity, with the goal of eventually executing a binding agreement. (Tully & Young 2010: 39). Under this agreement, the City would purchase 6.5 mgd of dedicated capacity within the SCWA's 85 mgd portion of the FRWA's diversion facilities. This MOU would also allow for additional capacity to accommodate peaking conditions of up to 10 mgd. The use of this capacity would not increase SCWA's permitted diversion rates and would not require any increase in the FRWP's currently permitted diversion capacity. For this reason, no physical changes to the FRWP diversion and pump structure and conveyance pipeline would occur.

One raw or treated-water booster pumping station would need to be constructed at the connection with the Freeport Project to provide sufficient operating pressure within the force main. Depending on the water treatment option chosen, the connection point would occur at the Vineyard Surface WTP, some point along SCWA's proposed northern service area pipeline, or the existing Douglas Treated-Water Storage Tanks. The number and type of pumps would depend on detailed design criteria and the precise location for the pump station has not been selected. However, the City anticipates that this facility would be in close proximity to the associated connection point to the FRWA diversion facilities.

Water treatment could be provided either through purchasing 10-mgd capacity within the Vineyard Surface WTP, construction of a 10-mgd White Rock WTP located southeast of the intersection of White Rock Road and Prairie City Road, construction of a 10-mgd Folsom Boulevard WTP located south of Folsom Boulevard, or construction of a 10-mgd WTP located on the Folsom South of U.S. 50 project site (see Exhibit 2-3 on page 2-15, in Chapter 2, "Alternatives," of the DEIR/DEIS).

Because the “Land” portion of the project site is not served by a public water system and sufficient off-site water conveyance and treatment facilities necessary to serve the project have not been constructed, and because the City and SCWA have not entered into a binding agreement for use of FRWA diversion facilities, this is considered a **direct, potentially significant** impact. The **indirect** physical impacts of constructing these water conveyance and treatment facilities are addressed throughout the EIR/EIS in the “B”, or “Water” sections of Chapter 3 and in Chapter 4, “Other Statutory Requirements” in the DEIR/DEIS.

Implementation of Mitigation Measures 3A.18-2a and 3A.18-2b would reduce significant impacts associated with increased demand for off-site water conveyance and treatment facilities under the Proposed Project Alternative to a **less-than-significant** level because adequate off-site water conveyance and treatment facilities would be documented or adequate financing would be secured before approval final maps and issuance of building permits.

3.4 FINDINGS RELATED TO CUMULATIVE IMPACTS

In addition to the direct and indirect significant impacts caused by the Proposed Project Alternative as discussed above, the City Council finds that implementation of the Folsom South of U.S. 50 Specific Plan will result in the following significant and unavoidable cumulative impacts:

3.4.1 AESTHETICS

The visual character of the SPA and Off-site Water Facilities Study Area is characterized by sweeping view of the Central Valley, coupled with the oak woodlands and grass-covered hillsides. This region is part of the Sierra Nevada foothills and the Central Valley, and is exemplary of those landscapes and of resources that are endemic to the area. Nearby planned or approved developments include the Westborough at Easton Specific Plan project to the west; the Promontory, El Dorado Hills, and Bass Lake Specific Plans projects to the northeast; the Valley View Specific Plan project to the east; and the Carson Creek Specific Plan project to the southeast. These projects would substantially change the visual conditions as open viewsheds are replaced by urban development.

At full buildout, the SPA would consist of developed urban land uses with small areas of open space and parks. Implementation of the “Land” portion of the project would substantially degrade this scenic vista, damage the character of the viewshed from a Sacramento County-designated scenic corridor, and alter the visual character of the SPA. Views along nearby roadways, including Scott Road, Old Placerville Road, White Rock Road, Prairie City Road, and U.S. 50, would change to urban land uses. Furthermore, viewsheds that include the SPA are part of thousands of acres of open space that would no longer exist. This area would become of similar visual quality to nearby developed land, and would no longer be considered a unique or scenic vista. Therefore, the “Land” portion of the project would permanently and substantially alter the scenic vista in the SPA. No feasible mitigation measures are available to reduce impacts associated with the alteration of scenic vistas from project development to a less-than-significant level because project development would result in a permanent, large-scale change.

Although the SPA does not contain, nor is it visible from, a state-designated scenic highway, Scott Road south of White Rock Road is a designated scenic corridor in Sacramento County. The Scenic Highways Element of the Sacramento County General Plan describes views from this roadway to consist of grasslands and cattle-grazing lands. These views are exemplary of rural Sacramento County landscape. Implementation of the “Land” portion of the project would substantially damage views from the portion of Scott Road designated as a scenic corridor through conversion of the existing grassland and cattle grazing land to urban development and the site would no longer provide exemplary views of rural Sacramento County landscape. No feasible mitigation measures are available to reduce impacts associated with the damage of scenic resources within a County-designated scenic corridor to a less-than-significant level.

Nearby planned or approved developments and other development in the project region as a whole would substantially change visual conditions as open viewsheds are replaced by urban development. Increased urban

development would also lead to increased nighttime light and glare, and daytime glare, in the region and more limited views of the night sky and sky glow effects. Views of the SPA and the alternative WTP sites contribute to this change in regional visual conditions, since the SPA and alternative WTP sites would be permanently altered to urban development, substantially degrading viewsheds located on Scott Road, Old Placerville Road, Prairie City Road, White Rock Road, U.S. 50, and for people located within the community of El Dorado Hills, the City of Folsom, the City of Rancho Cordova, and nearby rural residences. After development of the SPA under the “Land” portion of the project and booster pump station and WTP alternatives under the “Water” portion of the project, visual conditions in the SPA, booster pump station, and the WTP alternatives would be similar to existing views of urban settings found elsewhere in the project region. The “Land” and “Water” portions of the project include standards for design, architecture, development, and maintenance thereby ensuring that the general visual quality and character of development under the “Land” and “Water” portions of the project would be consistent with viewer expectations for similar urban environments; however, this would only partially reduce the impacts of degradation of visual character. The effect of these changes, when considering the related projects, on aesthetic resources from past and planned future projects is a cumulatively significant impact.

Assessment of visual quality is a subjective matter and reasonable people may differ as to the aesthetic value of undeveloped grasslands and oak woodlands, and whether development of urban uses in the plan area would constitute a substantial degradation of the existing visual character or quality of the site and its surroundings. Given the large scale of this urban development and the rural nature of its setting, the impacts on visual resources from implementation of the “Land” portion of the project are significant. Although design, architectural, development, and lighting standards are included to ensure that urban development in the plan area and region remains within certain aesthetic guidelines, there is no mechanism to allow implementation of the “Land” portion of the project and the related projects while avoiding the conversion of open space to urban development. Therefore, the change of views in the project region to urban land uses and the associated increase in nighttime light and daytime and nighttime glare are cumulatively significant and unavoidable impacts. In addition, the incremental contribution of the “Land” portion of the project to these impacts is cumulatively considerable (i.e., significant in and of itself).

Adoption of the Folsom General Plan Amendment (proposed GPA) would result in construction of additional multifamily residential units on infill parcels within the built-up area of the City of Folsom. These urban uses would occur in an infill area already characterized by similar uses. Therefore, the proposed GPA would not contribute to cumulatively considerable visual character or scenic view impacts. However, construction of the additional units under the proposed GPA could considerably contribute to cumulatively significant light and glare impacts.

3.4.2 AIR QUALITY

Both the “Land” and “Water” portions of the project are located in the Sacramento Valley Air Basin (SVAB). Past development in the SVAB combined with meteorological conditions has resulted in significant cumulative impacts on air quality. As described in Sections 3A.2 and 3B.2, “Air Quality,” the SVAB is in nonattainment status for ozone and respirable particulate matter with an aerodynamic diameter of 10 micrometers or less (PM₁₀). The air quality impacts of the proposed GPA are included in the analysis of the “Land” portion of the project.

At the local level, the SPA and the Off-site Water Facilities Study Area are located in the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). Under the “Land” portion of the project, all of the off-site elements of the project would also be under the jurisdiction of SMAQMD except the two roadway extensions into El Dorado County, which would be under the jurisdiction of the El Dorado County Air Quality Management District (EDCAQMD).

TEMPORARY, SHORT-TERM CONSTRUCTION IMPACTS

The “Land” and “Water” portions of the project would result in significant and unavoidable temporary, short-term construction-related air quality impacts even with implementation of all feasible mitigation measures identified in

Sections 3A.2 and 3B.2, “Air Quality.” Project-generated construction-related emissions would exceed SMAQMD’s significance threshold of 85 pounds per day (lb/day) for oxides of nitrogen (NO_x), and substantially contribute to emissions concentrations that exceed the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for ozone and PM₁₀. The projected total maximum daily construction emissions for some of the off-site elements would also individually exceed SMAQMD’s significance threshold of 85 lb/day for NO_x, and substantially contribute to emissions concentrations that exceed the NAAQS and CAAQS for ozone and PM₁₀.

Assuming that all related projects would also implement all feasible construction emission control measures consistent with respective SMAQMD and EDCAQMD guidelines, construction emissions on some of the related projects may be less than significant, although it is likely that larger projects, such as the Easton and Cordova Hills developments, and other projects identified in Table 4-2, would result in significant and unavoidable air quality impacts on their own. This impact cannot be more precisely determined because the related projects would develop on their own schedules, some of which are not known. It would, thus, be speculative to try to add together the various projects with their differing and changing schedules. However, given the large scale of development that would occur with the related projects, taken in total and combined with the nonattainment status of the SVAB for ozone and PM₁₀ and other development that would occur in the SVAB, these cumulative projects would result in a cumulatively considerable construction-related air quality impact. Because implementation of the “Land” and “Water” portions of the project would result in a significant and unavoidable impact from the generation of NO_x, and PM₁₀, the “Land” and “Water” portions of the project would result in a cumulatively considerable incremental contribution to a significant cumulative impact.

LONG-TERM OPERATIONAL IMPACTS

Operation-related activities of the “Land” portion of the project would result in project-generated mass emissions of NO_x that exceed SMAQMD’s significance threshold of 65 lb/day. Implementation of mitigation measures contained in Section 3A.2, “Air Quality,” would reduce impacts associated with emissions of NO_x, but not to less-than-significant levels. Operation-related activities of the “Water” portion of the project would not result in mass emissions of NO_x that exceed SMAQMD’s significance threshold. Related projects would similarly contribute to a degree and their relative level of contribution is generally related to their size. Long-term operational emissions from related projects, considered in light of the nonattainment status of the air basin, would be cumulatively significant. Emissions attributable to the project, plus cumulative development listed on Table 4-2, and emissions from other reasonably foreseeable future projects in SVAB as a whole, would continue to contribute to long-term increases in emissions that would exacerbate existing and projected nonattainment conditions. Thus, the project would result in a cumulatively considerable incremental contribution to a significant cumulative long-term operational air quality impact.

TOXIC AIR CONTAMINANTS

The “Land” and “Water” project activities related to temporary, short-term construction and long-term operations, could expose nearby existing off-site or proposed on-site sensitive receptors to toxic air contaminant (TAC) emissions. TAC emissions associated with temporary, short-term construction activities and stationary sources are site-specific and would be potentially significant for the “Land” and “Water” portions of the project. The proposed on-site commercial and industrial land uses have not yet been identified and could potentially generate substantial volumes of truck activity (e.g., warehouses, distribution centers) that could potentially be in the proximity of nearby sensitive receptors, thereby exposing these nearby on-site receptors to mobile-source TACs. Under the “Land” portion of the project, related impacts associated with on-site mobile source TACs are significant and unavoidable even with implementation of mitigation measures identified in Section A3.2, “Air Quality.” Under the “Water” portion of the project, operational emissions associated with the booster pump station and White Rock WTP or Folsom Boulevard WTP facilities could expose sensitive receptors TACs. However, with mitigation, the project would not result in a cumulatively considerable contribution to a significant cumulative impact related to regional mobile source TACs.

Under the “Land” portion of the project, project-related exposure to mobile-source TAC emissions from nearby U.S. 50 and other high traffic-volume roadways are significant and unavoidable, with or without additional quarry truck trips in the local roadway network, and despite implementation of all feasible mitigation measures identified in Section A3.2, “Air Quality.” Related projects would also develop land uses that would substantially increase traffic on nearby freeways and subsequently increase emissions of off-site mobile-source TACs. Given the large scale of development that would occur with the related projects, taken in total and combined with the increase in traffic-related pollutant emissions from U.S. 50 and other high traffic-volume roadways, the related projects would result in significant and unavoidable cumulative mobile-source TAC impacts. Therefore, the “Land” portion of the project would result in a cumulatively considerable incremental contribution to a significant cumulative TAC impact related to mobile-source TAC emissions from nearby U.S. 50 and other high traffic-volume roadways. See below for a detailed evaluation of the potential exposure of sensitive receptors in the SPA to TACs generated by quarry truck trips.

Land Use Compatibility with High-Volume Arterial Roadways

According to the land use planning maps for the Proposed Project and the other four “Land” action alternatives (see Chapter 2, “Alternatives”), arterial roadways that carry high volumes of traffic would pass by schools and residential land uses in the SPA. These roadways include segments of Prairie City Road, Oak Avenue, Scott Road, and White Rock Road. These roadways are of particular concern because they may accommodate a disproportionately high volume of diesel-powered truck trips, most of which would be associated with operation of the Teichert Quarry and other sand and gravel quarries south of the SPA. According to the *Draft EIR for the Teichert Quarry General Plan Amendment, Rezone, Use Permit, Reclamation Plan and Development Agreement* (County of Sacramento Department of Environmental Review and Assessment 2008), quarry trucks would travel by or through the SPA to U.S. 50 en route to their final destinations. The Draft EIR for the Teichert Quarry project does acknowledge the development of the SPA, it does not fully analyze the potential impacts of TAC-emitting truck traffic at off-site sensitive receptors, including those planned in the SPA. According to SMAQMD staff, the proportion of diesel trucks on the roadways is important because the volume of diesel trucks is the key variable used to develop the screening levels in SMAQMD’s Protocol (DuBose, pers. comm., 2009). In order to understand the effect of the quarry truck traffic on roadways that pass by sensitive receptors, which was not addressed in any previous environmental documentation, the analysis prepared for the Folsom South of U.S. 50 Specific Plan analyzed the TAC impact of projected future travel volumes both with and without additional truck traffic from the nearby quarries. As part of this analysis, an adjustment factor was incorporated to account for the fact that traffic on arterial roadways would travel at lower speeds—and thus have different emission rates—than traffic flowing at typical freeway speeds. In addition, this analysis also examined the projected traffic volumes using emission rates for the vehicle fleet under existing conditions (year 2010) as well as emission rates projected for the year 2030, when full build out of the project would be completed. According to model runs performed in ARB’s Motor Vehicle Emissions Inventory Model (EMFAC2007) (ARB 2006), emission rates from heavy, diesel-powered trucks are expected to be substantially lower in 2030 than 2010. This reflects the fact that emission factors in future years are expected to be lower than current levels because of more stringent vehicle emissions standards, improvements in vehicle emissions technology, and statewide efforts to replace older diesel engines with new or retrofitted, cleaner engines. It is important to consider the emission factors of both the existing and future vehicle fleets in order to understand what the risk levels would be during intermediate years because there is the potential that the daily traffic volumes on roadways would increase considerably before full build out while the emission rates of the vehicle fleet during a particular intermediate year are still relatively high.

Thus, for each road segment that would pass by locations where on-site sensitive receptors would be developed in the SPA, a separate analysis was conducted with and without the additional quarry truck traffic and with existing and future projected emission rates (i.e., for vehicle fleets in 2010 and 2030). The results of the analysis are summarized in Table 4-4. All detailed calculations and assumptions are provided in Appendix C1.

As shown in Table 4-4, all direct impacts associated with TAC exposure levels at receptors along all roadway segments studied for this analysis would be less than significant without the addition of quarry truck trips. No indirect impacts would occur.

However, when quarry truck trips are added to modeled roadway segments before the year 2030, traffic volumes within 400 feet of sensitive receptors that would be constructed in the SPA could result in exposure of those receptors to high levels of toxic air contaminants (see Table 4-4). Therefore, this direct impact would be potentially significant. No indirect impacts would occur.

As discussed above, it is reasonably foreseeable that the quarry truck vehicle fleet that would be used from the year 2030 onward would have lower emission factors as compared to current levels because of more stringent vehicle emissions standards, improvements in vehicle emissions technology, and statewide efforts to replace older diesel engines with new or retrofitted, cleaner engines. Therefore, as shown in Table 4-4, modeling results indicate that all direct impacts associated with TAC exposure levels at receptors along all roadway segments studied for this analysis would be less than significant with the addition of quarry truck trips after the year 2030.

East Sacramento Regional Aggregate Mining Truck Management Plan

When the Draft EIR/EIS was published in June 2010, the City of Folsom had been participating in a series of meetings with the County of Sacramento, the City of Rancho Cordova, representatives of Teichert and other quarry applicants with mining proposals before the County, and other participants aimed at resolving concerns about the routes and amounts of truck traffic that would be generated by the quarries. That process came to be known as the East Sacramento Regional Aggregate Mining Truck Management Plan (“TMP”). At that time, the participants in the TMP meetings had not yet reached consensus regarding truck routes through the SPA and adjoining areas, analysis methodology, or other important issues necessary to develop a definite, final TMP.

In November 2010, the Sacramento County Board of Supervisors approved various entitlements for the proposed Teichert quarry project in the south-eastern portion of Sacramento County, including a development agreement. The development agreement notes the ongoing participation of the Cities of Folsom and Rancho Cordova, the County and other interested parties in the development of the TMP and acknowledges that the Board will first have to comply with CEQA before adopting a TMP. The development agreement also commits Teichert to complying with any truck routing redistribution measures contained within any adopted TMP and requires Teichert to contribute its fair share toward the funding of such a program, including measures pertaining to air quality and noise. (Teichert Quarry Development Agreement, Section 2.4.5.A, page 14.)

The components of the TMP must include, at a minimum, the following:

- ▶ traffic solutions associated with routing quarry trucks so as maintain the “quality of life” in Folsom and Rancho Cordova;
- ▶ identification of truck haul routes within the SPA;
- ▶ phasing of improvements for the proposed haul routes;
- ▶ phasing of use of haul routes as development in the SPA proceeds; and
- ▶ a financing program for implementation of the TMP.

The TMP may also include, without limitation, one or more of the following components, which may be phased:

- ▶ diversion of US 50 bound trucks to Prairie City Road;
- ▶ construction of westerly vehicle lane(s) on Prairie City Road;
- ▶ construction of truck lane(s) and/or easterly vehicle lane(s) on Prairie City Road; or
- ▶ diversion of other truck traffic and/or other transportation improvements within the SPA.

The Teichert development agreement provides that Teichert shall not sell or transport by truck material directly from its Teichert Quarry facility, except by conveyer belt to its Grant Line facility, until the TMP is adopted. The development agreement also limits Teichert's annual sales of aggregate from its Grant Line facility until the TMP is adopted. The sales limitation is conditioned upon the City of Folsom's intent to include those portions of the TMP relating to the Folsom Plan Area Specific Plan, and any associated development agreement and environmental documentation. (Development Agreement, Section 2.4.5.B, pages 14-15.)

The Teichert development agreement and the statements of County staff and Supervisors indicate that the County intends, as the lead agency for the TMP, to prepare an environmental analysis pursuant to CEQA once a sufficient project description has been developed for the TMP, so that any potential impacts of implementing the plan can be fully and publicly considered before the plan is adopted. The development agreement sets April 12, 2011, as a target date for the completion of an agreed project description for the TMP. Once the project description is finalized, the County may begin preparation of its environmental analysis of the TMP.

