

4 OTHER STATUTORY REQUIREMENTS

4.1 CUMULATIVE IMPACTS

4.1.1 INTRODUCTION

This EIR/EIS provides an analysis of overall cumulative impacts of the Folsom South of U.S. 50 Specific Plan project (which includes both land use changes [“Land” components] and water supply [“Water” components]) taken together with other past, present, and probable future projects producing related impacts, as required by the State CEQA Guidelines (14 California Code of Regulations [CCR] Section 15130) and “reasonably foreseeable” future projects under NEPA implementing regulations (40 Code of Federal Regulations [CFR] 1508.7). The purpose of this analysis is twofold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant and second, to determine whether the Folsom South of Highway 50 Specific Plan project itself would cause a “cumulatively considerable” (and thus significant) *incremental* contribution to any such cumulatively significant impacts. (See the State CEQA Guidelines [CCR Sections 15064(h), 15065(c), 15130(a), 15130(b), and 15355(b)] In other words, the required analysis first creates a broad context in which to assess the project’s incremental contribution to anticipated cumulative impacts, viewed on a geographic scale well beyond the project site itself. The analysis then determines whether the project’s incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., “cumulatively considerable” in CEQA parlance).

Cumulative impacts are defined in the State CEQA Guidelines (CCR Section 15355) as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” A cumulative impact occurs from “the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (CCR Section 15355[b]).

Consistent with the State CEQA Guidelines (CCR Section 15130[a]), the discussion of cumulative impacts in this EIR/EIS focuses on significant and potentially significant cumulative impacts. The State CEQA Guidelines (CCR Section 15130[b]) state that:

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

The Council on Environmental Quality (CEQ) regulations implementing provisions of NEPA define cumulative impacts as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or nonFederal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative effects can result from individually minor, but collectively significant, actions over time (40 CFR 1508.8). They are caused by the incremental increase in total environmental effects when the evaluated project is added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can thus arise from causes that are totally unrelated to the project being evaluated, and the analysis of cumulative impacts looks at the life cycle of the effects, not the project at issue.

Where feasible, mitigation measures for cumulative impacts are provided along with the analysis of each issue area in Section 4.1.7 below. In those cases where project-specific mitigation measures would reduce the cumulative level of significance, those mitigation measures are identified.

The cumulative impacts of implementing the Proposed Project or any of the other four action alternatives for “Land” or the Preferred Alternative or any of the other action alternatives for “Water” would be substantially similar; therefore, this cumulative analysis uses the term “project” to refer to the action alternatives under both the “Land” and “Water” components. The cumulative impacts of adopting the No Project Alternative, which could entail construction of up to 44 rural residences under the existing Sacramento County land use and zoning (i.e., Ag-80) without any water conveyance facilities or water treatment plants, have already been analyzed as part of the Sacramento County General Plan EIR (1993), which is incorporated herein by reference.

4.1.2 PROJECTS CONTRIBUTING TO POTENTIAL CUMULATIVE IMPACTS

The State CEQA Guidelines identify two basic methods for establishing the cumulative environment in which the project is to be considered: the use of a list of past, present, and probable future projects (the “list approach”) or the use of adopted projections from a general plan, other regional planning document, or certified EIR for such a planning document (the “plan approach”). Either of these methodologies also fulfill the NEPA requirements for cumulative impact analysis (Council on Environmental Quality 1997). For this EIR/EIS, the list and plan approach have been utilized to generate the most reliable future projections possible.

The Folsom South of U.S. 50 Specific Plan project is comprised of several components, including land use changes (“Land” components) and water supply infrastructure (“Water” components). Large-scale development projects in the general vicinity of the “Land” portion of the project are included for known projects within western El Dorado County, eastern Sacramento County, and the City of Folsom. The “Water” portion of the project includes known development and infrastructure projects in Sutter County, the Natomas Basin, and the City of Rancho Cordova and larger statewide planning efforts that could substantially influence cumulative operational conditions along the Sacramento River. Because the Folsom South of U.S. 50 Specific Plan project is a long-term project, and there are innumerable other projects that may be proposed over the lifespan of the project’s buildout, the plan approach is also used to ensure that long-term growth throughout the region is considered. Projects and plans included in these two approaches are described below.

4.1.3 CUMULATIVE CONTEXT

Sacramento County, El Dorado County, and Sutter County as a whole are facing numerous regional issues pertaining to air quality degradation, traffic congestion, biological habitat loss, water quality degradation, and other urban-related environmental changes, which are discussed in greater detail below.