As of the time of the completion of the FEIR/FEIS, the details and description of the TMP have not yet been completed. The City is not the lead agency for the purpose of implementing the majority of the components of a TMP. And, because the TMP's description at this point is abstract, and not yet stable and finite, it would be too speculative at this point to include a meaningful analysis of the effects of implementation of the TMP. The TMP's project description is subject to change and additional important details of the plan still remain to be developed. For instance, the exact location of the truck haul routes and timing of implementation of the routes, which will be fixed based on the results of future study of the TMP components, have not yet been developed. In consideration of its good faith commitment to cooperate in the development and implementation of the TMP, the mitigation measures previously identified in the DEIR/DEIS to address the cumulative air quality and noise impacts associated with development of the SPA along with future quarry truck traffic through the plan area are being revised to rely upon the TMP as mitigation and ensure that when a TMP is adopted those portions of the TMP subject to City control will, in fact, be implemented. Accordingly, Cumulative Mitigation Measure Air-1-Land is hereby replaced with the following:

Cumulative Mitigation Measure AIR-1-Land: Implement East Sacramento Regional Aggregate Mining Truck Management Plan or Other Measures to Reduce Exposure of Sensitive Receptors to Operational Emissions of Toxic Air Contaminants from Quarry Truck Traffic.

The City of Folsom is a participant in the development of an East Sacramento Regional Aggregate Mining Truck Management Plan (TMP), a cooperative effort led by the County of Sacramento, with the input of the City of Folsom, the City of Rancho Cordova and other interested parties, including representatives of quarry project applicants. When the County Board of Supervisors approved entitlements for the Teichert quarry project in November 2010, it also adopted conditions of approval and a development agreement that requires Teichert's participation in, and fair share funding of, a TMP to implement roadway capacity and safety improvements required to improve the compatibility of truck traffic from the quarries with the future urban development in the Folsom South of U.S. 50 Specific Plan area and other jurisdictions that will be affected by quarry truck traffic. The development agreement adopted by the County for the Teichert project imposes limits on the amounts of annual aggregate sales from Teichert's facility until a TMP is adopted. The City of Folsom does not have direct jurisdiction over the Teichert, DeSilva Gates, or Walltown quarry project applicants as these projects are located within the unincorporated portion of the County. The County, as the agency with the primary authority over the quarries, has indicated that it intends to prepare an environmental analysis in accordance with CEQA prior to adoption of a TMP. The City's authority to control the activities of the quarry trucks includes restrictions or other actions, such as the approval and implementation of specialized road improvements to accommodate quarry truck traffic, that would be applicable within the City's jurisdictional boundaries. For the foregoing reasons, the City of Folsom considers itself a "responsible agency" (as that term is defined at State CEQA Guidelines, CCR Section 15381), in that it has some discretionary power over some elements of a future TMP, if such TMP calls for improvements or other activities on roadways

within the jurisdiction of the City. In a responsible agency role, the City would follow the process specified in the CEQA Guidelines for consideration and approval of the environmental analysis prepared by the County for a TMP after such documentation is prepared and adopted by the County. (State CEQA Guidelines, CCR Section 15096.)

Because no final project description for a TMP has been developed as of the completion of this FEIR/FEIS, the City would have to speculate as to those portions of a TMP that might be proposed for implementation within its jurisdiction, or the impacts that could arise from the implementation of as-yet uncertain components. Accordingly, formulation of the precise means of mitigating the potential cumulative air quality impacts pursuant to the TMP is not currently feasible or practical. However, as the preferred, feasible, and intended mitigation strategy to address the cumulative impacts of quarry truck traffic through the SPA, the City shall implement, or cause to be implemented those portions of the TMP (as described above) that are within its authority to control. In implementing the TMP, the City shall ensure that the TMP or traffic measures imposed by the City within the SPA reduce the risk of cancer to sensitive receptors along routes within the SPA from toxic air contaminant emissions to no more than 296 in one million (SMAQMD 2009, March, Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, Version 2.2:7), or such different threshold of significance mandated by SMAQMD or ARB at the time, if any. With this mitigation, the cumulative air quality impacts from truck toxic air contaminants would be less than significant.

As an alternative (or in addition) to implementing the TMP within the SPA, the following measures could (and should) be voluntarily implemented by the quarry project applicant(s) (Teichert, DeSilva Gates, and Granite [Walltown]) to help ensure exposure of sensitive receptors to TACs generated by quarry truck traffic to the 296-in-one-million threshold of significance identified above. The City encourages implementation of the following measures:

- ▶ The quarry project applicant(s) should meet with the City of Folsom to discuss mitigation strategies, implementation, and cost.
- ▶ A site-specific, project-level screening analysis and/or Health Risk Assessment (HRA) should be conducted by the City of Folsom and funded by the quarry truck applicant(s) for all proposed sensitive receptors (e.g., residences, schools) in the SPA that would be located along the sides of roadway segments that are identified in Table 4-4 as being potentially significant under any of the analyzed scenarios. Each project-level analysis shall be performed according to the standards set forth by SMAQMD for the purpose of disclosure to the public and decision makers. The project-level analysis shall account for the location of the receptors relative to the roadway, their distance from the roadway, the projected future traffic volume for the year 2030 (including the proportion of diesel trucks), and emission rates representative of the vehicle fleet for the year when the sensitive land uses would first become operational and/or occupied. If the incremental increase in cancer risk determined by in the HRA exceeds 296 in one million (or a different threshold of significance recommended by SMAQMD or ARB at the time, if any), then project design mitigation should be employed, which may include the following:
 - Increase the setback distance between the roadway and affected receptor. If this mitigation measure is determined by the City of Folsom to be necessary, based on the results of the HRA, the quarry truck applicant(s) should pay the Folsom South of U.S. 50 Specific Plan project applicant(s) and the City of Folsom a fee that shall serve as compensation for lost development profit and lost City tax revenues, all as determined by the parties. Said mitigation fee shall be determined in consultation with the quarry project applicant(s), the Folsom South of U.S. 50 Specific Plan project applicant(s), and the City of Folsom. No quarry trucks shall be allowed to pass on any roadway segment immediately adjacent to or within the SPA until said mitigation fees are paid.

- Implement tiered tree planting of fine-needle species, such as redwood, along the near side of the roadway segments and, if feasible, along the roadway 500 feet in both directions of the initial planting (e.g., 500 feet north and south of a roadway that runs east-west) to enhance the dispersion and filtration of mobile-source TACs associated with the adjacent roadway. These trees should be planted at a density such that a solid visual buffer is achieved after the trees reach maturity, which breaks the line of sight between U.S. 50 and the proposed homes. These trees should be planted before occupation of any affected sensitive land uses. This measure encourages the planting of these trees in advance of the construction of potentially affected receptors to allow the trees to become established and progress toward maturity. The life of these trees should be maintained through the duration of the quarry projects. The planting, cost, and ongoing maintenance of these trees should be funded by the quarry project applicant(s).
- To improve the indoor air quality at affected receptors, implement the following measures before the occupancy of the affected residences and schools:
 - equip all affected residences and school buildings developed in the SPA with High Efficiency Particle Arresting (HEPA) filter systems at all mechanical air intake points to the interior rooms;
 - use the heating, ventilation, and air conditioning (HVAC) systems to maintain all residential units under positive pressure at all times;
 - locate air intake systems for HVAC as far away from roadway air pollution sources as possible; and
 - develop and implement an ongoing education and maintenance plan about the filtration systems associated with HVAC for residences and schools.

To the extent this indoor air quality mitigation would not already be implemented as part of the Folsom South of U.S. 50 Specific Plan project development, this mitigation should be paid for by the quarry project applicant(s) before any quarry trucks are allowed to pass on any roadway that is within 400 feet of any residence or school within the SPA.

Implementation: The project applicant(s) of the Folsom South of U.S. 50 Specific Plan project.

Timing: Prior to approval of first tentative map or discretionary approval within SPA that would place sensitive receptors along roadways that quarry trucks would reasonably use to access U.S. Highway 50.

Enforcement: City of Folsom Community Development Department.

Implementation of Cumulative Mitigation Measure AIR-1-Land would reduce the significant impact related to exposure of project-generated sensitive receptors to toxic air contaminants generated by quarry truck trips to a less-than-significant level because the City would either designate truck routes that would limit or prohibit truck traffic adjacent to sensitive receptors or the City would be able to reach a voluntary agreement with the quarry applicants that would require a site-specific health risk assessment to be performed according to SMAQMD protocol, and in the event the cancer risk would exceed 296 in one million, or whatever threshold of significance is recommended by SMAQMD at the time, either the setback distances of the sensitive receptors from the road would be increased, or fewer quarry trucks would be allowed to pass on the roadways within 400 feet of the sensitive receptors. However, because the City of Folsom does not have jurisdiction over the Teichert, DeSilva Gates, or Walltown quarry project applicants and operations, if the quarry project applicants decline to voluntarily implement the recommended mitigation, the City may adopt truck route restrictions, thereby reducing the impact to a less-than-significant level.

CARBON MONOXIDE

As described in Sections 3A.2 and 3B.2, “Air Quality,” implementation of the “Land” and “Water” portions of the project would result in less-than-significant local mobile source CO-related air quality impacts. CO emission factors in future years are expected to be lower than current levels due to more stringent vehicle emissions standards and improvements in vehicle emissions technology. Thus, ambient local CO concentrations under cumulative conditions would continue to decline. Therefore, 1- and 8-hour CO concentrations for the future cumulative conditions would not be anticipated to exceed the significance thresholds of 20 parts per million (ppm) and 9 ppm, respectively. Consequently, the “Land” and “Water” portions of the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to increases in traffic volumes on the local roadway network relative to CO concentrations.

ODOR EMISSIONS

Odor intensity is a subjective measurement that is perceived differently depending on individual sensitivity. Depending on prevailing wind directions and speeds, odors may be limited to a small area immediately surrounding the source, or may be carried for longer distances to land uses further from the source. Most of the related projects considered in this analysis would result in the generation of odors on a short-term basis from construction activities, and on a long-term basis from operational activities.

Operation-related activities at the proposed on-site industrial and commercial areas could result in project-generated emissions of odors. Specific uses within those designations are not yet known and detailed site and grading plans have not yet been developed; however, these types of uses could entail painting/coating operations (e.g., auto body shops) and fast food restaurants in close proximity to proposed sensitive receptors. Thus, project-generated, on-site operation-related sources could directly expose existing and proposed receptors to emissions of objectionable odors. Implementation of mitigation measures identified in Section A3.2, “Air Quality,” would reduce the exposure of sensitive receptors under the “Land” portion of the project to project-generated odor emissions to a less-than-significant level. Operation-related activities of the “Water” portion of the project could result in project-generated emissions of odors from operation of the White Rock WTP or Folsom Boulevard WTP. However, treatment chemicals used in the water treatment processes would be stored in an enclosed building and would not generate odors off-site.

New residents that would be generated by the Eason project immediately west of the “Land” portion of the project could be exposed to odors associated with construction and operation of the project. In addition, new residents that would be generated within the SPA could be exposed to odors generated by the Easton project to the west, by the proposed City Corporation Yard to the south, and by the proposed Sacramento GreenCycle Project further south below the corporation yard. Therefore, the project’s odor impacts, when considered in combination with odor impacts of the related projects, could result in cumulatively significant impacts.

3.4.3 BIOLOGICAL RESOURCES

In addition to the related projects considered for all resource areas in this EIR/EIS, the projects identified in Table 4-5 below are also considered in the cumulative analysis for biological resources because the USACE has specifically requested an additional level of detailed cumulative analysis related to biological resources that includes a variety of additional projects to determine cumulative impacts on wetlands and waters of the U.S.

With regards to cumulative impacts related to the proposed GPA, the GPA would change permitted densities, but would not change the physical locations identified for Single Family, Multi-family Medium Density, and Multi-family High Density development in the existing Folsom General Plan. Therefore, for issue areas such as biological resources, which are related to land coverage, there would be change from the analysis already contained in the City’s existing General Plan.

Generally, the geographic extent of cumulative impacts on wetlands (e.g., vernal pools, seasonal wetland swales, seeps) and other waters of the U.S. (e.g., perennial and intermittent drainage channels), oak woodlands, and biological resources associated with these habitats includes the vernal pool and blue oak woodland regions of El Dorado County, Sacramento County, and neighboring counties that support similar biological resource values and functions to those of the SPA.

Many projects near the SPA and the Off-Site Water Facilities have been constructed recently or are in various stages of planning and entitlement. Some have already resulted in adverse impacts on wetlands and other waters of the U.S. Tables 4-2 and 4-3 summarize the impacts on water of the United States of the surrounding projects that were considered in the cumulative biological resources impact analysis for the “Land” and “Water” portions of the project.

As indicated in Table 3-17 below (Table 4-5 on page 4-30 of the DEIR/DEIS), based on the data currently available, cumulative losses of wetlands and other waters of the U.S., including vernal pools, for specific projects within surrounding areas of Sacramento and El Dorado Counties in the same watershed and supporting similar biological resources have been and are expected to be substantial. Thus, related projects throughout the region would result in a cumulatively significant impact to wetlands and these habitats. Due to its size and large acreage of habitats that would be lost as a result of implementation of the “Land” portion of the project, the “Land” portion of the project would contribute substantially to this regional loss. In addition, because the exact placement of the Folsom Boulevard WTP and conveyance pipeline alternative alignments has not been determined, the “Water” portion of the project could further contribute substantially to this regional loss.

Implementing the Folsom South of U.S. 50 Specific Plan project would result in a cumulatively considerable incremental contribution to the regional loss of the habitat types presented in Table 3-18 below (Table 4-6 on page 4-31 of the DEIR/DEIS). Each of these habitats has the potential to support special-status species, as listed in Table 3-18 (Table 4-6 on page 4-31 of the DEIR/DEIS). Therefore, project implementation would result in a cumulatively considerable incremental contribution to the decline of these species in the region.

The “Land” and “Water” portions of the project would result in degradation of wildlife habitat by developing new facilities that, when combined with other habitat impacts occurring from development within the region, would result in significant cumulative impacts. Despite the implementation of project-specific measures identified in Sections 3A.3 and 3B.3 “Biological Resources,” to mitigate impacts on biological resources, a temporal loss of wetlands and other waters of the U.S. and blue oak woodland would occur during implementation of mitigation until performance standards and success criteria are met. Within the SPA, 84.94 acres of aquatic habitat exists, including vernal pools and other seasonal wetlands, seeps, ponds, and stream channels. Of these, 40.75 acres (45%) would be permanently destroyed by project implementation. A total 50.7 acres of aquatic habitat occurs within all of Zone 4 of the “Water” Study Area and up to 13.5-acres of this total area could potentially be impacted by one or more of the Off-site Water Facility Alternatives. Off this total, approximately 45.9 acres reside within the Morrison Creek Watershed, while the remaining 4.8-acres occurring with the Coon-American sub-watershed.

It is estimated that 75% to 90% of the historic California vernal pool habitat has been lost. Results of surveys of vernal pool distribution in the Central Valley indicate that 13% of the 1,032,853 acres of vernal pool habitat mapped in 1997 was gone by 2005 (Placer Land Trust 2008). Losses of vernal pool habitat in the project region in that time period were substantial, with Sacramento County losing approximately 6,550 acres and El Dorado County losing approximately 260 acres. In the period between 1994 and 2005, Placer County lost approximately 17,115 acres of vernal pool habitat (Placer Land Trust 2008). In Sacramento County, two large new growth areas—Jackson Highway New Growth Area and Grant Line East New Growth Area—are planned for major urbanization between now and 2030. These two new growth areas support a combined 316 wetted acres of vernal pools that could be converted to urban land uses by the year 2030 (Sacramento County 2009). Full buildout of the City of Rancho Cordova General Plan planning area is projected to convert up to 20,728 acres of vernal pool grasslands containing 630 wetted acres of vernal pools. Historic losses of vernal pool habitat in combination with

**Table 3-17
Wetlands and Other Waters at Specific Projects in the Vicinity
of the Folsom South of Highway 50 Specific Plan**

Project	Total Waters of the U.S. (Approximate)	Affected Acres of Waters of the U.S. (Approximate)
Sacramento County		
Anatolia I, II, III, IV	86.43	44.29
Arboretum	116.86	31.75
Arista del Sol	17.41	13.88
Capital Village	None	None
Cordova Hills	103.67	39.4
Creekview Manor	25.90	7.72
DeSilva-Gates Quarry	N/A	N/A
Douglas 98	3.91	3.91
Douglas 103	5.40	1.98
Excelsior Estates	39.81	28.77
Florin-Vineyard Gap	33.46	22.9
Glenborough at Easton and Easton Place	22.90	4.93
Grantline 208	11.19	No net loss
Heritage Falls	6.85	6.85
Mather East	2.68	0.19
Mather Field	138	30
Montelena	16.66	10.605
North Douglas	5.36	6.17
North Douglas II	4.42	0.627
North Vineyard Station Drainage Master Plan	18.10	15.48
Rio del Oro	56.63	30.08
Sunridge Lot J	2.99	2.99
Sunridge Park	1.99	1.81
The Ranch at Sunridge	21.42	15.65
Teichert Quarry	7.41	3.63
Triangle Rock Expansion Project	11.03	9.1
Villages of Zinfandel	1.15	1.15
Vineyard Springs	53.34	16.07
Walltown Quarry	42.9	10.54
Westborough	2.49	2.5
El Dorado County		
Bass Lake	2.99	1.097
Carson Creek	3.49	0.97
El Dorado Hills	28.65	13.73
Valley View	14.47	2.27
Total (Approximate)	909.96	381.039
Notes: N/A = Not Available Source: Data provided by City of Rancho Cordova, USACE, and ECORP		

**Table 3-18
Special-Status Species Supported By the Habitat Types to Which the Project
Would Contribute a Cumulatively Considerable Incremental Loss**

Habitat Type	Special-Status Species Supported
Vernal Pools, Seasonal Wetlands, and Swales	Dwarf downingia
	Tuolumne button-celery
	Bogg's Lake hedge-hyssop
	Ahart's dwarf rush
	Greene's legenera
	Pincushion navarretia
	Slender Orcutt grass
	Sacramento Orcutt grass
	Vernal pool fairy shrimp
	Vernal pool tadpole shrimp
	Western spadefoot toad
Northwestern pond turtle	
Annual Grassland	Swainson's hawk
	White-tailed kite
	Tricolored blackbird
	Grasshopper sparrow
	Burrowing owl
	Northern harrier
	Loggerhead shrike
Oak Woodland	American badger
	Brandegees clarkia
	Swainson's hawk
	White-tailed kite
	American badger

Source: Data provided by AECOM in 2010

projected losses from existing, proposed, planned, and approved projects constitute a cumulatively substantial reduction in vernal pool habitat in the region. Habitat losses of this magnitude have a substantial adverse effect on species that rely on this habitat type, including Federally-listed vernal pool crustaceans, and contribute to the decline of these species.

The "Land" portion of the project would fill approximately 24.42 acres of vernal pools, seasonal wetlands, and seasonal wetland swales and would contribute to a cumulative loss of these wetland habitats in the region. Additional aquatic habitats that would be filled consist of 4.48 acres of seeps, 0.07 acre of marsh, 0.11 acre of willow scrub, 10.42 acres of other waters of the U.S. (i.e., ponds, stream channels, and ditches), and 1.25 acres of other aquatic habitats that are not waters of the U.S. (i.e., isolated waters). In addition, the project, when

combined with surrounding planned projects, would result in the conversion of large, open habitat landscapes surrounded by other open space to smaller patches of habitat surrounded by urban development. Therefore, aquatic habitats would be confined to small geographic locations and would be more vulnerable to the effect of habitat fragmentation and other indirect impacts.

Implementation of the “Water” portion of the project could result in the fill of additional vernal pools through construction of the WTP alternatives and the conveyance pipeline alternative alignments. Portions of the Zone 4 of the “Water” Study Area within the Morrison Creek watershed include 10.3 acres of vernal pool habitat, 5.8 seasonal wetland, and 0.4 acres of seasonal wetland swale, of which the Off-site Water Facility Alternatives could impact up to 3.4 acres of vernal pools, 2.3-acres of seasonal wetland, and 1.6 acres of seasonal wetland swale within the Morrison Creek watershed. Impacts to these aquatic features as part of the Off-site Water Facility Alternatives would result in impacts to up to 2.9% of vernal pools, 3.8% of seasonal wetlands, and 2.2% of seasonal wetland swales as mapped within the Morrison Creek Watershed. Although, only a small portion of Zone 4 of the “Water” Study Area lies within the Coon-American Watershed, given only limited aquatic resources exist, the corresponding proportion of potential impacts would be greater with 18% of vernal pools, 17.6% seasonal wetlands, and 23.5% of the seasonal wetland swales potentially impacted. These impacts when considered along with the quantity of wetlands and other waters present in the new growth areas of Sacramento County, including Jackson Highway, East of Grant Line Road, and Easton, which are expected to be converted to urban land uses by the year 2030, impacts to wetlands are cumulatively considerable (Sacramento County 2009).

Considering the rate of development in Sacramento County and the limited amount of undeveloped, unspoken for land that supports existing wetlands that could be preserved, or that is suitable for creation of compensatory aquatic habitats similar to those that would be removed by implementation of the “Land” portion of the project, it may not be possible to fully mitigate the loss of habitat functions and values provided by the nearly 41 acres of aquatic habitats that would be lost in the SPA.

Blue oak woodland habitat is rapidly declining in the Sacramento Valley and Sierra Nevada foothill region and a large %age of previously existing blue oak woodland has already been lost from the region. It is estimated that more than a million acres of California’s oak woodlands were lost between 1950 and 1988 (Bolsinger 1988) and another 750,000 acres are at risk of being converted to urban land uses by 2040 (California Oaks Foundation 2006: 6). Some of the largest losses of oak woodland habitat have occurred in areas surrounding or near the SPA in El Dorado and Placer Counties. It is projected that nearly 300,000 acres of oak woodlands could be developed in the Sacramento region by 2040 and the largest anticipated losses of oak woodland in the state are in El Dorado County, which is projected to lose 80% of its oak woodlands by 2040 (California Oaks Foundation 2006: 15). Over half of the existing oak woodlands in Placer, Nevada, and Yuba Counties are at risk of development by 2040 (California Oaks Foundation 2006: 15). Sacramento County supports just over 8,000 acres of oak woodland habitat, 7,250 of which are blue oak woodland. The SPA contains a relatively large %age (13%) of the county’s blue oak woodland habitat with approximately 949 acres. Although the project has been designed to preserve the majority of oak woodland habitat in the SPA, approximately 47% (444 acres) of the existing blue oak woodland community would still be removed. This constitutes a significant contribution to the regional loss of this biological resource, which provides important functions and values to common and special-status plant and animal species and functions in carbon sequestration, and therefore results in a significant contribution to a cumulatively considerable impact.

The “Land” portion of the project would result in the loss of 2,219 acres of annual grassland habitat, which serves as foraging habitat for raptors, including Swainson’s hawk, and other grassland associated wildlife species, and nesting habitat for burrowing owl. This loss would contribute significantly to the cumulatively considerable regional loss of this biological resource.

As indicated in Section 3B.3, “Biological Resources - Water,” of the DEIR/DEIS, the conveyance pipeline alternative alignments would generally be constructed within existing road rights-of-way and disturbed grasslands, thereby generally minimizing disturbance to sensitive habitats and areas that potentially support

special-status species bordering the roadway road rights-of-way. However, it is difficult to predict with certainty the exact placement of the conveyance pipeline within the roadway for each alternative. Based on the use of a 100-foot-wide construction easement, the conveyance pipeline could directly or indirectly affect several Federal and state-listed species that use adjacent seasonal wetlands, vernal pool complexes, annual grasslands, oak savanna, and riparian and other aquatic communities within Zone 4 of the “Water” Facilities Study Area. Without mitigation, construction-related impacts combined with other land development and roadway improvement projects within the conveyance pipeline alternative alignments could be cumulatively considerable.

Implementation of mitigation measures in Section 3A.3, “Biological Resources - Land,” of the DEIR/DEIS would reduce the direct project-specific impacts on valley elderberry longhorn beetle, tricolored blackbirds, bats, special-status plants, riparian habitat, and valley needlegrass grassland to a less-than-significant level under the “Land” portion of the project. Mitigation measures in Section 3B.3, “Biological Resources - Water,” of the DEIR/DEIS would reduce impacts on vernal pool fairy shrimp, western spadefoot toad, northwestern pond turtle, Swainson’s hawk, and Sacramento Orcutt grass to a less-than-significant level under the “Water” portion of the project. However, even with implementation of the proposed mitigation and regional enforcement of the USACE “no-net-loss” standard, the value of the region as it relates to the long-term viability of these resources would be substantially diminished. The “Land” and “Water” portions of the project would result in a cumulatively considerable incremental contribution to significant cumulative biological resources impacts, including the loss and degradation of sensitive habitats, habitat for special-status wildlife, and habitat for special-status plants; and loss/ displacement of special-status wildlife.

FISHERIES

The assignment of water supplies from NCMWC in the Sacramento River Basin would not adversely affect candidate, sensitive, or special-status fish species. The proposed addition of a new point of diversion and change in CVP delivery schedule as part of the Off-site Water Facility Alternatives are relatively minor when compared to overall flows in the Sacramento River system, including total Delta inflow and outflow, and Delta CVP and SWP exports. The minor changes in hydrologic conditions would have only very minimal impacts on overall aquatic habitat quantity and quality. As a result, the Off-site Water Facility Alternatives when added to other water supply projects, including the EWA and Yuba River Accord, would result in cumulative benefits to this section of the Sacramento River. Downstream of Freeport, the minor reduction in flows attributed to the Off-site Water Facility Alternatives would be minimized by the addition of flows from other water supply projects considered in the cumulative analysis and the overall change in the delivery schedule. Therefore, the “Water” portion of the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to fisheries.

3.4.4 CLIMATE CHANGE

Emissions of greenhouse gases (GHGs) have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. The proper context for addressing this issue in an EIR/EIS is as a discussion of cumulative impacts, because although the emissions of one single project will not cause global climate change, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. In turn, global climate change has the potential to result in rising sea levels, which can inundate low-lying areas; affect rainfall and snowfall, leading to changes in water supply; and affect habitat, leading to adverse effects on biological resources.

Because of the length of the cumulative global climate change analysis, it is presented in this EIR/EIS as a stand-alone section. Accordingly, please see Sections 3A.4 and 3B.4, “Climate Change.” Sections 3A.4 and 3B.4 contain an analysis of the projected GHG emissions from the “Land” and “Water” portions of the project with respect to their potential to contribute to global climate change (see Subsections 3A.4.1 in 3A.4). Additionally, Section 3A.4 contains an analysis of the potential effects of global climate change on the “Land” portion of the

project based on available scientific data. The development assumptions for the GPA were included in the modeling of impacts described for the “Land” portion of the project.

3.4.5 CULTURAL RESOURCES

The cumulative context for cultural resources is defined as the SPA and the Sacramento Region, including Sacramento and El Dorado Counties and the Cities of Folsom and Rancho Cordova. Cultural resources in the project region generally consist of prehistoric sites, historic sites, historic structures, and isolated artifacts. During the 19th and 20th centuries, localized urbanization and intensive agricultural use in the region caused the destruction or disturbance of numerous prehistoric sites, while many structures now considered to be historic were erected. From the latter half of the 20th century to the present, prehistoric and historic structures have been disturbed and destroyed. During this period, the creation and enforcement of various regulations protecting cultural resources have substantially reduced the rate and intensity of these impacts; however, even with these regulations, cultural resources are still degraded or destroyed as cumulative development in the region proceeds.

The records search conducted for the “Land” portion of the project indicates that the entire SPA has been previously inventoried for cultural resources and that approximately 260 prehistoric and historic-era districts, sites, features, and isolated artifacts have been identified (Appendix E2). Cultural resources identified within the SPA include: (1) traces of early Native American habitation including lithic artifact scatters and bedrock mortars; and (2) the remains of historic-era activities, in particular, those related to Gold Rush-era and later mining operations. The latter consist of the remains of small placer and quartz mines, numerous ditches and remains of similar water conveyance infrastructure, cabin sites, and other structural foundations, tailings piles, and refuse scatters.

Under the “Land” portion of the project, identified resources constitute the remains of a long series of human activities from prehistoric habitation and resource processing, to early historic mining, ranching, and transportation. Although the entire SPA has been subjected to detailed archaeological surveys and historical investigations, much of this research has been piece-meal. Most of the prehistoric and historic-era resources documented within the SPA have not been formally evaluated for significance per National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) criteria. Regardless of their association or eligibility, the large number of cultural resources documented indicates that the SPA has long been the focus of intensive activity for thousands of years and due to its largely intact nature it is unique in the Sacramento/Folsom region. Construction that would be implemented as part of the “Land” portion of the project would likely result in direct adverse impacts to these resources.

The records search conducted for the “Water” portion of the project identified 19 sites that are situated within various portions of the Off-site Water Facilities Study Area (Appendix M). Many of these sites are potentially associated with the American River (Folsom) Placer Mining District. In addition to the sites identified in the records search, the Off-site Water Facilities Study Area also includes portions of White Rock Road, which at one time was part of the Lincoln Highway; a major overland transportation route between Carson City and Sacramento during the Gold Rush era. Construction of the “Water” portion of the project could disturb known cultural and historic resources. Mitigation outlined in Section 3B.2, “Cultural Resources - Water,” would reduce potentially significant impacts to known cultural resources to a less-than-significant level.

Implementation of mitigation measures identified for the “Land” portion of the project in Section 3A.5, “Cultural Resources,” would substantially reduce the level of direct impacts on identified cultural resources, but not to a less-than-significant level. Ground-disturbing work would still result in direct impacts to cultural resources, some of which are likely to be eligible for listing on the CRHR and NRHP. The State CEQA Guidelines (CCR Section 15126.4 [b][2]) state that a project which causes a substantial adverse change in the significance of a unique archaeological resource or an historical resource may have a significant effect on the environment. In some circumstances, depending on the significance of the resource, even the requirement for documentation of an archaeological resource or historical resource may not be sufficient to reduce the impact below the level of

significance. Therefore, the “Land” portion of the project would result in a cumulatively considerable incremental contribution to the regional loss of known prehistoric and historic-era sites in the project vicinity.

The density of documented resources within the SPA and in the vicinity of the off-site elements under the “Land” portion of the project suggests that the entire project footprint is also sensitive for previously unidentified and currently unknown cultural resources. As-yet-undiscovered subsurface cultural resources might also underlie the booster pump station site, alternative WTP sites, and conveyance pipeline alternative alignments under the “Water” portion of the project. Mitigation measures contained in Sections 3A.5 and 3B.5, “Cultural Resources,” would reduce project-related impacts on as-yet-undiscovered cultural resources to less-than-significant levels. However, undiscovered cultural resources may underlie one or more of the other related project sites, and it is unknown whether the related projects would implement appropriate mitigation. Furthermore, even after mitigation is implemented, it may be impossible to avoid the cultural resource, and a substantial adverse change in the significance of the resource (such as damaging or destroying the qualities that make it significant) could result. Therefore, the related projects could result in potentially significant cumulative impacts on undocumented cultural resources within the project vicinity. In this context, the “Land” and “Water” portions of the project could result in a cumulatively considerable incremental contribution to a significant cumulative impact.

The proposed GPA would change permitted densities, but would not change the physical locations identified for Single Family, Multi-family Medium Density, and Multi-family High Density development in the existing Folsom General Plan. For issue areas (such as cultural resources) that are related to land coverage, there would be no change from the City’s existing General Plan.

3.4.6 GEOLOGY, SOILS, MINERALS, AND PALEONTOLOGICAL RESOURCES

MINERAL RESOURCES

The presence of mineral resources is dependent on the type of geologic formation, which varies from location to location and therefore is site-specific. Some of the related projects contain sources of aggregate materials. None of the related projects contain potential sources of kaolin clay. The majority of the SPA is classified by the California Division of Mines and Geology (CDMG) as Mineral Resource Zone (MRZ) MRZ-3 for construction aggregate, “areas containing mineral deposits, the significance of which cannot be evaluated from existing data.” The western third of the SPA contain areas where piles of cobbles were deposited during dredger gold mining operations in the 1800s and early 1900s. Similar piles of dredge tailings are present in nearby areas of Rancho Cordova, which are actively being mined, and the proposed Teichert, Walltown, and DeSilva-Gates quarries south of White Rock Road are proposed for mining as an aggregate sand and gravel resource. However, the on-site dredge tailings are located primarily within the Alder Creek drainage. Alder Creek is a perennial watercourse, and its drainage and riparian resources are protected by both Sacramento County and City of Folsom General Plan policies and ordinances. Furthermore, in 2003, the City of Folsom determined that because it did not have any active mining operations, and because none were expected in the future, that it would not update its California Surface Mining and Reclamation Act ordinance. The SPA is not delineated as an area of known mineral resources in either the City of Folsom or Sacramento County General Plans. Finally, the Alder Creek dredge tailings are not present in a large enough concentration that would warrant an economically viable on-site mining operation. Therefore, implementation of the “Land” portion of the project would not contribute substantially to a regional loss of aggregate sand and gravel resources and would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to these mineral resources.

The western edge of the SPA is zoned MRZ-3 for kaolin clay in an area that roughly corresponds to the location of the Ione Formation in the SPA. The Ione Formation is known to contain kaolin clay in other locations in northern California (i.e., Amador County). Currently it is unknown whether or not an economically valuable deposit of kaolin clay is present. If it were present, the deposit would be unavailable for mining following project implementation, because urban development is planned throughout the area where the Ione Formation occurs in the SPA. Mitigation measures in Section 3A.7, “Geology, Soils, Minerals, and Paleontological Resources - Land,”

would require studies to determine whether or not an economically valuable source of kaolin clay is present in the SPA. However, this mitigation would not reduce the level of impacts associated with the loss of kaolin clay, if it is present. The only occurrence of the Ione Formation in Sacramento County is located in the SPA. However, the Ione Formation occurs in other locations along Sierra Nevada foothills south of the SPA, from Amador County to Camanche Reservoir in Calaveras County. Kaolin clay is being mined at several locations within the Ione Formation in Amador County. Because the deposits of kaolin clay in the state occur in a very limited geographic area, the “Land” portion of the project could result in a cumulatively considerable incremental contribution to a significant cumulative impact (if kaolin clay is present in the SPA).

A review of available Sacramento County mineral resource maps indicates that facilities proposed as part of the “Water” portion of the project would not impede access to these delineated mineral resources within the eastern portions of Sacramento County. Although portions of the conveyance pipeline alternative alignments would travel in close proximity to several areas identified as containing mineral resources classified as MRZ-2; given that these alignments would be confined to the existing roadway rights-of-way, their location would not contribute to any increased losses in the availability of known mineral resources. Therefore, the “Water” portion of the project would have no impacts related to mineral resources and no cumulatively considerable impacts would occur.

3.4.7 HYDROLOGY, WATER QUALITY, AND GROUNDWATER RESOURCES

Implementation of the “Water” portion of the project would not construct new wells or require groundwater to meet water demands of the “Land” portion of the project. However, operation of the “Water” portion of the project could indirectly contribute to an increase in the volume of groundwater pumped by SCWA within the South American Subbasin in the future. Other projects that may contribute to future cumulative impacts include: new development associated with the Sacramento County General Plan Update, the Long-Term EWA Program, East Sacramento County Groundwater Replacement Project, and SCWA Zone 40 Conjunctive-Use Program. Under future cumulative conditions (beyond 2030), other incremental water demands from developments within the unincorporated portions of Sacramento County in conjunction with new growth within the City’s of Rancho Cordova and Elk Grove could place additional demands on local groundwater. These additional demands as contemplated in Sacramento County’s General Plan EIR for the Preferred Alternative when combined with SCWA’s incremental reduction in capacity within the Freeport Project could lead to cumulatively considerable impacts to local groundwater resources by exceeding the groundwater basin’s safe yield of 273,000 AFY.

In the Sacramento County General Plan Update EIR, the County identified an additional water demand of 31,633 AFY for the proposed Preferred Alternative. This additional demand, if solely supplied through groundwater, and combined with other existing groundwater demands is estimated at 262,280 AFY in 2030 and would exceed the sustainable yield for the Central Basin. The largest component of the total 31,633 AFY for SCWA Zone 40’s new water demand is almost entirely created by the Jackson and Grant Line East New Growth Areas and is an order of magnitude larger than the purveyor with the next largest demand (California American Water Suburban/Rosemont) at 2,342 AFY demand predicted for the Central Basin.

The County’s General Plan EIR notes that SCWA’s Zone 40 is allocated 40,900 AFY of groundwater from the Central Basin with the completion of the Freeport Project and, as provided in the County’s draft General Plan Update EIR, SCWA is not proposing any new groundwater supply in excess of this allocation to support growth in the General Plan Update’s Preferred Alternative. At this time, SCWA is proposing additional water conservation, use of recycled water, and a robust conjunctive use plan that identifies an active groundwater banking program during wet weather and increased groundwater pumping during dry periods. In addition, the draft General Plan Update EIR identifies an additional policy requiring that a water supply plan demonstrating that new growth within the Jackson and Grant Line East New Growth Areas will not exceed the sustainable yield of the Central Groundwater Basin be approved prior to development.

Although the County’s Preferred Alternative, General Plan (2007), has not been formally adopted, the potential indirect impacts to groundwater resources created by the Off-Site Water Facility Alternatives could contribute a

cumulative demand for groundwater resources. Beyond 2030, the combined demand for groundwater during dry years could exceed the safe yield of the Central Basin, thereby resulting in a significant, cumulatively considerable impact. At this time, the City is unable to confirm whether potential future groundwater impacts could be reduced to less than significant levels. Based on this circumstance, the City concludes that the Off-site Water Facility Alternatives could indirectly contribute to potentially cumulative, significant and unavoidable impacts to the South American Groundwater Subbasin beyond 2030.

3.4.8 LAND USE AND AGRICULTURAL RESOURCES

Land in the project vicinity has been converted from agricultural uses to urban development over the last 50 years. Because of the soil types, land in the project vicinity is generally most suitable for grazing land, rather than intensive agriculture such as row crops. Approximately 187,102 acres of land in Sacramento County was under Williamson Act contracts in 2007 (California Department of Conservation [DOC] 2008:26). Of these lands, approximately 10,605 acres were in the nonrenewal process (DOC 2008:29). The nonrenewal process is the most common mechanism for termination of Williamson Act contract lands and most Williamson Act contracts are terminated through nonrenewal expiration. In Sacramento County, approximately 406 acres of land under of Williamson Act contracts entered the nonrenewal process, and the amount of contract land terminated through nonrenewal expirations was approximately 524 acres as of 2007 (DOC 2008:34, 35).

Under the “Land” portion of the project, approximately 2,493 acres of the SPA consists of agricultural lands under existing Williamson Act contracts. Notices of nonrenewal were filed on these parcels in 2004 and 2006; as a result, these existing contracts will expire in 2014 and 2016, respectively. Under the “Water” portion of the project, the White Rock WTP site is under an existing Williamson Act contract, and a notice of nonrenewal was filed on this parcel (APN 072-0060-052-000) and the existing contract will expire in 2018. Implementation of the “Land” and “Water” portions of the project would require the cancellation of one or more of these Williamson Act contracts before their expiration date because the proposed land and water uses would not be permitted under the existing contracts. No feasible mitigation measures are available to reduce impacts associated with the cancellation of these Williamson Act contracts to a less-than-significant level.