SACRAMENTO COUNTY

Sacramento County encompasses approximately 775 square miles in the middle of the 400-mile-long Central Valley, which is California’s prime agricultural region. Sacramento County is bordered by Contra Costa and San Joaquin Counties on the south, Amador and El Dorado Counties on the east, Placer and Sutter Counties on the north, and Yolo and Solano Counties on the west. Sacramento County extends from the low delta lands between the Sacramento and San Joaquin Rivers north to about 10 miles beyond the State Capitol and east to the foothills of the Sierra Nevada. The southernmost portion of Sacramento County has access to the San Francisco Bay via the Sacramento River. Sacramento County lies at the geographic center of the region and spans both agricultural land uses as well as the most urbanized areas of the region. The geographic boundaries of Sacramento County include seven incorporated cities: Sacramento, Folsom, Rancho Cordova, Citrus Heights, Elk Grove, Galt, and Isleton.

The highest densities of employment and residential uses are located in the urban core of the city of Sacramento. Two of the three regional employment centers are located in Sacramento County, one in downtown Sacramento and the more recent along U.S. Highway 50 (U.S. 50) in the cities of Rancho Cordova and Folsom. Land uses north of the American River are primarily suburban residential with concentrations of commercial and employment uses along major transportation routes. The southern end of the region (e.g., south Sacramento, the unincorporated Vineyard community, the cities of Elk Grove and Galt) is predominantly residential, with the latter three areas at

fairly low-suburban to rural densities. The Cosumnes River floodplain and existing agricultural operations separate the cities of Elk Grove and Galt. The southeast county (outside of existing cities and the county Urban Services Boundary [USB]) is in agricultural use with pockets of rural residential communities.

Growth in Sacramento County is occurring and is projected to occur primarily in the cities of Elk Grove and Rancho Cordova and in the community of Natomas, which are the only remaining areas of the county within the USB where land is available.

New residential development is expected to result from buildout of vacant and underutilized parcels; planned communities, including Elverta, East Antelope, Vineyard Springs, North Vineyard Station, and Florin Vineyard Gap; mixed-uses in commercial corridors; and the West of Watt, Easton, Jackson Highway Corridor, and Grant Line East New Growth Areas. Approximately 113,000 housing units could be developed from buildout of these areas (Sacramento County 2009:2-12).

According to the Sacramento Area Council of Government's (SACOG's) Sacramento Region Blueprint, the unincorporated portion of Sacramento County will grow by nearly 100,000 new jobs and 100,000 new housing units by 2030, indicating that this trend is likely to continue (Sacramento County 2009:2-9). Accommodating the projected employment and the new residents will not only require more housing, but will also necessitate additional jobs, stores, human services, transportation system capacity, public facilities, and municipal and countywide services. The county population has grown from 1,041,219 in 1990 to 1,223,499 in 2000 (U.S. Census Bureau 2000b), and the population of the county as of January 1, 2008, was estimated to be 1,433,187 (California Department of Finance [DOF] 2009).

EL DORADO COUNTY

El Dorado County encompasses approximately 1,790 square miles with the waters of Lake Tahoe and Folsom Lake covering 65 square miles of this total area. The physical environment of El Dorado County has an important influence on its land use and development patterns. The most important physical features affecting development are the Sierra Nevada mountain range, U.S. 50, large areas of the county that are dominated by forestland, and Lake Tahoe. (El Dorado County 2003: 5.1-1.)

The Sierra Nevada divides El Dorado County into two distinct topographic areas—the west slope and Lake Tahoe Basin. The west slope extends from the Sacramento County line on the west to the summit of the Sierra Nevada on the east and contains most of the developed land in the county. The Lake Tahoe Basin extends from the eastern side of the Sierra Nevada to the California/Nevada border. This mountainous area is characterized physically by rugged and steep terrain. (El Dorado County 2003: 5.1-1.)

U.S. 50 bisects El Dorado County, traveling east-west from the Sacramento County through Placerville to and past the California/Nevada border just south of Lake Tahoe. Development in the county has closely followed this route, with the densest development in the west. One reason for the clustering of development in the western portion of the county is the vast area of forestland that is in the El Dorado National Forest and privately owned commercial timberland, and steep terrain that covers much of the eastern two-thirds of the county. Major towns and communities along this corridor include El Dorado Hills, Cameron Park, Shingle Springs, Placerville, Pollock Pines, and South Lake Tahoe. In addition, U.S. 50 is a major transportation corridor for residents living in El Dorado County and working in Sacramento County and for recreation-related traffic generated in areas outside of the county. (El Dorado County 2003: 5.1-2.)