In the vicinity of the SPA and Off-site Water Facilities Study Area, the only agricultural lands under existing Williamson Act contracts are south of White Rock Road. Nearby proposed projects, including the Teichert and Walltown quarries, would require cancellation of lands under Williamson Act contracts. Therefore, the impact of these related projects would be cumulatively considerable (i.e., significant), and the “Land” and “Water” portions of the project would result in a cumulatively significant incremental contribution to this cumulatively significant and unavoidable impact. It should be noted that the Williamson Act contract for the DeSilva-Gates Quarry project specifically lists mining as a compatible use under the terms of the existing contract and no cancellation of this contract would be required (Sacramento County 2007a).

3.4.9 NOISE

When determining whether the overall noise (and vibration) impacts from related projects would be cumulatively significant and whether the project’s incremental contribution to any significant cumulative impacts would be cumulatively considerable, it is important to note that noise and vibration are localized occurrences; as such, they decrease rapidly in magnitude as the distance from the source to the receptor increases. Therefore, only those related projects that are in the direct vicinity of the “Land” and “Water” portions of the project and those that are considered influential in regards to noise and vibration (e.g., not located where ambient conditions are dominated by traffic noise from U.S. 50 and relatively large in size) would have the potential to be considered in a cumulative context with the project’s incremental contribution (e.g., Easton, Carson Creek, City Corporation Yard, and the Teichert, Walltown, and DeSilva Gates quarries).

TEMPORARY, SHORT-TERM EXPOSURE OF SENSITIVE RECEPTORS TO INCREASED EQUIPMENT NOISE

Construction equipment noise from the aforementioned related projects would be similar in nature and magnitude to those discussed from the “Land” and “Water” portions of the project in Section 3A.11 and 3B.11, “Noise.” Specifically, noise levels from on-site construction activities would fluctuate depending on the particular type, number, and duration of usage for the varying equipment. The site preparation phase would be anticipated to generate the most substantial noise levels as the on-site equipment associated with grading, compacting, and excavation tend to be the loudest. Although detailed information is not currently available, construction of the related projects would be anticipated to result in noise levels of approximately 87 dB L_{eq} and 90 dB L_{max} at 50 feet from the simultaneous operation of heavy-duty equipment, which could exceed applicable standards at nearby sensitive receptors and/or result in substantial increases in ambient noise levels especially during the more noise-sensitive hours of the day. While temporary, short-term construction source noise levels from the related projects could be considered exempt in the City of Folsom and the County of Sacramento if such noise would only occur during the daytime hours, there is no guarantee that all of the related projects would include such restrictions, and the County of El Dorado has not adopted a daytime construction noise exemption. Therefore, the related projects could generate significant impacts related to short-term exposure of sensitive receptors to increased equipment noise. Construction of the “Land” and “Water” portions of the project could also result in a significant impact from temporary, short-term equipment noise levels in the direct vicinity and possible during the same time frame as the related projects. Implementation of Mitigation Measures in 3A.11 and 3B.11, “Noise,” would limit construction activities to daytime hours and require the construction of temporary noise barriers; however, these measures would not be sufficient to avoid significant construction noise impacts. Thus, the incremental contribution of the “Land” and “Water” portions of the project to this significant cumulative impact would be cumulatively considerable.

LONG-TERM EXPOSURE OF SENSITIVE RECEPTORS TO INCREASED TRAFFIC NOISE LEVELS

This analysis examines the potential for degradation of the existing ambient noise environment from project implementation based on thresholds contained in the CEQA checklist, which also encompass the factors taken into account for impacts under NEPA, where a 5 dBA increase at 50 dBA existing sound levels would be considered a significant impact, and a 3 dBA increase at 60 dBA existing sound levels would be considered a significant impact.

Implementation of the aforementioned related projects would result in an increase in ADT volumes on affected roadway segments and, consequently, an increase in traffic source noise. Traffic noise levels associated with the related projects were predicted for affected roadway segments using FHWA’s Highway Noise Prediction Model (FHWA-RD-77-108) (FHWA 1978) and traffic data (e.g., ADT volumes, vehicle speeds, and % distribution of vehicle types) from DKS Associates, Inc. and Caltrans. This model is based on the California vehicle noise (CALVENO) reference noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and ground attenuation factors and does not assume any natural or human-made shielding (e.g., the presence of vegetation, berms, walls, or buildings). Table 4-8 summarizes the modeled traffic noise levels at the approximate road corridor boundary under future no project conditions, essentially the noise levels attributable only to the related projects including the quarry-related activities. In comparison to those levels shown in Table 3A.11-18 under the existing no project conditions, implementation of the related projects would result in substantial (e.g., 3 dB L_{dn} /CNEL where traffic noise levels range between 60 and 65 dB L_{dn} /CNEL, or 1.5 dB L_{dn} /CNEL where traffic noise levels are greater than 65 dB L_{dn} /CNEL) net increases along affected roadway segments. It is also important to note here that the addition of the quarry-related traffic alone under future conditions (i.e., compare no project [without quarry trucks] to no project [with quarry truck] in Table 4-8 below) results in substantial increases in traffic noise levels. Therefore, the related projects could result in a significant impact from long-term exposure of sensitive receptors to increased traffic noise levels. As discussed in Impact 3A.11-4, project operation would result in a significant impact from the long-term exposure of sensitive receptors to increased traffic noise levels on the same affected roadway segments, which for

the purposes of that analysis, did not include quarry-related traffic. Implementation of Mitigation Measure 3A.11-4 would reduce this impact, but not to a less-than-significant level.

Over the long-term, operation of the “Water” portion of the project could generate a minimal number of new vehicle trips from employees traveling to and from the White Rock WTP or Folsom Boulevard WTP and routine maintenance and inspection activities of the conveyance pipeline and booster pump station. These trips could substantially degrade the existing ambient noise environment.

Thus, the traffic noise impacts from the “Land” and “Water” portion project and related projects, taken together, are cumulatively significant. Construction of sound walls and other noise-attenuating features (e.g., berms, dual-pane windows) throughout the region would require a regional program (which does not exist) and may not be feasible to implement. Because it is considered infeasible to sufficiently reduce noise at every existing and proposed sensitive receptor that would be affected, this cumulative traffic noise impact is significant and unavoidable, and the project’s incremental contribution to the significant cumulative impact is itself cumulatively considerable (i.e., significant and unavoidable).

COMPATIBILITY OF SENSITIVE LAND USES WITH THE AMBIENT NOISE ENVIRONMENT

After consideration has been made of the project-related increase in the ambient noise level (discussed in the preceding paragraph), this analysis considers whether the total noise level with project implementation would be within the allowable exterior local jurisdictional noise element standard. Any total noise level above the local jurisdictional noise element standard would be considered a significant impact.

Ambient noise levels in the general area of the aforementioned related projects would be influenced largely by vehicle traffic on nearby roadways. Table 4-8 summarizes the modeled traffic noise levels on area roadways at the approximate road corridor boundary under future no project conditions including quarry-related activities. As shown in Table 4-8, when considering traffic noise levels associated with the related projects including quarry-related activities, modeled noise levels exceed 60 L_{dn}/CNEL (which is the level considered acceptable in the applicable standards for sensitive uses) by as much as 20 dB, which could result in incompatibilities with existing sensitive uses and/or those proposed as part of the related projects (e.g., Easton and Carson Creek). Therefore, a significant impact could occur from the related projects from land use incompatibility with vehicle traffic. The 60-dB L_{dn}/CNEL noise contours for adjacent roadways (i.e., U.S. 50, White Rock Road, and Prairie City Road) with the inclusion of projected quarry truck trips completely encompass the SPA. Even considering that a typical 6-foot sound wall would reduce noise levels from approximately 5-6 dB and for each additional foot of wall another 1 dB (Caltrans 1998), and incorporating the maximum setback distance feasible, noise levels would still exceed applicable standards at those sensitive uses proposed as part of the project. Thus, the incremental contribution of the “Land” portion of the project to this significant cumulative impact would be cumulatively considerable.

Based on the analyses of operational noise impacts from the “Water” portion of the project, minimal noise from vehicular traffic would be expected from the Off-Site Water Facilities WTP. However, the proximity of pump and generator facilities for the Off-Site Water Facilities pumping facilities, and the WTP, to adjacent sensitive receptors is not known at this time and, therefore, the City is unable to confirm whether enclosing pump and generator facilities at the booster pump station and well sites would mitigate water-related operational noise to a less-than-significant level. Although unlikely, in order to be conservative, this analysis assumes that pumping and WTP operations, when considered in combination with the related projects, could, at times, be in excess of Sacramento County and City of Rancho Cordova standards. Therefore, the incremental contribution of the “Water” portion of the project to this significant cumulative impact could be cumulatively considerable.

As described on page 4-24 of the DEIR/DEIS, the City of Folsom is a participant (along with the County of Sacramento, the City of Rancho Cordova, and other interested parties) in the East Sacramento Regional Aggregate Mining TMP. Accordingly, Cumulative Mitigation Measure Noise-1-Land is hereby replaced with the following:

Cumulative Mitigation Measure NOISE-1-Land: Implement East Sacramento Regional Aggregate Mining Truck Management Plan or Other Measures to Reduce Exposure of Sensitive Receptors to Operational Noise from Quarry Truck Traffic.

The City of Folsom is a participant in the development of an East Sacramento Regional Aggregate Mining Truck Management Plan (TMP), a cooperative effort led by the County of Sacramento, with the input of the City of Folsom, the City of Rancho Cordova and other interested parties, including representatives of quarry project applicants. When the County Board of Supervisors approved entitlements for the Teichert quarry project in November 2010, it also adopted conditions of approval and a development agreement that requires Teichert's participation in, and fair share funding of, a TMP to implement roadway capacity and safety improvements required to improve the compatibility of truck traffic from the quarries with the future urban development in the SPA and other jurisdictions that will be affected by quarry truck traffic. The development agreement adopted by the County for the Teichert project imposes limits on the amounts of annual aggregate sales from Teichert's facility until a TMP is adopted. The City of Folsom does not have direct jurisdiction over the Teichert, DeSilva Gates, or Walltown quarry project applicants as these projects are located within the unincorporated portion of the County. The County, as the agency with the primary authority over the quarries, has indicated that it intends to prepare an environmental analysis in accordance with CEQA prior to adoption of a TMP. The City's authority to control the activities of the quarry trucks includes restrictions or other actions, such as the approval and implementation of specialized road improvements to accommodate quarry truck traffic, that would be applicable within the City's jurisdictional boundaries. For the foregoing reasons, the City of Folsom considers itself a "responsible agency" (as that term is defined at State CEQA Guidelines, CCR Section 15381), in that it has some discretionary power over some elements of a future TMP, if such TMP calls for improvements or other activities on roadways within the jurisdiction of the City. In a responsible agency role, the City would follow the process specified in the CEQA Guidelines for consideration and approval of the environmental analysis prepared by the County for a TMP after such documentation is prepared and adopted by the County. (State CEQA Guidelines, CCR Section 15096.)

Because no final project description for a TMP has been developed as of the completion of this FEIR/FEIS, the City would have to speculate as to those portions of a TMP that might be proposed for implementation within its jurisdiction, or the impacts that could arise from the implementation of as-yet uncertain components. Accordingly, formulation of the precise means of mitigating the potential cumulative noise impacts pursuant to the TMP is not currently feasible or practical. However, as the preferred, feasible, and intended mitigation strategy to address the cumulative impacts of quarry truck traffic through the SPA, the City shall implement, or cause to be implemented those portions of the TMP (as described above) that are within its authority to control. In implementing the TMP, the City shall ensure that the TMP or traffic measures imposed by the City within the SPA reduce the traffic noise exposure to sensitive receptors along routes within the SPA so as to ensure that sensitive receptors are not exposed to interior noise levels in excess of 45 dBA, or increases in interior noise levels of 3 dBA or more, whichever is more restrictive. With this mitigation, the cumulative noise impacts from truck traffic would be less than significant.

As an alternative (or in addition) to implementing the TMP within the SPA, the following measures could (and should) be voluntarily implemented by the quarry project applicant(s) (Teichert, DeSilva Gates, and Granite [Walltown]) to help ensure interior noise levels for sensitive receptors to noise generated by quarry truck traffic would not exceed 45 dBA or increase of 3 dBA over existing conditions, as identified above. The City encourages implementation of the following measures:

- ▶ The quarry project applicant(s) should meet with the City of Folsom to discuss mitigation strategies, implementation, and cost.

- ▶ A site-specific, project-level screening analysis should be conducted by the City of Folsom and funded by the quarry truck applicant(s) for all proposed sensitive receptors (e.g., residences, schools) in the SPA that would be located along the sides of roadway segments that are identified in Table 4-8 as being potentially significant under any of the analyzed scenarios. The analysis should be conducted using an approved three dimensional traffic noise modeling program (i.e., TNM or SoundPlan). Each project-level analysis should be performed according to the standards set forth by the City of Folsom for the purpose of disclosure to the public and decision makers. The project-level analysis should account for the location of the receptors relative to the roadway, their distance from the roadway, and the projected future traffic volume for the year 2030 (including the %age of heavy trucks). If the incremental increase in traffic noise levels are determined to exceed the threshold of significance recommended by the City of Folsom, then design mitigation should be employed, which may include the following:
 - ▶ Model the benefits of soundwalls (berm/wall combination) along the quarry truck hauling roadways and affected receptors not to exceed a total height of eight feet (two-foot berm and six-foot concrete mason wall). If this mitigation measure is determined by the City of Folsom to be inadequate, additional three dimensional traffic noise modeling should be conducted with the inclusion of rubberized asphalt at the expense of the quarry truck applicant(s). No quarry trucks should be allowed to pass on any roadway segment immediately adjacent to or within the SPA until said mitigation has been agreed upon by the City of Folsom and fees for construction of said mitigation are paid by the quarry truck applicant(s).
 - ▶ Implement the installation of rubberized asphalt (quiet pavement) on roadway segments adjacent to sensitive receptors that carry quarry trucks if soundwalls do not provide adequate reduction of traffic noise levels. The inclusion of rubberized asphalt would provide an additional 3 to 5 dB of traffic noise reduction. The cost of construction using rubberized asphalt should be borne by the quarry truck applicant(s). Said mitigation fee should be determined in consultation with the quarry project applicant(s), the Folsom South of U.W. 50 Specific Plan project applicant(s), and the City of Folsom. No quarry trucks should be allowed to pass on any roadway segment immediately adjacent to or within the SPA until said mitigation fees are paid.
 - ▶ To improve the indoor noise levels at affected receptors, implement the following measures before the occupancy of the affected residences and schools:
 - Conduct an interior noise analysis once detailed construction plans of residences adjacent to affected roadways are available to determine the required window package at second and third floor receptors to achieve the interior noise level standard of 45 dB Ldn without quarry trucks.
 - Determine the interior quarry truck traffic noise level increases at second and third floor receptors adjacent to affected roadways compared to no quarry truck conditions. Window package upgrades are expected to be necessary due to the traffic noise level increases caused by quarry trucks along affected roadways. Quarry truck applicant(s) should pay for the cost of window package upgrades (increased sound transmission class rated windows) required to achieve the interior noise level standard of 45 dB Ldn with the inclusion of quarry truck traffic.

To the extent this noise mitigation would not already be implemented as part of the Folsom South of U.W. 50 Specific Plan project development, this mitigation should be paid for by the quarry project applicant(s) before any quarry trucks are allowed to pass on any roadway that is within 400 feet of any residence or school within the SPA.

Implementation: The project applicant(s) of the Folsom South of U.S. 50 Specific Plan project.

- Timing:** Prior to approval of first tentative map or discretionary approval within SPA that would place sensitive receptors along roadways that quarry trucks would reasonably use to access U.S. 50.
- Enforcement:** City of Folsom Community Development Department.

Implementation of Cumulative Mitigation Measure Noise-1-Land would reduce the significant impact related to exposure of project-generated sensitive receptors to noise from increased traffic levels generated by quarry truck trips to a less-than-significant level because the City would either designate truck routes that would limit or prohibit truck traffic adjacent to sensitive receptors or the City would be able to reach a voluntary agreement with the quarry applicants that would require a site-specific noise assessment to be performed using an approved three dimensional traffic noise modeling program, and in the event the quarry trucks are shown to cause a 3 dBA increase in sound levels (or to increase interior sound levels above 45 dBA) within 400 feet of any project-generated sensitive receptors, either the setback distances of the sensitive receptors from the road would be increased, the sound wall heights would be increased, additional sound reduction measures such as quiet pavement would be constructed, or fewer quarry trucks would be allowed to pass on the roadways within 400 feet of the sensitive receptors such a 3 dBA increase would not occur. However, the City of Folsom does not have direct jurisdiction over the Teichert, DeSilva Gates, or Walltown quarry project applicants and operations; therefore, if the quarry project applicants decline to voluntarily implement the recommended mitigation, the City may adopt truck route restrictions, thereby reducing the impact to a less than significant level.

POPULATION, EMPLOYMENT, AND HOUSING

Depending on the action alternative chosen for development, implementation of the “Land” portion of the project would include an estimated population of 16,761–24,335 new residents at full buildout. As discussed in Section 3A.13, “Population, Employment, and Housing - Land,” it cannot be determined whether the “Land” portion of the project would generate population growth that exceeds estimates for Folsom or Sacramento County under their currently adopted General Plans, and the “Land” portion of the project could potentially result in unplanned population growth in the area. Population growth, by itself, is not considered a significant cumulative effect because it is not an environmental impact. However, the direct and indirect effects, such as housing and infrastructure needs that are related to population growth, can lead to physical environmental effects, the impacts of which are considered throughout Chapter 3 of this EIR/EIS.

The “Water” portion of the project would not involve construction of new housing that would directly result long-term increases in population. Therefore, the “Water” portion of the project would have no impacts related directly to population growth and no cumulatively considerable impacts would occur.

The proposed GPA could result in an excess of 532 units within the current City boundaries beyond those incorporated in the currently adopted Folsom General Plan. Population growth, by itself, is not considered a significant cumulative effect because it is not an environmental impact. However, the direct and indirect effects, such as housing and infrastructure needs that are related to population growth, can lead to physical environmental effects, the impacts of which are considered in Section 3A.10, “Land Use and Agricultural Resource – Land,” throughout Chapter 3 of this EIR/EIS, and in the City’s General Plan EIR.

Jobs/Housing Balance

The concept of jobs/housing balance presumes that the environment and quality of life in a given area benefit when the area has a balance between its housing supply and its employment base. In the broadest sense, the balance of jobs and housing in a metropolitan region is defined as provision of an adequate supply of housing to house workers employed in a defined geographic area, such as a community, a city, or other subregion. Alternatively, a jobs/housing balance can be defined as adequate provision of employment in a defined area that generates enough local workers to fill the housing supply. The opportunity to live close to the workplace afforded by providing

housing close to jobs should translate to lower congestion and commute times by eliminating the necessity for long-distance commutes. It also provides increased opportunities to use transit, bike, or walk to work in lieu of driving. An area that has too many jobs relative to its housing supply is likely (in the absence of offsetting factors) to experience substantial in-commuting, relatively rapid increases in housing prices, and intensified pressure for additional residential development. Conversely, if an area has relatively few jobs in comparison to the number of employed residents, many of the workers are required to commute to jobs outside their area of residence. Commuting results in more traffic congestion, air quality degradation, and noise generation.

The simplest measure of jobs/housing balance is an index based on the ratio of employed residents (which is influenced by the number of homes) to jobs in the area. An index of 1.0 indicates that the supply of jobs and housing are balanced. An index above 1.0 indicates that employment growth is outpacing housing growth and, therefore, there are more jobs than employed residents, and may suggest that many employees are commuting in from outside the community. An index below 1.0 indicates that housing growth is outpacing employment growth and, therefore, there are more employed residents than jobs and may suggest that many residents are commuting to jobs outside the community. Imbalance is often a result of local land use policy; therefore, long-term job uses and housing in an urban area should eventually equalize with good planning practices, and thus reduce commuting.