Development on the west slope is concentrated near the El Dorado/Sacramento County line and along the U.S. 50 corridor, with several large-scale residential and commercial developments under construction and approved plans for additional future development. The density of residential and commercial development gradually decreases and the amount of open space increases heading east from the foothills to the Sierra Nevada summit. Placerville,

located approximately 15 miles from the county line, is the only incorporated city on the west slope. (El Dorado County 2003: 5.1-1.)

The projected demand for new housing by 2025 is roughly 32,000 units (El Dorado County 2003:4-14). New residential development is anticipated to occur in the western portion of El Dorado County with El Dorado Hills experiencing the largest growth (El Dorado County 2003:4-14). This is due to the proximity to public services and the regional job base. Nonresidential development is also expected to occur in the western parts of El Dorado County where additional household growth is driving growth in employment (El Dorado County 2003:4-20).

According to SACOG's Sacramento Region Blueprint, El Dorado County will grow by nearly 187,000 new jobs and 32,000 new housing units by 2050 (SACOG and Valley Vision 2004a). El Dorado County population has grown from 125,995 in 1990 to 156,299 in 2000 (U.S. Census Bureau 2000a), and the current population of El Dorado County as of January 1, 2009, was estimated to be 180,185 (DOF 2009).

SUTTER COUNTY

Sutter County is situated in the Sacramento Valley, with the southern boundary located approximately 10 miles north of the city of Sacramento. Sutter County comprises 607 square miles of land. It is generally bordered on the west by the Sacramento River, on the east by the Feather and Bear Rivers and Placer County, on the north by Butte County, and on the south by Sacramento County. State Route (SR) 99 extends in a north-south direction through Sutter County and is the primary corridor connecting Sutter County to the region. SR 99 is joined by SR 70 in the southern part of Sutter County, becoming SR 99/70. SR 70 extends north to the cities of Marysville and Oroville. SR 20 is the primary east-west connection through Sutter County. (Sutter County 2008.)

The unincorporated area of Sutter County consists of several rural communities including Meridian, adjacent to the western boundary in the north; Sutter, located in the north-central portion of Sutter County abutting the Sutter Buttes; Robbins, located in the southwest between the Sacramento River and the Sutter Bypass along SR 113; and the communities of Rio Oso, Trowbridge, Nicolaus, and East Nicolaus, all clustered near the convergence of the Bear and Feather Rivers in the southeast portion of Sutter County. (Sutter County 2008.)

In addition to the rural communities, Sutter County includes two incorporated cities: Yuba City and Live Oak. Yuba City is the major urban center within Sutter County and is located along the Feather River in the east-central portion of Sutter County where SR 99 and SR 20 intersect. The city of Live Oak is located in the northeast corner of Sutter County north of the city of Yuba City.

Although residential uses are clustered in the cities and rural communities, approximately 8,800 acres of residential uses are scattered throughout the remainder of Sutter County. Most of these residential uses are located in unincorporated areas surrounding the cities of Yuba City and Live Oak and outside of the boundaries of the rural communities. Other clusters of residential land use occur along major transportation corridors, such as SR 99 and SR 20, as well as along the Sacramento and Feather Rivers and surrounding the Sutter Buttes. Other smaller concentrations of industrial and public areas are also located throughout unincorporated Sutter County, most often near the concentrations of residential uses mentioned above and outside of the rural communities' boundaries. Small clusters of commercial uses exist outside of the cities and rural communities, but in general, these uses occur either within or immediately surrounding these areas. (SACOG 2007.)

Most of the growth in Sutter County has taken place in the cities of Yuba City and Live Oak. Annexations and new development have increased the share of Sutter County's incorporated population from 40% in 1970 to 75% in 2007 (SACOG 2007). SACOG's Sacramento Region Blueprint anticipates 40,000 households and 60,000 jobs in Sutter County between 2000 and 2050. With regard to the Proposed Project, the SACOG Blueprint Preferred Scenario anticipates approximately 20,000 jobs and 8,500 households on 7,420 acres in the south Sutter County area. Sutter County has grown from 64,415 people in 1990 to 78,930 people in 2000 (U.S. Census Bureau 2000). The current population of Sutter County as of January 1, 2009, was estimated to be 95,878 persons (DOF 2009a).