Jobs/housing indices are more useful for examining the potential for “self-containment” at the regional level than for determining whether this self-sufficiency actually exists in a given community. Balance involves more than matching numbers of housing units and numbers of jobs. Even if communities have a statistical balance between jobs and housing, they are still very likely to experience in-commuting and out-commuting, given the variety and dispersed nature of employment and residential opportunities elsewhere in the region and the high level of mobility offered by automobiles. Trip-making decisions, including the choice of mode, are based on many factors. In the most rational scenario, mode choice is based on the relative time, cost, and availability of alternative transportation modes. However, mode choice is not simply the result of a rational decision between equally weighed travel tradeoffs. Based on theory and empirical research, the perceived cost, household characteristics, and land use also affect mode choice. Additional factors shape the context in which people make trip decisions, including the fact that two-income households usually work in different locations; frequent job turnover reduces the ability to locate with reference to one’s workplace; and factors other than jobs access, such as quality of schools, housing prices, and access to other amenities, influence residential location choices as much as or more than proximity to employment. (Atlanta Regional Commission 2002.)

Because the “Land” portion of the project would provide employment opportunities in Sacramento County, including the City of Folsom, as well as the greater Sacramento region, and would be located on the El Dorado County line with off-site improvements being constructed in El Dorado County, the geographic area is defined as El Dorado and Sacramento Counties. To allow for consistency in comparisons, the jobs/housing balance indices in this analysis were calculated using the SACOG Metropolitan Transportation Plan’s (MTP’s) estimated housing and employment projections for these counties. These projections were based on employment, population and housing growth in specific geographic locations using recent growth trends; planned projects (both adopted and in-process) in each jurisdiction; planning-related issues such as flood control, habitat and infrastructure; and the long-range planning projects in each location. The jobs/housing indices were determined by dividing the projected number of jobs by the projected number of housing units. (SACOG 2007:15-1.)

The ratio of jobs to housing varies considerably in Sacramento County. Rancho Cordova had the highest jobs ratio in 2005 with a jobs/housing index of 2.70, followed by the Cities of Sacramento and Folsom with jobs/housing indices of 1.99 and 1.29, respectively. Citrus Heights had the lowest jobs to housing ratio in 2005 with a jobs/housing index of 0.53. As a whole, the jobs/housing index for Sacramento County was 1.34 in 2005. Over the next 25 years, job growth is expected to improve the number of jobs compared to the number of employed residents living in the county and the jobs/housing index is projected to decrease in Sacramento County to 1.21 in 2035. (SACOG 2007:15-3.)

El Dorado County has maintained a low ratio of jobs-to-housing units. In 2005, the jobs/housing index for El Dorado County was 0.79. The majority of the county's employment growth has occurred in the unincorporated communities of El Dorado Hills and Cameron Park at the western edge of the county. These areas have experienced robust residential growth due to entitlement of several specific plans. Apart from additional commercial and industrial growth along U.S. 50, El Dorado Hills will continue to function as El Dorado County's main jobs center. Employment growth in the county is expected bring the jobs/housing index for El Dorado County to 0.98. (SACOG 2007:15-2, 15-3.)

The estimated number of jobs generated by the "Land" portion of the project and the number of employable residents in the SPA would depend on the project (action) alternative chosen for development. The jobs/housing index would be 1.2 for the Proposed Project Alternative, 1.3 for the Resource Impact Minimization Alternative, 1.5 for the Centralized Development Alternative, 1.1 for the Reduced Hillside Development Alternative, or 1.8 for the No Federal Action Alternative, which indicates that the project would be job rich regardless of the alternative implemented. The jobs/housing index for Folsom was 1.29 in 2005, and is projected to decrease to 1.23 in 2035, which indicates the city would remain job rich (SACOG 2007:15-2). Therefore, the project would cumulatively affect the city's jobs-housing balance.

At a more regional level, the jobs/housing index for Sacramento County was 1.34 in 2005 and is projected to decrease to 1.21 in 2035. Overall, the jobs/housing index for the Sacramento region (Sacramento, El Dorado, Placer, Sutter, Yolo, and Yuba Counties) as a whole was 1.24 in 2005 and is projected to decrease to 1.15 by 2035. The jobs/housing indices for these counties indicate that planned housing projects, including this project, are expected to provide housing opportunities and improve the current jobs/housing balance to approximately 1.15 jobs to one housing unit by 2035; however, the Sacramento region would remain slightly job rich. In this respect, the project would cumulatively affect the county and Sacramento region jobs-housing balance. (SACOG 2007:15-2.)

3.4.10 TRAFFIC AND TRANSPORTATION

For traffic and transportation analysis purposes, cumulative conditions reflect year 2030 conditions, the anticipated build-out date of the SPA, and include the increased population that would be generated by the proposed GPA. Land use for the cumulative scenarios is based on the following sources: SACOG forecasts; the City of Folsom General Plan; the City of Rancho Cordova General Plan; the El Dorado County General Plan; the proposed Easton/Glenborough Specific Plan; the Cordova Hills area unapproved Phase I plan; and the proposed Teichert, Walltown, and DeSilva-Gates quarries south of the site. The cumulative traffic volume increases would result in unacceptable levels of service at various roadway segments, intersections, and freeway ramps in the study area as detailed in Section 3A.15, "Traffic and Transportation - Land," of this EIR/EIS. Furthermore, many of the identified impacts would occur outside of the City's jurisdiction and therefore the City cannot impose or enforce mitigation; however, it is expected that these impacts would be reduced to a less-than-significant level if the respective agencies, i.e., Caltrans, Sacramento County, El Dorado County, imposed and enforced specific mitigation measures. Buildout of the "Land" project, in conjunction with other planned, proposed, and approved projects in the vicinity, would result in cumulatively considerable increases to peak-hour and daily traffic volumes, even if the other agencies cooperated to implement mitigation measures.

3.4.11 UTILITIES AND SERVICE SYSTEMS

Future development in Sacramento and El Dorado Counties would increase the demand for utilities in the region. In terms of cumulative impacts, the appropriate service providers are responsible for ensuring adequate provision of public utilities within their jurisdictional boundaries. As indicated in Sections 3A.16 and 3B.16, "Utilities and Service Systems," the necessary public utilities would be provided to the SPA by the City, SRCSD, EID, Sacramento Metropolitan Utility District (SMUD), Pacific Gas & Electric Company (PG&E), AT&T, and Comcast. Public utilities would be provided to the "Water" portion of the project by SMUD and AT&T. The related "Land" projects within the Cities of Folsom and Rancho Cordova would rely on similar service providers

(with the exception of EID). Related projects outside the Cities of Folsom and Rancho Cordova would rely on a variety of service providers, within Sacramento and El Dorado Counties, some of which could include SRCSD, EID, PG&E, AT&T, and Comcast. The “Land” portion and “Water” portions of the project and the proposed GPA would result in less-than-significant impacts associated with increased demand for electrical and communications services and infrastructure, and the “Land” portion of the project would result in less-than-significant impacts associated with increased demand for SRCSD off-site wastewater collection and conveyance facilities; increased generation of solid waste; and increased demand for natural gas and cable television services and infrastructure. Tables 3A.16-3, 3A.16-4, and 3A.16-5 in Section 3A.16, “Utilities and Service Systems - Land,” of the DEIR/DEIS summarize wastewater generation, solid waste generation, and electrical and natural gas service demands, respectively.

WATER SUPPLY

Presently, there are no public water supply facilities in the SPA. Implementation of the “Water” portion of the project would allow the City to provide water service to new development within the SPA. The “Water” portion of the project proposes to acquire not more than 8,000 AFY of CVP settlement supply water from the NCMWC to meet the water supply demands at buildout of the “Land” portion of the project. That water would be permanently assigned to the City and this water supply would be provided by Reclamation for diversion from the Sacramento River.

In compliance with SB 610, the City has prepared a water supply assessment (WSA) to evaluate the adequacy of existing and future water supplies to meet the water demand created by the “Land” portion of the project in conjunction with existing and future development (Appendix M1). The WSA concluded that NCMWC would have sufficient surface water supplies to serve the “Land” portion of the project.

In relation to water supplies within NCMWC’s service area, the City acknowledges that continued urbanization within NCMWC’s service area could occur in the future and that these areas could be served by the City of Sacramento as opposed to NCMWC. However, even if the City of Sacramento served these areas in the future, it is unlikely that total water use within NCMWC’s service area would increase. By considering both 2004 and 2007 cropping patterns within NCMWC’s service area, the Wagner and Bonsignore Report (2007) (see Appendix M2) supports this conclusion.

Because the Wagner & Bonsignore report considered 2004 and 2007 cropping patterns within NCMWC’s service area and the associated water use, the cumulative analysis considers the irrigation of approximately 4,500 acres that were no longer under agricultural production in 2007. If, however, 2007 cropping patterns were to continue in the future and urbanized development replaced the approximately 4,500 acres taken out of production, the corresponding water use would still be less than agricultural water use in 2004. Hence, even if the City of Sacramento supplied the new development within NCMWC’s service area as opposed to NCMWC, there is sufficient basis for concluding that there would no corresponding net increase in water use within NCMWC’s service area, but more likely a net reduction in water use.

This finding is supported by the fact that rice is generally considered to be one of the more water-intensive crops and, in general terms, uses substantially more water on a per-acre basis when compared to an M&I use. Further, current building codes (e.g., CalGreen) and water conservation measures (e.g., California Urban Water Conservation BMPs [2007]) combined with a 1:1 ratio of open space to development requirements as outlined in the Natomas Joint Vision MOU, would likely further reduce total water demand for urbanized uses. Although the pattern of demand would change under an urbanized scenario, this change in the delivery pattern would benefit the CVP by adding to carryover storage within Shasta Reservoir during the fall months. This effect would be similar to the project’s effect on Shasta Reservoir storage. For these reasons, the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact.

WATER CONVEYANCE AND TREATMENT FACILITIES

Presently, there are no public water supply facilities in the SPA. A new on-site water system would be constructed and would include transmission and distribution pipelines, aboveground water storage tanks, and booster pump stations. The on-site water system would be incrementally expanded to meet the demands of the “Land” portion of the project.

The “Water” portion of the project would construct off-site water conveyance and treatment facilities to convey water to the SPA. These off-site facilities consist of (1) a point of diversion on the Sacramento River at the Freeport Project, (2) a raw or treated-water booster pump station, and (3) a raw or treated-water transmission pipeline to convey the water to the SPA. The point of diversion, booster pump station, and water transmission pipeline would be sized to accommodate not more than 6,000 AFY of water purchased from NCMWC. Water treatment would be provided through the Vineyard WTP or construction of the White Rock WTP or Folsom Boulevard WTP. The WTP alternatives would have an ultimate capacity of approximately 10 million gallons per day (mgd).

Implementation of mitigation measures in Sections 3A.16 and 3B.16, “Utilities and Service Systems,” would reduce potentially significant project-related impacts related to on- and off-site water conveyance facilities to a less-than-significant level by ensuring that sufficient on- and off-site water conveyance infrastructure and facilities would be available to serve all “Land” portions of the project. Therefore, the “Land” and “Water” portions of the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to water conveyance and treatment facilities.

WASTEWATER CONVEYANCE FACILITIES

The SPA is presently not served by any municipal wastewater collection and treatment systems. Approximately 3,313 acres of the SPA west of Empire Ranch Road is within the SRCSD service area and the remaining 189 acres east of Empire Ranch Road is within both the SRCSD and EID service areas.

A draft sewer master plan was prepared for the project to address the viability of providing sewer service to the SPA and identify on- and off-site facility needs and design. Proposed on-site wastewater collection trunk lines and all other planned elements of the wastewater system would be sized to accommodate planned wastewater flows.

The proposed GPA could result in construction of 546 units beyond those envisioned in the existing Folsom General Plan. In combination with future projects that may be built within the City of Folsom, the proposed GPA could contribute considerably to a potentially significant cumulative impact related to wastewater conveyance. Mitigation Measures 3A.16-1 and 3A.16-3 would require proof of capacity prior to approval of development under the proposed GPA, and would also result in a less than considerable cumulative contribution.

Sacramento Regional County Sanitation District

The wastewater generated within the 3,313-acre SRCSD service area would ultimately be conveyed to the Folsom South Pump Station that is north of Easton Valley Parkway and approximately 1,500 feet west of Oak Avenue. From the Folsom South Pump Station, the proponents of the Folsom South of U.S. 50 Specific Plan would construct an off-site force main to convey flows to an existing SRCSD 24-inch force main located within Iron Point Road north of U.S. 50 and downstream of the existing Folsom East 3B Pump Station. The existing 24-inch force main is currently a dry pipeline and was constructed as part of SRCSD’s Folsom East Interceptor project for future use by the “Land” portion of the project. Therefore, the “Land” portion of the project and the proposed GPA would not result in a cumulatively considerable incremental contribution to a significant cumulative impact on SRCSD wastewater conveyance facilities.

El Dorado Irrigation District

Approximately 189 acres of the SPA east of Empire Ranch Road is within the EID service area and wastewater collection and conveyance facilities for that area would be provided by EID. Sewer flows from the EID service area would be conveyed to an existing pump station at the intersection of White Rock Drive and Winterfield Drive and ultimately conveyed to the El Dorado Hills Wastewater Treatment Plant (WWTP). The existing collection and conveyance facilities may not have the capacity to accommodate wastewater flows generated by the “Land” portion of the project to the EID service area and could require improvements to meet project demands. Implementation of mitigation contained in Section 3A.16, “Utilities and Service Systems - Land,” would reduce significant impacts associated with increased demand for EID conveyance facilities to a less-than-significant level because adequate wastewater conveyance facilities would be documented before approval final maps and issuance of building permits.

However, potential improvements could include expanding the capacity of existing sewer pipelines, upgrading or replacing the existing pump, and installing an additional manhole; it is not known at this time what specific improvements would be required. Any improvements to these facilities would require additional analysis in a subsequent CEQA document to identify specific impacts and any required mitigation measures. Impacts resulting from improvements to EID collection and conveyance facilities could include: temporary, short-term generation of criteria air pollutants, such as PM₁₀ (e.g., respirable particulate matter with a diameter smaller than 10 microns) and emissions of ozone precursors (e.g., reactive organic gases and oxides of nitrogen) during construction; temporary lane closures; increased truck traffic and other roadway impacts during construction; exposure of sensitive receptors to noise levels above noise ordinances during construction; exposure of sensitive noise receptors to new stationary-source noise from potential pump station improvements; and exposure of construction crews and the public to hazardous materials used in construction.

Since it is unknown if existing collection and conveyance facilities have the capacity to accommodate wastewater flows generated by project development, the “Land” portion of the project could directly and indirectly contribute to the need for off-site EID wastewater facility improvements. The “Land” portion of the project would contribute to the potentially significant environmental effects associated with improvements to these facilities for which feasible mitigation may not be available to reduce impacts to a less-than-significant level.

Because future improvements to the EID collection and conveyance facilities would be required to serve the project and other development in the EID service area, the environmental impacts of these facilities are associated with development of the project. Therefore, the “Land” portion of the project and related projects could contribute to the indirect and direct significant impacts associated with the future improvements to the collection and conveyance facilities that would be needed to serve the “Land” portion of the project and the related projects. Therefore, related projects could result in cumulatively considerable (i.e., significant) impacts associated with increased demand for wastewater conveyance facilities, and the “Land” portion of the project would result in a cumulatively considerable incremental contribution to this cumulatively significant impact.

Wastewater Treatment Facilities

Sacramento Regional County Sanitation District

Depending on the project or action alternative chosen for development, approximately 3.83 to 5.76 million gallons per day (mgd) of average dry-weather flow and 8.58 to 12.10 mgd peak wet-weather flow would be generated within the SRCSD service area (MacKay & Soms 2008b; Zoller, pers. comm. 2009).

The wastewater flows generated in the SPA, including the 189-acre portion of the SPA that would be served by EID, have been planned for in the SRCSD Master Plan 2000. The master plan estimates that buildout of the SPA would generate an average dry-weather flow of 6.82 mgd and a peak wet-weather flow of 14.48 mgd (SRCSD 2003b:Table 3-1). Because 189 acres of the SPA would be served by EID, the project-related average-dry weather flow and peak-wet weather flow would be less than those identified in the SRCSD Master Plan 2000.

The *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan* (2001) provides for expansion of the Sacramento Regional Water Treatment Plant (SRWTP) to 218 mgd, and provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth through the year 2020. According to the 2020 Master Plan EIR, the permitted capacity (181 mgd) of the SRWTP was expected to be reached before 2010. However, flows to the SRWTP have consistently decreased between 2000 and 2006 from 155 mgd to 131 mgd. The reason for reduced flows is a result of water conservation efforts over the last 10 years. In addition, State legislation passed in 2009 and the SRCSD commitment to promote water supply reliability and Delta sustainability would substantially reduce the amount of wastewater generated in the future.

The expansion of the SRWTP to 218 mgd was based on growth rates expected to be achieved in the Sacramento County region by 2020. This projected capacity does not specifically include buildout of the “Land” portion of the project or the proposed GPA. Note that the 218 mgd total does not represent a buildout population total for SRCSD; rather, it represents the amount of growth expected within SRCSD based on projections. The SRCSD has determined that growth within the district is less than what was projected in the 2020 master plan and the SRWTP can provide capacity to future development beyond what was originally anticipated. Although there is expected to be sufficient SRWTP capacity to accommodate project flows through 2020, there would be no assurances that the SRWTP would have adequate capacity for new wastewater flows for the SPA occurring after 2020. Over time, additional planning at the SRWTP would occur, and overall capacity would be assessed and additional capacity planned for and added. The SRWTP site has sufficient land area to accommodate a substantially higher flow than 218 mgd; however, SRCSD’s plans beyond the next 12 years are speculative.

Because there is a relationship between the “Land” portion of the project (and the proposed GPA) and the need for expansion of the SRWTP, implementation of the “Land” portion of the project and the proposed GPA would contribute indirectly and incrementally to the related impacts. As described in the 2020 Master Plan EIR, construction and operation of the expanded SRWTP would result in several environmental impacts (including impacts on water quality, hydrology, and fisheries), most of which would be reduced to a less-than-significant level through implementation of mitigation. The only significant and unavoidable impact would be from temporary, short-term increases in NO_x during construction of SRWTP facilities. However, the adequacy of the EIR for the 2020 Master Plan is being litigated (see Section 3A.16, “Utilities and Service Systems - Land” for additional information). In addition to the impacts identified above, there is a potential that new significant impacts to water quality or other resources could be identified if the EIR for the SRWTP is found inadequate and impacts are re-analyzed. However, it is speculative to draw any such conclusion at this point.

The “Land” portion of the project, the proposed GPA, and the related projects would contribute to the need to expand wastewater treatment capacity at the SRWTP facility identified by SRCSD in its 2020 Master Plan; therefore, the “Land” portion of the project and the proposed GPA would contribute to a cumulatively considerable incremental contribution to a significant cumulative impact related to the short-term impact on air quality from expansion of the SRWTP identified in the 2020 Master Plan EIR.

El Dorado Irrigation District

Depending on the project or action alternative chosen for development, approximately 0.05 to 0.31 mgd of average dry-weather flow and 0.14 to 0.78 mgd of peak wet-weather flow would be generated within the EID service area (MacKay & Soms 2008b).

Currently, the design capacity of the El Dorado Hills WWTP is 3.0 mgd average dry-weather flow and 7.6 mgd peak wet-weather flow. As of 2007, the average dry weather flow is approximately 2.86 and the peak wet-weather flow is 8.04 mgd. Expansion of the WWTP is required to provide wastewater treatment capacity for land uses in El Dorado Hills as identified by the El Dorado County General Plan (2003). The treatment plant is currently being expanded to 4.0 mgd, which is anticipated to be completed in 2010. The full buildout of the treatment plant to 5.4 mgd is expected to occur by 2025.