CITY OF FOLSOM

The City of Folsom encompasses approximately 24 square miles within the incorporated boundaries, of which 2.4 square miles are water, primarily accounted for by Folsom Lake. The City is located in north-central California about 20 miles east of Sacramento and approximately 125 miles east of San Francisco. The city is bounded by Folsom Lake to the north, the El Dorado County line to the east, U.S. 50 to the south, and Lake Natoma to the southwest. The city is bisected by the American River, which runs diagonally from northeast to southwest from the Folsom Lake to Lake Natoma. The City limit also extends north of the American River and to the Placer County line north of Folsom-Auburn Road and the Baldwin Reservoir.

The SACOG Blueprint Preferred Scenario anticipates an additional 24,400 households and 31,700 jobs in Folsom between 2000 and 2050 (SACOG and Valley Vision 2004a). The Blueprint assumes the City would have a population of 105,000 by 2050 and most of this growth would be located on vacant land within the current City boundaries and within the SPA. The City population has grown from 29,802 in 1990 to 51,884 in 2000 (U.S. Census Bureau 2000c), and the population of the City as of January 1, 2009, was estimated to be 71,018 (DOF 2009b).

CITY OF RANCHO CORDOVA

The City of Rancho Cordova encompasses approximately 20,000 acres in eastern Sacramento County. The Planning Area for the City of Rancho Cordova consists of the existing incorporated city and a larger study area (approximately 58,190 acres) and was selected based on the city limits and surrounding areas that are anticipated to be incorporated into the city in the future (Rancho Cordova 2006: 3.0-1). The city limits and its Planning Area are generally bordered by the American River on the north, Prairie City Road and the boundary of the 100-year floodplain for the Cosumnes River on the east, Jackson Highway (SR 16) on the south, and Watt Avenue and the City of Sacramento on the west. (City of Rancho Cordova 2006.)

The city is characterized by a wide range of existing land uses, including residential developments, commercial/retail/office uses, industrial uses, and institutional uses. The majority of the commercial, office, and retail uses are located along the Sunrise Boulevard and Folsom Boulevard corridors. Industrial, manufacturing, and distribution facilities are located throughout the city, primarily along Sunrise Boulevard, Jackson Highway (SR 16), Bradshaw Road, and Folsom Boulevard. The Aerojet General Corporation operations are located south of U.S. 50 and east of Sunrise Boulevard. Teichert and Granite have active mining operations north of Jackson Highway (SR 16) between Bradshaw Road and Excelsior Road and Teichert also has operations south of U.S. 50 along Grant Line Road. The most southern portion of the city (i.e., south of SR 16) is characterized with rural residential, agricultural operations, and industrial land uses. (City of Ranch Cordova 2006: 4.1-4.)

The SACOG Blueprint Preferred Scenario anticipates an additional 112,000 households and 144,000 jobs in Rancho Cordova between 2000 and 2050. The Blueprint assumes Rancho Cordova would have a population of over 332,000 people by 2050 and a fairly even mixture of jobs and housing and this growth would occur through development on underutilized lands along and near Folsom Boulevard and lands inside the current Urban Services Boundary (USB). Housing is expected to be primarily single-family detached homes plus multi-family units (attached rowhouses, townhomes, condominiums, and apartments) to ensure housing for the growing population and work force. (SACOG and Valley Vision 2004d.) The city population has grown from 48,731 in 1990 to 53,065 in 2000 (U.S. Census Bureau 2000), and the population of the City as of January 1, 2009, was estimated to be 61,817 (DOF 2009c).

4.1.4 GEOGRAPHIC SCOPE

Different portions of the project would develop on and affect different geographical areas. The following geographic area descriptions are used in this EIR/EIS:

- ▶ **Specific Plan Area (SPA):** This refers to the entire area proposed for annexation by the City of Folsom, including U.S. 50 highway right-of-way and interchange areas, for a total of approximately 3,584 acres. Most “On-Site” analyses in the “Land” portion of this EIR/EIS address conditions on the SPA.
- ▶ **Off-site Improvements:** This refers to the location of certain off-site improvements required to support the proposed land use changes, including a detention basin west of Prairie City Road; roadway and interchange improvements along U.S. 50 (at Prairie City Road, Oak Avenue, Rowberry Drive, Scott Road, and Empire Ranch Road); a sewer line extension across U.S. 50 to an existing pump station along Iron Point Road; and sewer and roadway extensions into El Dorado Hills.
- ▶ **Off-site Water Facilities Study Area:** This refers to the area studied for the various water supply facilities required under the alternatives in the “Water” portion of this EIR/EIS. These facilities include: (1) a point of diversion on the Sacramento River at the Freeport Project, (2) a raw or treated-water booster pump station, (3) a raw or treated-water conveyance pipeline alternative to convey the water to the SPA, and (4) a water treatment plant (WTP) alternative.

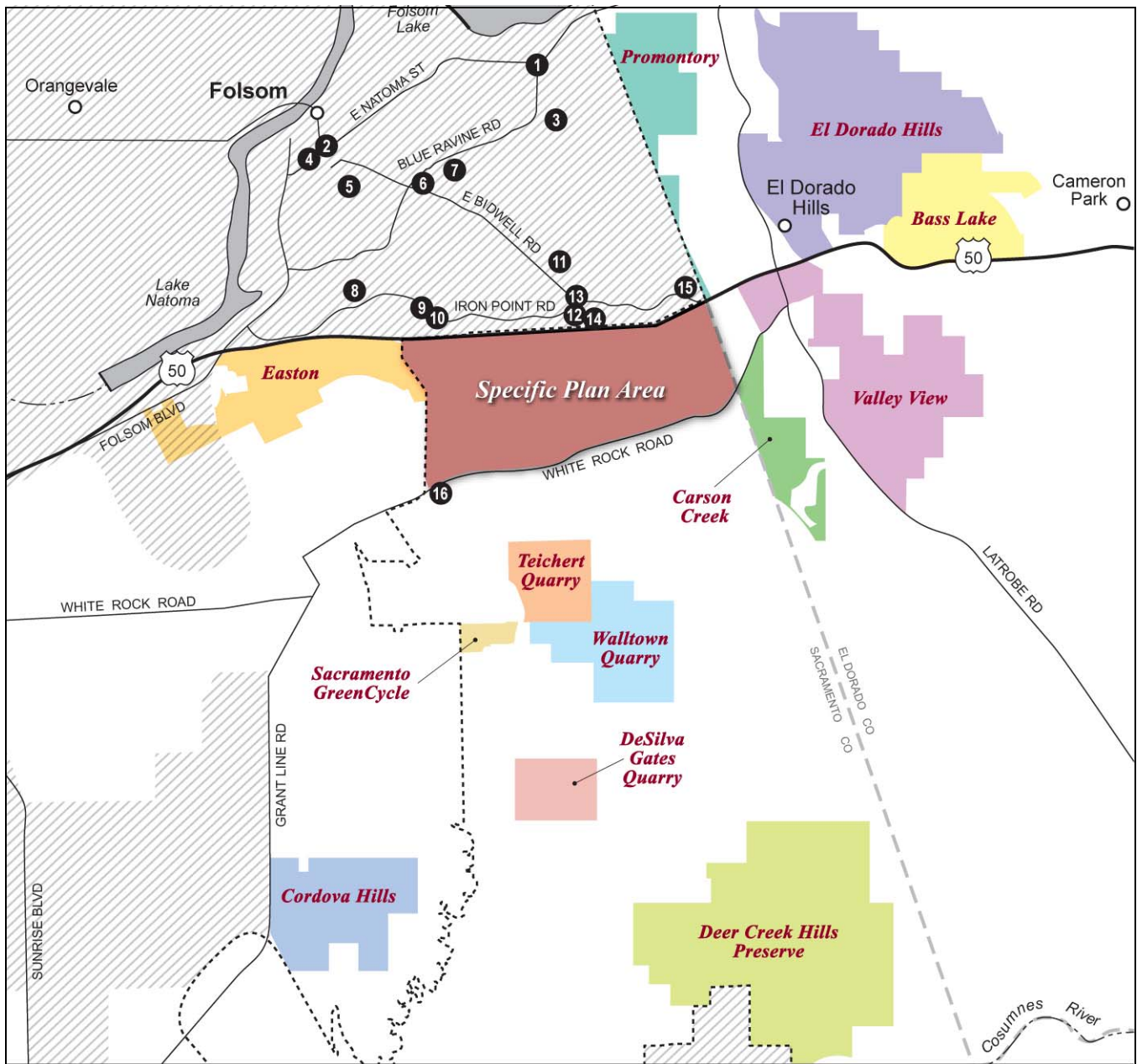
The geographic area that could be affected by the “Land” and “Water” portions of the project varies depending on the type of environmental resource being considered. When the impacts of the “Land” and “Water” portions of the project are considered in combination with other past, present, and future projects to identify cumulative impacts, the other projects considered may also vary depending on the type of environmental impacts being assessed. The general geographic area associated with different environmental impacts of the ‘Land” and “Water” portions of the project defines the boundaries of the area used for compiling the list of projects considered in the cumulative impact analysis. Table 4-1 presents the general geographic areas associated with the different resources addressed in this EIR/EIS cumulative analysis.