Implementation of mitigation in Section 3A.16, “Utilities and Service Systems - Land,” would reduce significant impacts associated with increased demand for wastewater treatment plant facilities from development of the Folsom South of U.S. Specific Plan to a less-than-significant level because adequate wastewater treatment facilities would be documented before approval of final maps and issuance of building permits.

However, the SPA was not included in the planned future capacity of the El Dorado Hills WWTP; therefore, this project would potentially result in increased in wastewater flows that exceed treatment plan capacity. Any improvements to the treatment plant would require additional analysis in a separate CEQA document to identify specific impacts and any required mitigation measures. Impacts resulting from improvements to the El Dorado Hills WWTP could include: temporary, short-term generation of criteria air pollutants such as PM₁₀ and emissions of ozone precursors (e.g., reactive organic gases and oxides of nitrogen) during construction; generation of new odors from operation of expanded treatment plant facilities; degradation of water quality from increased discharges to Carson Creek; temporary roadway lane closures, increased truck traffic, and other roadway impacts during construction; exposure of sensitive receptors to noise levels above noise ordinances during construction; and exposure of construction crews and the public to hazardous materials used in construction.

It is unknown if the existing El Dorado Hills WWTP has the capacity to accommodate wastewater flows generated by development of the EID portion of the SPA, and whether the “Land” portion of the project could directly and indirectly contribute to the need for El Dorado Hills WWTP improvements. Therefore, the “Land” portion of the project could contribute to the potentially significant environmental effects associated with improvements to treatment plant facilities for which feasible mitigation may not be available to reduce impacts to a less-than-significant level.

Because future improvements to the EID WWTP would be needed to serve the “Land” portion of the project and other developments in the EID service area, the environmental impacts of these facilities would be associated with development of the “Land” portion of the project. Therefore, the “Land” portion of the project and related projects could contribute to the indirect and direct significant impacts associated with the future improvements to the EID WWTP that would be needed to serve the project and the related projects. Therefore, related projects could result in cumulatively considerable (i.e., significant) impacts associated with increased demand for wastewater conveyance facilities, and the project would result in a cumulatively considerable incremental contribution to this cumulatively significant impact.

3.5 FINDINGS RELATED TO THE RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Based on the EIR and the entire record before the City Council, the City Council makes the following findings with respect to the project’s balancing of local short-term uses of the environment and the maintenance of long-term productivity:

As the Specific Plan is implemented, certain impacts would occur on a short-term level. Such short-term impacts are discussed above. Where feasible, measures have been incorporated in the Specific Plan to mitigate these potential impacts.

The Specific Plan would result in the long-term commitment of resources to implement the Specific Plan including water, natural gas, fossil fuels, and electricity. The long-term implementation of the Specific Plan would provide economic benefits to the City of Folsom. The Specific Plan would provide a development plan and guidelines for a large-scale mixed-use development in areas annexed into the City of Folsom. Notwithstanding the foregoing, some long-term impacts would result from implementation of the Specific Plan.

Despite short-term and long-term adverse impacts that would result from implementation of the Specific Plan, the short-term and long-term benefits of implementation of the Specific Plan justify implementation.

3.6 FINDINGS RELATED TO PROJECT ALTERNATIVES

Where a lead agency has determined that, even after adoption of all feasible mitigation measures, a project as proposed would still cause one or more significant environmental impacts that cannot be substantially lessened or avoided, the lead agency, prior to approving the project as mitigated, must first determine, with respect to such impacts, whether there remain any project alternatives that are both environmentally superior and feasible within the meaning of CEQA. As noted under the heading “Findings Required under CEQA” above, an alternative may be “infeasible” if it fails to achieve most of the basic objectives of the project. Thus, “‘feasibility’ under CEQA encompasses ‘desirability’ to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors” of a project. *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417.

3.6.1 SUMMARY OF LAND ALTERNATIVES CONSIDERED

In addition to the Proposed Project Alternative, the City considered the No Project Alternative as well as four action alternatives. A summary comparison of the long-term environmental benefits to be gained, or adverse impacts to be avoided, among all alternatives is provided at the end of DEIR/DEIS Chapter 2, “Alternatives”; detailed comparisons are provided within each section of Chapter 3, “Affected Environment, Environmental Consequences, and Mitigation Measures,” of the DEIR/DEIS.

NO PROJECT ALTERNATIVE

Under this alternative, the project as a whole would not be developed or implemented—meaning that none of the development proposed for the SPA would be constructed and no off-site water facilities would be constructed. However, the No Project Alternative assumes that existing land uses in the SPA would continue, including development as permitted under the adopted Sacramento County General Plan designations and zoning, which would permit the construction of up to 44 individual rural residences on 80-acre parcels zoned for agricultural use. This analysis uses existing site conditions at the time that the NOP was published (September 2008) as the “existing conditions” portion of the “no project” scenario (see State CEQA Guidelines Section 15126.6[e][2]). Remediation of contaminated soil and groundwater on the Aerojet General Corporation parcel along the western property boundary is a separate action that will continue either with or without project implementation.

Under the No Project Alternative, the SPA would not be annexed into the City of Folsom. Instead, it would remain within, and under the jurisdiction of, unincorporated Sacramento County. Although Chapter 3.0, “Affected Environment, Environmental Consequences, and Mitigation Measures,” of the DEIR/DEIS discusses the impacts related to the No Project Alternative, it is not appropriate in the EIR/EIS to propose mitigation measures for the No Project Alternative, because the City of Folsom has no authority or jurisdiction over any actions which would occur in the SPA under this alternative. In addition, this alternative would result in no impacts to wetlands or other waters of the U.S. (as compared to a total of 39.5 acres filled for the “Land” portion of the project and 6.8 acres filled for the “Water” portion of the project for a grand total of 46.3 acres filled by the project as a whole). Because no impacts would occur, the USACE would have no authority over any actions that would occur in the SPA under this alternative.

Although the Sacramento County General Plan contains goals and policies intended to protect many sensitive resources, such as cultural and biological resources, most of those goals and policies do not apply to land that is zoned and designated for agricultural use, because continued agricultural activities and agricultural land is a valuable resource in and of itself that is encouraged and protected by Sacramento County. The goal of Sacramento County’s Agricultural Element as stated in its General Plan is to “maintain the County’s agricultural lands, and (their) agricultural productivity...” and “disruption of one resource value for another is an historic pattern of land development in the County,” which the County is now trying to avoid. As further discussed in the Sacramento County General Plan, the County recognizes that while all resources are valuable, it is not always possible to achieve a balance between protecting agricultural land owners’ right to farm, and protecting other sensitive resources. The

analysis of the No Project/No Action Alternative in the EIR/EIS assumes that “normal agricultural activities” would continue in the SPA; based on the soil types in the SPA, those activities would consist of dryland farming (i.e., livestock grazing), which is consistent with the historic use of the SPA over the last 100 years.

Facts in Support of Finding of Infeasibility

Under this alternative, land within the SPA would remain under the jurisdiction of Sacramento County and no action would be taken by the City of Folsom. As a consequence, no part of the Folsom South of U.S. 50 Specific Plan would be implemented. Existing agricultural uses would continue and future development could occur as anticipated in the Sacramento County General Plan (1993). The Sacramento County General Plan is currently being updated and Sacramento County has released a DEIR to evaluate the environmental impacts of the general plan (2007). The No Project Alternative would not fulfill any of the project objectives, the majority of which relate to the orderly development of the Folsom sphere of influence area following the passage of Measure W and amendment of the Folsom City Charter (see DEIR/DEIS, pages 1-7 through 1-8). Because the No Project Alternative would not achieve any of the objectives for the project, the No Project Alternative is not a feasible alternative. Therefore, this alternative has been rejected.

No USACE PERMIT ALTERNATIVE

This alternative was designed to avoid the placement of dredged or fill material into waters of the U.S. (including wetlands) from both the “Land” and “Water” portions of the project, thus eliminating the need for a USACE Section 404 CWA permit. As a result, there would be no fill of waters of the U.S. under this alternative, compared to 46.3 combined acres of fill under the total Proposed Project Alternative (i.e., including both land development and off-site water facilities). This alternative, however, would likely still require that the applicants consult with the USFWS and the National Marine Fisheries Service (NMFS) to ensure compliance with Section 9 of the Endangered Species Act. A conceptual land use map showing development areas and jurisdictional wetlands with a 50-foot-wide avoidance buffer in the SPA is provided in Exhibit 2-13 of the EIR. Proposed backbone infrastructure improvements in this alternative are illustrated in Exhibit 2-14 of the EIR. Under this alternative, 1,506.1 acres of the SPA would be designated as open space, compared to 1,057 acres under the Proposed Project Alternative. This alternative also would require more expensive/time-consuming, methods of construction for roadways and utilities. Under this alternative, approximately 3,837 fewer residential housing units would be constructed, and approximately 131 fewer acres would be used for commercial/industrial development, than under the Proposed Project Alternative. The acreage proposed for park use is reduced to 84.8 acres in this alternative. Tables 2-1 and 2-2 list the total estimated residential, commercial, and industrial development under this alternative. The off-site water facilities in this alternative would avoid fill of waters of the U.S. by using horizontal directional drilling (i.e., jack-and-bore) construction methods along the pipeline alignment and by siting the water treatment plant in a location that would avoid fill of waters of the U.S.

Facts in Support of Finding of Infeasibility

Under this alternative, development would occur without placement of dredged or fill material into waters of the U.S. While this alternative would lessen significant and unavoidable impacts related to biological resources and climate change, these impacts would still be significant and unavoidable (DEIR/DEIS, pages 2-106 through 2-107). The No USACE Permit Alternative would have the lowest water demand of the action alternatives (DEIR/DEIS, page 2-107). Overall, while the No USACE Permit Alternative may lessen some impacts, the significance conclusions of this alternative are the same as for the Proposed Project Alternative.

A feasibility analysis for the action alternatives was prepared by Kosmont Companies (dated April 7, 2011) and interpreted by Economic & Planning Systems, Inc. (EPS) (EPS 2011). As explained by EPS, Kosmont estimated the infrastructure cost burden compared to the assessed value of residential and commercial land for all action alternatives. The infrastructure cost burden, expressed as a percentage of the selling price, is a generally accepted indicator of whether a reasonable and prudent developer would proceed with development. According to both

EPS (2011) and Mr. James C. Ray of MacKay & Soms Civil Engineers (Ray, pers. comm., 2011), infrastructure burdens between 15 and 20% are considered acceptable. An infrastructure burden in excess of 20% is generally considered financially infeasible (EPS 2011:2).

This alternative would require significant additional cost needed to construct numerous roadway bridge crossings to span the biological resources on the project site. The cost burden percentage for the No USACE Permit Alternative range from 32.7% to 39.3% for residential uses, and from 45.4% to 69.2% for commercial uses, with an overall average of 40.9% cost burden (EPS 2011:2). Based on the feasibility thresholds discussed in the EPS memo (2011), the No USACE Permit Alternative is financially infeasible. Thus, a reasonable and prudent developer would not construct the project under this alternative due to the excessive infrastructure costs (Ray, pers. comm., 2011).

The No USACE Permit Alternative would be inconsistent with a number of City of Folsom General Plan policies including those related to accommodation of anticipated growth, providing sufficient housing choices, and providing goods and services of adjacent neighborhoods (Policies 4.1, 7.4, 10.1, 15.4, 18.1, and 18.5). The No USACE Permit Alternative also conflicts with general plan policies requiring that annexed land be fiscally sound additions to the City (Policies 7.1 and 7.4).

While the No USACE Permit Alternative would meet some of the basic objectives of the project, this alternative would not meet these objectives to the same extent as would the Proposed Project Alternative. For example, the No USACE Permit Alternative would not fully meet objectives related to consistency with the City's general plan, providing a mix of housing to diversify the City's housing stock, and providing neighborhood- and region-serving retail uses.

Because the No USACE Permit Alternative would be financially infeasible, would conflict with the City's general plan, and would not meet some of the basic objectives of the project, this alternative is considered infeasible. Therefore, this alternative has been rejected.

RESOURCE IMPACT MINIMIZATION ALTERNATIVE

This alternative would include additional areas of high-quality biological habitat in the proposed preserve area, and would also preserve many of the known on-site cultural resources that would likely be eligible for listing on the California Register of Historical Resources/National Register of Historic Places. DEIR/EIS Exhibit 2-15 illustrates the conceptual land use plan for the Resource Impact Minimization Alternative, and Exhibit 2-16 illustrates proposed backbone infrastructure improvements.

Under the Resource Impact Minimization Alternative, project components would be reconfigured to avoid many of the impacts on waters of the U.S., including wetlands and high-quality biological habitat, and the level of residential development would be decreased to reduce the amount of project-generated traffic, air quality emissions, and noise. A permit for wetland fill would still be required under this alternative; 26.47 acres of waters of the U.S. would be filled, 13.03 fewer acres than would be filled by the Proposed Project Alternative. An additional 375 acres of land across the SPA would be designated as open space.

A total of 1,429 acres, approximately 40% of the SPA, would become a protected wetland preserve. Areas of the SPA with higher concentrations of cultural resources, including areas on the northwestern portion of the SPA would also remain in open space in this alternative. The total acreage of residential development would be reduced by approximately 205 acres and approximately 2,245 fewer residential units would be constructed. Overall density would decrease (average density across the residentially designated area would be approximately 6 du/ac, compared to 6.65 du/ac under the Proposed Project Alternative). Commercial and industrial development sites would be reduced by approximately 113 acres. Development of park land would be reduced to 105.7 acres. The types of land uses and general on- and off-site infrastructure improvements would remain the same as under

the Proposed Project Alternative. Tables 2-3 and 2-4 list the total estimated residential, commercial, and industrial development under this alternative.

Facts in Support of Finding of Infeasibility

Under this alternative, development would avoid more sensitive biological resources than under the Proposed Project Alternative. As a result, this alternative would include fewer residential units and a reduction in acreage available for commercial and industrial uses. While this alternative would lessen significant and unavoidable impacts related to air quality and cultural resources as compared to the Proposed Project Alternative, these impacts would still be significant and unavoidable (DEIR/DEIS, pages 2-106 through 2-107). Overall, while the Resource Impact Minimization Alternative may lessen some impacts, the significance conclusions of this alternative are the same as for the Proposed Project Alternative.

A feasibility analysis for the action alternatives was prepared by Kosmont Companies (dated April 7, 2011) and interpreted by EPS (EPS 2011). As explained by EPS, Kosmont estimated the infrastructure cost burden compared to the assessed value of residential and commercial land for all action alternatives. The infrastructure cost burden, expressed as a percentage of the selling price, is a generally accepted indicator of whether a reasonable and prudent developer would proceed with development. According to both EPS (2011) and MacKay & Soms Civil Engineers (Ray, pers. comm., 2011), infrastructure burdens between 15 and 20% are considered acceptable. An infrastructure burden in excess of 20% is generally considered financially infeasible (EPS 2011:2).

The cost burden percentage for the Resource Impact Minimization Alternative ranges from 26.2% to 30.5% for residential uses, and from 30.5% to 45.8% for commercial uses, with an overall average of 30.3% cost burden (EPS 2011:3). This alternative would require substantial additional cost needed to construct connections between the various areas of development on the project site. Based on the feasibility window discussed in the EPS memo (2011), the Resource Impact Minimization Alternative is financially infeasible. Thus, a reasonable and prudent developer would not construct the project under this alternative due to the excessive infrastructure costs (Ray, pers. comm., 2011).

The Resource Impact Minimization Alternative would be inconsistent with a number of City of Folsom General Plan policies including those related to accommodation of anticipated growth, providing sufficient housing choices, providing land available for industrial development, and providing goods and services of adjacent neighborhoods (Policies 4.1, 7.4, 10.1, 10.2, 15.4, and 18.1). The Resource Impact Minimization Alternative also conflicts with general plan policies requiring that annexed land be fiscally sound additions to the City (Policies 7.1 and 7.4).

While the Resource Impact Minimization Alternative would meet some of the project objectives, this alternative would not meet these objectives to the same extent as would the Proposed Project Alternative. The No USACE Permit Alternative would not meet objectives related to consistency with the City's general plan, providing a mix of housing to diversify the City's housing stock, and providing neighborhood- and region-serving retail uses.

Because the Resource Impact Minimization Alternative would be financially infeasible, would conflict with the City's general plan, and would not fully meet all of the project objectives, this alternative is considered infeasible. Therefore, this alternative has been rejected.

CENTRALIZED DEVELOPMENT ALTERNATIVE

This alternative would preserve approximately 75% of the eastern part of the SPA in its current undeveloped state. Commercial development would still occur along the south side of U.S. 50 within the foothills. It would also entail about 1,000 fewer equivalent dwelling units (EDUs) than the Proposed Project Alternative. This alternative was developed to reduce potential impacts to biological, cultural, and visual resources. DEIR/EIS Exhibit 2-17 illustrates the conceptual land use plan for the Centralized Development Alternative, and Exhibit 2-

18 illustrates proposed backbone infrastructure improvements. This alternative would fill 37.06 acres of waters of the U.S., 2.48 acres fewer than would be filled under the Proposed Project Alternative.

The Centralized Development Alternative envisions a higher density of residential development on a smaller footprint compared to the Proposed Project Alternative, resulting in more dwelling units per acre. The total acreage of residential development would be reduced by approximately 387 acres, but total number of residential units would be reduced by only 1,186, resulting in a higher overall density per acre (7.85 du/ac in the Centralized Development Alternative compared to 6.65 du/ac in the Proposed Project Alternative). The acreage of commercial and industrial development would be similar in this alternative compared to the Proposed Project Alternative. The acreage proposed for park use is reduced to 118.7 acres in this alternative, including local parks which are included in acreage totals for residential and mixed-use designations. The types of land uses and general on- and off-site infrastructure improvements under the Centralized Development Alternative would remain the same as under the Proposed Project Alternative. A 1,464.4-acre area would be dedicated to open space (approximately 407 acres more than under the Proposed Project Alternative) is also designated under the Centralized Development Alternative.

Facts in Support of Finding of Infeasibility

Under this alternative, development would be at a higher overall density on a smaller amount of land. This alternative would include fewer residential units, a lower percentage of single-family units, and a reduction in acreage dedicated to commercial and industrial uses. While this alternative would lessen significant and unavoidable impacts related to aesthetics, these impacts would still be significant and unavoidable (DEIR/DEIS, pages 2-106 through 2-107). This alternative would also reduce the magnitude of the less-than-significant impacts related to geology, soils, minerals, and paleontological resources. Overall, while the Centralized Development Alternative may lessen the severity of some impacts, the significance conclusions of this alternative are the same as for the Proposed Project.

A feasibility analysis for the action alternatives was prepared by Kosmont Companies (dated April 7, 2011) and interpreted by EPS (EPS 2011). As explained by EPS, Kosmont estimated the infrastructure cost burden compared to the assessed value of residential and commercial land for all action alternatives. The infrastructure cost burden, expressed as a percentage of the selling price, is a generally accepted indicator of whether a reasonable and prudent developer would proceed with development. According to both EPS (2011) and MacKay & Soms Civil Engineers (Ray, pers. comm., 2011), infrastructure burdens between 15 and 20% are considered acceptable. An infrastructure burden in excess of 20% is generally considered financially infeasible (EPS 2011:2).

The cost burden percentage for the Centralized Development Alternative range from 20.1% to 22.2% for residential uses, and from 16.9% to 24.0% for commercial uses, with an overall average of 21.3% cost burden (EPS 2011:2). By reducing the amount of developable acreage, infrastructure costs are spread among fewer units and developable acreage, thus increasing the financial burden on the amount of future development. Based on the feasibility thresholds discussed in the EPS memo (2011), the Centralized Development Alternative would be considered financially infeasible. Thus, a reasonable and prudent developer would not construct the project under this alternative due to the excessive infrastructure costs (Ray, pers. comm., 2011).

The Centralized Development Alternative would be inconsistent with a number of City of Folsom General Plan policies including those related to accommodation of anticipated growth, providing sufficient housing choices, and providing goods and services of adjacent neighborhoods (Policies 4.1, 7.4, 10.1, 15.4, and 18.1). The Centralized Development Alternative also conflicts with general plan policies requiring that annexed land be fiscally sound additions to the City (Policies 7.1 and 7.4).

While the Centralized Development Alternative would meet some of the project objectives, this alternative would not meet these objectives to the same extent as would the Proposed Project Alternative. More specifically, the Centralized Development Alternative would not fully meet objectives related to consistency with the City's

general plan, providing a mix of housing to diversify the City's housing stock, and providing neighborhood- and region-serving retail uses.

Because the Centralized Development Alternative would be financially infeasible, would conflict with the City's general plan, and would not fully meet the project objectives, this alternative is considered infeasible. Therefore, this alternative has been rejected.

REDUCED HILLSIDE DEVELOPMENT ALTERNATIVE

This alternative would reduce the developed area on the eastern portion of the SPA, leaving more of the foothill area in its current undeveloped state for the purposes of reducing adverse effects on aesthetic, biological, and cultural resources. This alternative would also entail about 1,343 additional EDUs compared to the Proposed Project Alternative, with a much higher density of development within the central portion of the SPA, thus reducing potential impacts related to traffic and air quality. DEIR/EIS Exhibit 2-19 illustrates the proposed land use plan for the Reduced Hillside Development Alternative, and proposed backbone infrastructure improvements are illustrated in Exhibit 2-20. The Reduced Hillside Development Alternative would fill 42.69 acres of waters of the U.S., 3.19 acres more than would be filled under the Proposed Project Alternative.

Although low density uses on a particular property may reduce the levels of impacts occurring on or emanating from the property, low densities are considered an inefficient use of finite land resources. In areas with growing populations, low-density development coupled with increasing market demand can result in development being pushed outward toward other areas on the urban periphery, with the long-term consequence of more overall loss of habitat, open space, and farmland. In this alternative, the land use mix includes more residential areas at higher densities, and relatively less low-density single-family residential development. Although these higher densities may result in greater localized impacts on resources, the overall area of disturbance is reduced by concentrating development in particular locations. The Sacramento region has experienced demographic pressure over the past two decades reflecting an increasing statewide population and intrastate migration from the San Francisco Bay Area and southern California, and the City is interested in furthering its goals and objectives of providing a mix of affordable housing and new jobs to its residents; therefore, developing the site with a higher density, centralized land use pattern would focus market demand for development into an area near existing development, infrastructure, and services while increasing the amount of land which remains as open space. Traffic modeling also shows that higher density development results in a reduction in vehicle miles traveled and associated greenhouse gas emissions.

The Reduced Hillside Development Alternative envisions a greater density of residential development on a slightly smaller footprint compared to the Proposed Project Alternative, resulting in more dwelling units per acre. The total acreage of residential development would be reduced by approximately 64 acres, but the density would be increased such that approximately 1,343 additional residential units would be constructed. The acreage of commercial and industrial development would be increased by less than 20 acres. The acreage proposed for park use (including local parks which are included in acreage totals for residential and mixed-use designations) is increased to 170.9 acres in this alternative. The types of land uses and general on- and off-site infrastructure improvements under the Reduced Hillside Development Alternative would remain the same as under the Proposed Project Alternative. A 1,057-acre area dedicated to open space (the same size as under the Proposed Project Alternative) is also designated under the Reduced Hillside Development Alternative.

Facts in Support of Finding of Infeasibility

Under this alternative, development would be avoided in the eastern portion of the SPA while providing more dwelling units and greater densities than the Proposed Project Alternative. Significance conclusions across all environmental issue areas under this alternative would be the same as for the Proposed Project Alternative (DEIR/DEIS, pages 2-106 through 2-107).

A feasibility analysis for the action alternatives was prepared by Kosmont Companies (dated April 7, 2011) and interpreted by EPS (EPS 2011). As explained by EPS, Kosmont estimated the infrastructure cost burden compared to the assessed value of residential and commercial land for all action alternatives. The infrastructure cost burden, expressed as a percentage of the selling price, is a generally accepted indicator of whether a reasonable and prudent developer would proceed with development. According to both EPS (2011) and MacKay & Soms Civil Engineers (Ray, pers. comm., 2011), infrastructure burdens between 15 and 20% are considered acceptable. An infrastructure burden in excess of 20% is generally considered financially infeasible (EPS 2011:2).

The cost burden percentage for the Reduced Hillside Alternative range from 19.1% to 21.0% for residential uses, and from 14.9% to 20.6% for commercial uses, with an overall average of 19.9% cost burden (EPS 2011:2). The increased number of dwelling units under this alternative helps to lower the overall cost burden, but only to the very upper end of financial feasibility. Based on the feasibility thresholds discussed in the EPS memo (2011), the Reduced Hillside Alternative is considered marginally financially feasible. However, this alternative would vastly oversupply the expected demand of multi-family units. This would likely mean that the units would not be marketable and would likely meet with substantial opposition from existing residents (Ray, pers. comm., 2011). Thus, because the units under this alternative would not likely be marketable and because the infrastructure cost burden is identified as being at the very highest end of the normally acceptable range, this alternative is not considered economically feasible (Ray, pers. comm., 2011).

The Reduced Hillside Alternative would be inconsistent with a number of City of Folsom General Plan policies including those related to accommodation of anticipated growth, providing sufficient housing choices, and providing goods and services of adjacent neighborhoods (Policies 4.1, 7.4, 10.1, 15.4, and 18.1). The Reduced Hillside Alternative also conflicts with general plan policies requiring that annexed land be fiscally sound additions to the City (Policies 7.1 and 7.4).

While the Reduced Hillside Alternative would meet some of the project objectives, this alternative would not meet these objectives to the same extent as the Proposed Project Alternative. The Reduced Hillside Alternative would not fully meet objectives related to consistency with the City's general plan, providing a mix of housing to diversify the City's housing stock, and providing neighborhood- and region-serving retail uses.

Because the Reduced Hillside Alternative would be financially infeasible, would conflict with the City's general plan, and would not fully meet the project objectives, this alternative is considered infeasible. Therefore, this alternative has been rejected.

3.6.2 SUMMARY OF WATER ALTERNATIVES CONSIDERED

In addition to the Preferred Off-site Water Facility Alternative, the City considered ten other "Water" alternatives as discussed below.

NO USACE PERMIT OFF-SITE WATER FACILITY ALTERNATIVE

The No USACE Permit Off-site Water Facility Alternative would involve the same facilities described under the Preferred Off-site Water Facility Alternative above, and the conveyance pipeline would follow a similar route. However, the No USACE Permit Off-site Water Facility Alternative would avoid all direct impacts (i.e., fill) to waters of the U.S., which include wetlands, through the incorporation of trenchless construction technologies. Construction staging areas and the entry/exits for all trenchless construction activities would also be sited within non-sensitive areas and a minimum of 50 feet from waters of the U.S. At each location where trenchless construction would occur, the City would use a single or combination of trenchless technologies, including but not limited to, microtunneling, horizontal directional drilling (HDD), or jack and bore, to avoid these jurisdictional features. The new water treatment plant, regardless of its location, would be sited so as to avoid being placed within 50 feet of any waters of the U.S., including wetlands. Similar to the other "Water"

Alternatives, all construction activities would occur within the 200-foot corridor under consideration for northeastern portions of Zone 4 of the “Water” Study Area.

Facts in Support of Finding of Infeasibility

Under the No USACE Permit Off-Site Water Facility Alternative, the conveyance route and location of the on-site WTP would be essentially the same as the Preferred Off-site Water Facility Alternative. However, because all jurisdictional waters would be avoided through the use of alternative construction techniques, this alternative would have substantially increased construction costs relative to the Preferred Off-site Water Alternative.

Financial analysis of the various “Land” alternative performed by Kosmont and analyzed by EPS (2011) assumed implementation of the Preferred Off-site Water Facility Alternative. As discussed above, the Proposed Project Alternative is the only financially feasible alternative (EPS 2011). Because the No USACE Permit Off-site Water Facility Alternative would require alternative construction techniques that would likely involve substantially increased construction costs, this alternative could make the Proposed Project Alternative (which includes implementation of the Preferred Off-site Water Facility Alternative) financially infeasible. Furthermore, this alternative would not result in any reduction in impact significance (DEIR/DEIS, page 2-108). Because the additional construction costs of this alternative would make it financially infeasible and this alternative would not lessen any environmental impacts, this alternative is considered infeasible. Therefore, this alternative has been rejected.

OFF-SITE WATER FACILITY ALTERNATIVE 1. RAW WATER CONVEYANCE – GERBER/GRANT LINE ROAD ALIGNMENT AND WHITE ROCK WTP

Under Off-site Water Facility Alternative 1, the City would construct facilities similar to those proposed under the Preferred Off-site Water Facility Alternative and described in DEIR/DEIS Section 2.13.3. The City would integrate its water supply conveyance facilities with the Freeport Project and wheel raw water through Pipeline Segments 1 and 2 of the Freeport Project. Under Off-site Water Facility Alternative 1, the City would construct a new 30-inch, raw-water conveyance pipeline that would connect with the pump station located in an area just northeast of the bifurcation. The raw-water pipeline would extend northeast approximately 15.3 miles from the bifurcation to a new WTP south of the SPA. This pipeline length would result in a corridor under consideration of approximately 372 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment.

Similar to the Preferred Off-site Water Facility Alternative, a 10-mgd capacity, raw water pump station would be constructed near the Freeport Project bifurcation and would include a rated horsepower of 1,700 HP. From the pump station, the conveyance pipeline under this alternative would follow the same alignment as the Preferred Alternative up to a new WTP located southeast of the intersection of White Rock Road and Prairie City Road, at a City-proposed Corporation Yard. The White Rock WTP would be constructed on a 10-acre portion of a 68-acre parcel, Assessor’s Parcel Number (APN) 072-006-0052, and to the south of the City’s proposed Corporation Yard. A treated-water main would be constructed from the White Rock WTP to connect with the backbone water infrastructure within the SPA. Under this alternative, the White Rock WTP would have an ultimate capacity of approximately 10 mgd.

Treatment process and facilities under this alternative would be similar to those described for the Preferred Off-site Water Facility Alternative. The environmental analysis considers the City’s options to either annex the WTP site into its jurisdiction or to seek development entitlements through Sacramento County.

Facts in Support of Finding of Infeasibility

Under this alternative, the conveyance route would be essentially the same as the Preferred Off-site Water Facility Alternative. However, this alternative would construct the WTP outside of the SPA, which would increase the overall development footprint of the SPA. This alternative would not lessen any environmental impacts and would actually result in significant impacts related to land use and agriculture as opposed to potentially significant impacts under the Preferred Off-site Water Facility Alternative (DEIR/DEIS, page 2-108). Because this alternative would not lessen any environmental impacts, would result in greater impacts to land use and agriculture, and would increase the overall development footprint of the project, this alternative is considered infeasible. Therefore, this alternative has been rejected.

OFF-SITE WATER FACILITY ALTERNATIVE 1A. RAW WATER CONVEYANCE – GERBER/GRANT LINE ROAD ALIGNMENT VARIATION AND WHITE ROCK WTP

Off-site Water Facility Alternative 1A consists of a variation in the conveyance pipeline alignment for Off-site Water Facility Alternative 1. All other features of this alternative, including the WTP and pump station, would be similar to that of Off-site Water Facility Alternative 1. Off-site Water Facility Alternative 1A would realign the conveyance pipeline alignment so that it deviates from White Rock Road prior to the first curve north of the intersection of White Rock Road and Grant Line Road. The pipeline would travel north-northeast along a property line boundary, prior to re-intersecting with the Off-site Water Facility Alternative 1 alignment on the current White Rock Road right-of-way. Off-site Water Facility Alternative 1A would reduce the length of pipeline by approximately a quarter of a mile when compared to Off-site Water Facility Alternative 1. This pipeline length of 15.2 miles would result in a corridor under consideration of approximately 364 acres. Similar to the Preferred Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment.

Facts in Support of Finding of Infeasibility

Under this alternative, the conveyance route would be substantially similar to the Preferred Off-site Water Facility Alternative with minor deviations. However, this alternative would construct the WTP outside of the SPA which would increase the overall development footprint of the SPA. This alternative would not lessen any environmental impacts and would actually result in significant impacts related to land use and agriculture as opposed to potentially significant impacts under the Preferred Off-site Water Facility Alternative (DEIR/DEIS, page 2-108). Because this alternative would not lessen any environmental impacts, would result in greater impacts to land use and agriculture, and would increase the overall development footprint of the SPA, this alternative is considered infeasible. Therefore, this alternative has been rejected.

OFF-SITE WATER FACILITY ALTERNATIVE 2. TREATED WATER CONVEYANCE – DOUGLAS ROAD ALIGNMENT AND VINEYARD SWTP

Under Off-site Water Facility Alternative 2, instead of constructing a new WTP the City would purchase 6.5 mgd, on average, of capacity within the Freeport Project and Vineyard SWTP. This capacity would be augmented with additional peaking capacity of up to 10 mgd within the Freeport Project and Vineyard SWTP, which is located on an 80-acre site on Florin Road between Bradshaw and Excelsior Roads. SCWA is nearing the completion of the Vineyard SWTP, which is initially designed to treat up to 50 mgd for SCWA's Zone 40 Northern Service Area, and expected to start operation in fall 2011.

In addition to purchasing capacity within the Vineyard SWTP, this alternative would involve the construction of a new pumping facility and treated-water conveyance pipeline approximately 17.4 miles in length. This pipeline length results in a corridor under consideration of approximately 423 acres in area. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this

alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment. The pumping facility would be constructed according to the parameters identified for the Proposed Off-site Water Facility Alternative and located on-site at the Vineyard SWTP. The electrical load requirements for the pumping facility under this alternative would be slightly less than Off-site Water Facility Alternative 1 and are currently estimated at 1,670 HP.

From the Vineyard SWTP, the alignment would extend from Florin Road east to Eagles Nest Road, at which point, the alignment would extend north to Douglas Road. Once at Grant Line road, the alignment would follow the same route as Off-site Water Facility Alternative 1. At the terminus of the conveyance alignment, this alternative would connect to new equalization facilities sited within the SPA instead of a new WTP as described for Off-site Water Facility Alternative 1. The equalization facilities are described below.

Equalization Facilities

As part of Off-site Water Facility Alternative 2, the City may construct a 4-million-gallon (MG) ground-based storage tank within the SPA and an associated pumping station on approximately 1-acre. The equalization tanks would be sited with the storage tanks identified to the northeast of the intersection of Road A and Oak Avenue within the SPA (see Exhibit 2-7) and would consist of pre-stressed concrete similar to existing City-owned tanks. The tank height would be no more than three stories or approximately 30 feet.

Pumping and backup power generation would be part of the on-site water distribution infrastructure constructed in conjunction with new development within the SPA. Chemical re-treatment facilities may also be constructed, if determined necessary. To achieve the tank foundation elevation, the existing ground surface at the site may require excavations of up to 10 feet beneath the ground surface. The exterior wall facing would be painted or other architectural treatment administered as desired for aesthetic purposes.

Facts in Support of Finding of Infeasibility

Under this alternative, the conveyance path would be routed along Douglas Boulevard, a major utility corridor, would involve conveyance of treated water instead of raw water, and would utilize the existing Vineyard SWTP. Implementation of this alternative would also require the installation of equalization facilities described above. This alternative would result in lesser environmental impacts to the areas of air quality, land use and agriculture, and drainage, hydrology, and water quality (DEIR/DEIS, page 2-108). However, conveyance of raw water is preferred to conveyance of treated water, making this alternative less attractive than the Preferred Off-site Water Facility Alternative. Also, Douglas Road is a major utility corridor and alignment in a less-crowded corridor is preferable. Without an on-site WTP, the SPA would not have operational control over major water treatment processes, structural facilities, and maintenance activities.

Despite lesser environmental impacts, the drawbacks of the alternative regarding crowded alignment and lack of control over WTP activities make this alternative infeasible. Therefore, this alternative has been rejected.

OFF-SITE WATER FACILITY ALTERNATIVE 2A. TREATED WATER CONVEYANCE – EXCELSIOR ROAD ALIGNMENT VARIATION AND VINEYARD SWTP

Off-site Water Facility Alternative 2A involves a variation in the conveyance route alignment for Off-site Water Facility Alternative 2. All other features associated within this alternative would be the same as Off-site Water Facility Alternative 2.

Under Off-site Water Facility Alternative 2A, the conveyance pipeline alignment would deviate from the Off-site Water Facility Alternative 2 route at the intersection of Florin and Excelsior Roads and travel north along Excelsior Road to Mather Boulevard. At the intersection with Douglas Road, this alignment would travel back to the east and follow the Off-site Water Facility Alternative 2 alignment east to Grant Line Road where it would

then travel north to White Rock Road. Unlike Off-site Water Facility Alternative 2, this alternative would follow the Off-site Water Facility Alternative 1A alignment north of the intersection of Grant Line Road and White Rock Road and follow it to the SPA where it would directly connect with the equalization facility.

The length of this alignment would be approximately 16.3 miles thereby resulting in a corridor under consideration of approximately 390 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment. Equalization facilities constructed under this alternative would be similar to those described for Off-site Water Facility Alternative 2.

Facts in Support of Finding of Infeasibility

Under this alternative, the conveyance route would be substantially similar to the Preferred Off-site Water Facility Alternative. The major differences in this alternative are that treated water would be conveyed, a new WTP would not be constructed, and would include construction of equalization facilities described above. This alternative would result in lesser environmental impacts to the areas of air quality, land use and agriculture, and drainage, hydrology, and water quality (DEIR/DEIS, page 2-108). This alternative would result in greater impacts related to environmental justice (DEIR/DEIS, page 2-108). However, conveyance of raw water is preferred to conveyance of treated water, making this alternative less attractive than the Preferred Off-site Water Facility Alternative. Without an on-site WTP, the SPA would not have operational control over major water treatment processes, structural facilities, and maintenance activities.

Despite lesser environmental impacts, the drawbacks of the alternative regarding conveyance of treated water and lack of control over WTP activities and greater impacts related to environmental justice make this alternative infeasible. Therefore, this alternative has been rejected.

OFF-SITE WATER FACILITY ALTERNATIVE 2B. TREATED WATER CONVEYANCE – NORTH DOUGLAS TANKS VARIATION AND VINEYARD SWTP

Off-site Water Facility Alternative 2B involves a shortened variation in the conveyance alignment as described for Off-site Water Facility Alternative 2 and would connect to the North Douglas Water Tanks (North Douglas Tanks), which were constructed by SCWA to serve areas within Sunrise Douglas Community Plan area, and extend south along Ivan Way to Douglas Road. The alignment would then follow the same route as Off-site Water Facility Alternative 2 to the SPA. All other features associated with this alternative would be similar to those described for Off-site Water Facility Alternative 2 with treatment provided at the Vineyard SWTP and equalization facilities within the SPA.

By constructing the conveyance alignment from the North Douglas Tanks, the length of the pipeline is reduced to approximately 6 miles, thereby resulting in a corridor under consideration of approximately 157 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment.

Under this alternative, construction of the pumping facility would occur according to the parameters identified for Off-site Water Facility Alternative 1 and located on the existing North Douglas Tanks site. The electrical load requirements for the pumping facility under this alternative are currently estimated at 1,100 HP. Similar to Off-site Water Facility Alternative 2, the conveyance alignment under this alternative would directly connect with the Equalization Tanks within the specific land area.

Facts in Support of Finding of Infeasibility

Under this alternative, the conveyance route would be substantially similar to Off-site Water Facility Alternative 2. This alternative would also convey treated water instead of raw water, would include alignment along Douglas Boulevard, would utilize the existing Vineyard SWTP, and would include construction of equalization facilities described above.

This alternative would result in lesser environmental impacts to the areas of air quality, land use and agriculture, parks and recreation, and drainage, hydrology, and water quality (DEIR/DEIS, page 2-108). However, conveyance of raw water is preferred to conveyance of treated water, making this alternative less attractive than the Preferred Off-site Water Facility Alternative. Also, Douglas Road is a major utility corridor and alignment in a less-crowded corridor is preferable. Without an on-site WTP, the SPA would not have operational control over major water treatment processes, structural facilities, and maintenance activities.

Despite lesser environmental impacts, the drawbacks of this alternative would make it financially infeasible. Therefore, this alternative has been rejected.

OFF-SITE WATER FACILITY ALTERNATIVE 3. TREATED WATER CONVEYANCE – NORTH DOUGLAS TANKS VARIATION AND VINEYARD SWTP

Off-site Water Facility Alternative 3 involves the construction of a raw-water conveyance pipeline from the bifurcation point to the White Rock WTP site south of the intersection of White Rock and Prairie City Roads. Off-site Water Facility Alternative 3 raw water conveyance alignment would follow the same alignment as described for the treated-water pipeline in Off-site Water Facility Alternative 2. This would result in a pipeline length of 17.4 miles and a corridor under consideration of approximately 423 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment.

The pump station would be constructed at the same site location and according to the same parameters as identified for Off-site Water Facility Alternative 1. The main difference under Off-site Water Facility Alternative 3 would be that, rather than connecting directly to the equalization facilities within the SPA, this alternative would involve the construction of a new, 10-acre White Rock WTP at the same location as described in Off-site Water Facility Alternative 1. The treatment process under this alternative would be the same as those described for Off-site Water Facility Alternative 1. In addition, similar to Off-site Water Facility Alternative 1, a new treated water pipeline would be constructed from the WTP, which would connect with water backbone infrastructure within the SPA.

Facts in Support of Finding of Infeasibility

Under this alternative, treated water instead of raw water would be conveyed, alignment would be placed along Douglas Boulevard, the Vineyard SWTP would be utilized, and equalization facilities would need to be constructed. However, conveyance of raw water is preferred to conveyance of treated water, making this alternative less attractive than the Preferred Off-site Water Facility Alternative. Also, Douglas Road is a major utility corridor and alignment in a less-crowded corridor is preferable. Without an on-site WTP, the SPA would not have operational control over major water treatment processes, structural facilities, and maintenance activities.

This alternative would not lessen any environmental impacts and would actually result in significant impacts related to land use and agriculture as opposed to potentially significant impacts under the Preferred Off-site Water Facility Alternative (DEIR/DEIS, page 2-108). Because this alternative would not lessen any environmental impacts, would result in greater impacts to land use and agriculture, and would have many drawbacks related to conveyance and alignment, this alternative is considered infeasible. Therefore, this alternative has been rejected.

OFF-SITE WATER FACILITY ALTERNATIVE 3A. RAW WATER CONVEYANCE – EXCELSIOR ROAD ALIGNMENT VARIATION AND WHITE ROCK WTP

Off-site Water Facility Alternative 3A is only differentiated from Off-site Water Facility Alternative 3 by an alternate raw-water conveyance alignment. The main difference under this alternative would be that the raw water conveyance alignment would follow the same alignment as described for Off-site Water Facility Alternative 2A. Under this alternative, the City would construct a new, 10-acre White Rock WTP, similar to that described for Off-site Water Facility Alternative 1. This would result in a pipeline length of 16.3 miles and a corridor under consideration of approximately 389 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or 100-foot-wide buffer off the roadway centerline along the alignment.

Facts in Support of Finding of Infeasibility

Under this alternative, the conveyance path would be similar to the Preferred Off-site Water Facility Alternative with some differences in alignment of the raw-water conveyance. This alternative would construct the WTP outside of the SPA, which would result in an increase in the overall development footprint of the SPA. Without an on-site WTP, the SPA would not have operational control over major water treatment processes, structural facilities, and maintenance activities.

This alternative would not lessen any environmental impacts and would actually result in significant impacts related to land use and agriculture as opposed to potentially significant impacts under the Preferred Off-site Water Facility Alternative (DEIR/DEIS, page 2-108). Also, this alternative would result in less-than-significant impacts related to environmental justice, compared to no impacts in this topic area under the Preferred Off-site Water Facility Alternative. Because this alternative would not lessen any environmental impacts, would result in greater impacts to land use and agriculture and environmental justice, and would increase the overall development footprint, this alternative is considered infeasible. Therefore, this alternative has been rejected.

OFF-SITE WATER FACILITY ALTERNATIVE 4. RAW WATER CONVEYANCE – EASTON VALLEY PARKWAY ALIGNMENT AND FOLSOM BOULEVARD WTP

Off-site Water Facility Alternative 4 would entail the construction of a raw water conveyance pipeline from the bifurcation pump station north to a new WTP located south of Folsom Boulevard – or the Folsom Boulevard WTP – and east of Sunrise Boulevard. The raw-water pump station would be constructed according to the same parameters as described for the Proposed Off-site Water Facility Alternative. This would result in a total pipeline length of 19.4 miles and a corridor under consideration of approximately 469.6 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or 100-foot-wide buffer off the roadway centerline along the alignment.

The raw water pipeline would follow the same alignment as Off-site Water Facility Alternative 3 alignment north to Douglas Road and travel east. Along Douglas Road, the Off-site Water Facility Alternative 4 alignment would deviate from Off-site Water Facility Alternative 3 and transition back to the north at Sunrise Boulevard. From Sunrise Boulevard, the alignment extends north in a cross-country alignment along the western boundary of the Rio del Oro Specific Plan area to White Rock Road. At White Rock Road, the alignment would travel east for a short distance to the southwestern corner of the Aerojet Property. The alignment is currently planned to conform to the planned Rancho Cordova Parkway, which will serve as main arterial roadway through the proposed Westborough at Easton project.

Just south of the FSC, the raw water conveyance pipeline would turn back to the east along an existing dirt road to the Folsom Boulevard WTP. Under this alternative, the City would construct the Folsom Boulevard WTP with an ultimate capacity of approximately 10 mgd on a 10-acre portion of a 118-acre parcel (APN 072-025-1075) south of Folsom Boulevard. Water treatment processes proposed under this alternative would be the same as those

described for the Proposed Off-site Water Facility Alternative. At this time, the City has not determined whether it would annex the WTP site into its jurisdiction or whether it would seek development entitlements through the City of Rancho Cordova or Sacramento County depending on timing and, therefore, the environmental analysis considers both options.

From the Folsom Boulevard WTP, the City would construct a new treated-water conveyance pipeline that would travel east along an existing dirt road south of Folsom Boulevard. The treated water alignment would follow the existing dirt road, which parallels U.S. 50 to the south, to Prairie City Road. At Prairie City Road, the treated-water alignment would connect with an equalization facility or directly with water backbone infrastructure within the SPA. The existing direct road conforms to the planned roadway alignment for the Easton Valley Parkway.

Facts in Support of Finding of Infeasibility

Under this alternative, water treatment would occur at a facility constructed outside of the SPA, increasing the overall development footprint of the SPA. Without an on-site WTP, the SPA would not have operational control over major water treatment processes, structural facilities, and maintenance activities. This alternative would not lessen any environmental impacts and would result in significant impacts related to land use and agriculture as opposed to potentially significant impacts under the Preferred Off-site Water Facility Alternative (DEIR/DEIS, page 2-108). Because this alternative would not lessen any environmental impacts, would result in greater impacts to land use and agriculture, and would increase the overall development footprint of the SPA, this alternative is considered infeasible. Therefore, this alternative has been rejected.

OFF-SITE WATER FACILITY ALTERNATIVE 4A. RAW WATER CONVEYANCE – EASTON VALLEY PARKWAY ALIGNMENT VARIATION AND FOLSOM BOULEVARD WTP

Off-site Water Facility Alternative 4A would include a minor variation to the raw-water pipeline route described for Off-site Water Facility Alternative 4. Similar to Off-site Water Facility Alternative 3A, this alternative would deviate from the Off-site Water Facility Alternative 4 route at the intersection of Florin and Excelsior Roads and travel north along Excelsior Road and Mather Boulevard. At the intersection with Douglas Road, this alignment would travel back to the east and rejoin the Off-site Water Facility Alternative 4 raw-water alignment east of Eagles Nest Road. The remainder of this alignment and the associated facilities would be identical to those described for Off-site Water Facility Alternative 4. This would result in a total pipeline length of 18.3 miles and a corridor under consideration of approximately 444 acres. Similar to the Proposed Off-site Water Facility Alternative, an exact alignment has not been selected for this alternative and, therefore, this alternative considers a 200-foot-wide corridor or a 100-foot-wide buffer off the roadway centerline along the alignment.

Facts in Support of Finding of Infeasibility

Under this alternative, water treatment would occur at a facility constructed outside of the SPA, increasing the overall development footprint of the SPA. Without an on-site WTP, the SPA would not have operational control over major water treatment processes, structural facilities, and maintenance activities. This alternative would not lessen any environmental impacts and would actually result in significant impacts related to land use and agriculture as opposed to potentially significant impacts under the Preferred Off-site Water Facility Alternative (DEIR/DEIS, page 2-108). Also, this alternative would result in less-than-significant impacts related to environmental justice, compared to no impacts in this topic area under the Preferred Off-site Water Facility Alternative. Because this alternative would not lessen any environmental impacts, would result in greater impacts to land use and agriculture and environmental justice, and would increase the overall development footprint of the SPA, this alternative is considered infeasible. Therefore, this alternative has been rejected.

3.7 FINDINGS REGARDING EIR ERRATA AND RECIRCULATION

State CEQA Guidelines Section 15088.5 requires a lead agency to recirculate a DEIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of the DEIR but before certification of the FEIR/FEIS. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent declines to implement. The State CEQA Guidelines Section 15088.5(a) provides the following examples of significant new information under this standard:

- ▶ A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- ▶ A substantial increase in the severity of an environmental impact would result unless mitigation are adopted that reduce the impact to a level of insignificance.
- ▶ A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- ▶ The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043).

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR (State CEQA Guidelines, Section 15088.5[b]).

An Errata to the DEIR/DEIS, dated May 6, 2011, identified revisions to text in the FEIR/FEIS. In some cases, the revisions to the DEIR/DEIS text reduced the significance conclusion of identified impacts to less than significant, and in other cases the impact remained significant and unavoidable.

The City of Folsom City Council finds that the changes identified in the Errata do not identify any new impacts or identify any substantial increase in the severity of an environmental impact that would not be reduced to a less-than-significant level through mitigation, nor would the revised mitigation measures result in new significant environmental impacts. Instead, the revised mitigation measures clarify and strengthen the effectiveness of the mitigation measures to help further reduce or avoid an impact. Because no new unmitigated impacts have been identified or created by the revised mitigation, the EIR is not changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the Folsom South of U.S. 50 Specific Plan. The revisions to the EIR's mitigation measures represent improvements to the analysis and mitigation of impacts, and therefore do not require recirculation of the EIR.

4 STATEMENT OF OVERRIDING CONSIDERATIONS

In determining whether to approve a project, CEQA requires all public agencies to balance the benefits of a project against its unavoidable environmental impacts. The City of Folsom proposes to approve the Folsom South of U.S. 50 Specific Plan project despite the significant unavoidable adverse impacts identified in the EIR/EIS. The EIR/EIS consists of five text volumes and associated appendices: the DEIR/DEIS text (Volumes I through III), the DEIR/DEIS technical appendices (included on CD on back cover of Volume III), the FEIR/FEIS text (Volumes I and II), and the FEIR/FEIS technical appendices (included on CD on back cover of Volume II).

The FEIR/FEIS identifies and discusses unavoidable significant effects that would occur as a result of implementing the Folsom South of U.S. 50 Specific Plan, in addition to addressing comments received on the DEIR/DEIS. With implementation of the Mitigation Monitoring and Reporting Program adopted by the City to mitigate or avoid significant impacts on the environment, most of the environmental impacts of the project can be reduced to a less-than-significant level. The FEIR/FEIS determined that the project is expected to result in significant and unavoidable impacts as discussed in Section 3.3.1 above.

4.1 OVERRIDING CONSIDERATIONS

Pursuant to PRC Section 21081 and Section 15093 of the State CEQA Guidelines, the City of Folsom adopts and makes the following statement of overriding considerations regarding the remaining significant unavoidable impacts of the project, as discussed above, and the anticipated economic, social, and other benefits of the project.

The City finds and determines that (1) the majority of the significant impacts of the project will be reduced to acceptable levels by implementation of the mitigation measures recommended in these findings; (2) the City's approval of the project as proposed will result in certain significant adverse environmental effects that cannot be avoided or reduced to a less-than-significant level even with the incorporation of all feasible mitigation measures into the project; and (3) there are no other feasible mitigation measures or feasible project alternatives that will further mitigate, avoid, or reduce to a less-than-significant level the remaining significant environmental impacts.

In light of the environmental, social, economic, and other considerations identified in the findings above, and the considerations set forth below related to this project, this City chooses to approve the project because, in its view, the economic, social, technological, and other benefits resulting from the project substantially outweigh the project's significant and unavoidable adverse environmental effects.

The following statements identify the reasons why, in the City's judgment, the benefits of the project outweigh the significant and unavoidable impacts. The substantial evidence supporting the enumerated benefits of the project can be found in the preceding findings, which are herein incorporated by reference; in the project itself; and in the record of proceedings as defined above. Each of the overriding considerations set forth below constitutes a separate and independent ground for finding that the benefits of the project outweigh its significant adverse environmental effects and is an overriding consideration warranting approval.

The City finds that the project, as conditionally approved, will have the following economic, social, technological, and environmental benefits:

- 1. General Plan Policies and Goals.** The project will further the City's goals and policies for new residential land uses, as set forth in its General Plan, by providing a variety of residential land use designations to meet the future needs of the City and the region, while ensuring compatibility with existing and planned land uses.

Specifically, the project includes construction of approximately 10,210 dwelling units in five residential land use classifications on 1,477.2 acres (DEIR/DEIS, page 2-14). The five residential land use classifications proposed are: Single Family (1-4 dwelling units per acre); Single Family High Density (4-7 dwelling units per acre); Multi-Family Low Density (7-12 dwelling units per acre); Multi-Family Medium Density (12-20 dwelling units per acre); and, Multi-Family High Density (20-30 dwelling units per acre) (DEIR/DEIS, pages 2-14 and 2-19). Larger lots with large homes at low densities, small homes on smaller lots, multiple family housing, and all densities and housing types in between are possible. The scale of the community would allow for great variety in the type of neighborhood amenities associated with the various housing types, providing a great deal of choice when choosing to buy, share, or rent a home in the City. Housing prices and rents would vary considerably, allowing increased housing opportunities for a variety of income levels. Providing a mix of housing types for all incomes promotes General Plan Land Use Element Goal 8 and Housing Element Goal 18.

The project would also add a new variety of mixed and commercial land uses to the City. The project includes 451.7 acres of land designated for commercial/industrial use, under the commercial land use classifications of Office Park, Community Commercial, General Commercial, and Regional Commercial (DEIR/DEIS, page 2-19). Three office park areas are proposed along U.S. 50. Community Commercial sites, covering a total of 38.8 acres, are proposed for the intersection of Prairie City and White Rock Roads, and at two locations along Scott Road. 212.9 acres of General Commercial uses are proposed in the central and eastern portion of the SPA along U.S. 50, and on Scott Road in the northern portion of the SPA. A Regional Commercial district (shopping centers) is proposed for 110.8 acres at the southwest corner of Scott Road and U.S. 50. The project would provide for an estimated 5,054,616 square feet of commercial building space and generate 13,210 employees (DEIR/DEIS, page 3A.13-9). The jobs/housing index would be 1.2 for the Proposed Project Alternative, indicating that the SPA would be jobs-rich (DEIR/DEIS, page 4-56). The provision for jobs and commercial opportunities within the City promotes General Plan Land Use Element Goals 4, 10, 12, 13, and 15.

The Proposed Project Alternative would improve educational facilities and opportunities within the City by designating approximately 130.6 acres for schools, including five elementary school sites, and one middle and high school site (DEIR/DEIS, page 2-24). This would help reduce impacts on existing school and promote General Plan Land Use Element Goal 16 and Public Facilities Element Goal 40.

The project will greatly expand recreational opportunities within the City by providing total of 121.7 acres of parks, representing a ratio of 5 acres of parkland per 1,000 residents (DEIR/DEIS, page 2-19). Planned park facilities would include two community parks, numerous neighborhood parks, and local 'mini' parks (DEIR/DEIS, page 2-19). Each of the proposed school sites is located adjacent a proposed neighborhood park in order to provide joint use opportunities. In addition to the proposed park area, multi-use trails would be appropriate within some open space areas of the SPA (DEIR/DEIS, page 2-19). These increased recreational opportunities and facilities would promote General Plan Park and Recreation Element Goals 35, 36, and 39.

The project will improve circulation in the area through the inclusion of a number of different types of roadways, bicycle and pedestrian trails, and payment of fair-share funding toward regional roadway and highway improvements (DEIR/DEIS, page 2-34). This variety of benefits associated with the Proposed Project Alternative would help promote City General Plan Goal 17.

2. **Job Creation.** The creation and development of new, additional job-generating uses is crucial to achieving various goals of the City's General Plan, including Land Use Element Goals 4 and 10. The project, through its designation of substantial and strategically-located lands to job-generating uses, plays a strong role in achieving these goals.

In addition to creating long-term employment opportunities through the commercial, office, and industrial components of the project, development of the SPA would create thousands of construction jobs in addition to hundreds of jobs created by addition of schools, restaurants, retail locations, and other service-oriented establishments. As discussed above, the SPA would generate 13,210 jobs (DEIR/DEIS, page 3A.13-9). The jobs/housing index would be 1.2 for the Proposed Project Alternative, indicating that the SPA would be jobs-rich (DEIR/DEIS, page 4-56). The project would result a jobs/housing balance greater than 1.0, meaning that more jobs than houses would be created at the project site, resulting in a net economic benefit to the City and substantially promoting the jobs-housing goals and policies in the City's General Plan.

3. **Public Revenues.** The SPA, through its phased implementation and ability to generate revenues for the City, would play a strong role in achieving the General Plan goals related to developing tax revenue-creating activities necessary to implement other City-wide objectives. No costs associated with development of the project would be borne by existing residents of the City. In addition, the SPA would contribute its fair share toward the cost of City-wide community facilities that are necessary to serve the project but proposed for construction outside of the SPA, including transportation improvements (i.e., roads and bridges) and infrastructure improvements. In short, the project would increase tax revenues to the City through increased

property values, an expanded housing market, and increased and expanded commercial activities, increased industrial and job-generating uses, and the overall enhancement of the City's economic base.

5 REFERENCES

This Findings of Fact and Statement of Overriding Considerations includes all references used in Chapter 5 of the DEIR/DEIS, as well as the following additional references:

Economic & Planning Systems. 2011 (April 14). *Folsom Sphere of Influence Cost Burden Feasibility Analysis*. EPS# 16538. Sacramento, CA. Letter memorandum to David Miller and Ken Payne of the City of Folsom.

EPS. *See* Environmental & Planning Systems.

Ray, James C. President. MacKay & Soms Civil Engineers, Sacramento, CA. April 11, 2011—letter to Ken Payne and David Miller of the City of Folsom stating opinion regarding the economic feasibility of the “Land” alternatives.