Table 4-1 Geographic Scope of Cumulative Impacts		
Resource Issue	Geographic Area	
	Land	Water
Aesthetics	Sacramento County, the City of Folsom, and the community of El Dorado Hills	Sacramento County and the City of Rancho Cordova
Air Quality	Sacramento Federal Ozone Nonattainment Area (includes Sacramento County, Yolo County, the western portion of El Dorado County, and portions of Placer and Solano Counties)	Sacramento Federal Ozone Nonattainment Area (includes Sacramento County, Yolo County, the western portion of El Dorado County, and portions of Placer and Solano Counties)
Biological Resources	Alder Creek, Buffalo Creek, Coyote Creek, and Carson Creek watersheds	Sacramento County
Climate Change	Global, regional, and local (SPA and vicinity)	Global, regional, and local (Off-Site Water Facilities Study Area and vicinity)
Cultural Resources	SPA and Sacramento Region, including El Dorado and Sacramento Counties and the City of Folsom	Sacramento Region, including Sacramento County and the City of Rancho Cordova
Environmental Justice	City of Folsom, Sacramento County, and El Dorado Hills	City of Rancho Cordova and Sacramento County
Geology, Soils, Minerals, and Paleontological Resources	SPA and immediate vicinity	Alternative WTP sites and alternative conveyance pipeline alignments
Hazards and Hazardous Materials	SPA	Alternative WTP sites and alternative conveyance pipeline alignments
Hydrology and Water Quality	South American Groundwater Subbasin, Alder Creek, Buffalo Creek, Coyote Creek, and Carson Creek watersheds and their receiving waters	Alder Creek and Buffalo Creek

Table 4-1 Geographic Scope of Cumulative Impacts		
Resource Issue	Geographic Area	
	Land	Water
Groundwater Resources	NA ¹	South American Groundwater Subbasin and North American Groundwater Subbasin
Land Use and Agricultural Resources	Development identified in El Dorado County, Sacramento County, and the City of Folsom	Development identified in Sacramento County and the City of Rancho Cordova
Noise	Immediate project vicinity where effects are localized	Immediate vicinity of alternative WTP sites and alternative conveyance pipeline alignments where effects are localized
Parks and Recreation	Regional and local facilities	Regional and local facilities
Population, Employment, and Housing	Sacramento Region, including El Dorado and Sacramento Counties and the City of Folsom	NA ²
Public Services	City of Folsom Fire Department, City of Folsom Police Department, and Folsom Cordova Unified School District	NA ²
Traffic and Transportation	Regional and local facilities	Regional and local facilities
Utilities and Service Systems	Natomas Central Mutual Water Company, Sacramento Regional County Sanitation District, Sacramento Regional Wastewater Treatment Plant, El Dorado Irrigation District, Sacramento Metropolitan Utility District, Kiefer Landfill, PG &E, AT&T, and Comcast	Kiefer Landfill, SMUD, and AT&T
Notes: NA = not applicable; WTP = water treatment plant; SMUD = Sacramento Municipal Utility District; PG&E = Pacific Gas & Electric Company		
¹ Groundwater resources under the land portion of the project are included in Section 3A.9, "Hydrology and Water Quality."		
² The "Water" portion of the project would have no impacts on population, employment, and housing and public services as explained in detail in EIR/EIS Section 3.0, "Affected Environment, Environmental Consequences, and Mitigation Measures."		
Source: Data compiled by AECOM in 2010		

4.1.5 LIST OF RELATED PROJECTS

The list of past, present, and probable future projects used for this cumulative analysis is restricted to major development projects in eastern Sacramento County, western El Dorado County, and the City of Folsom under the "Land" portion of the project; and major development projects and roadway and water supply infrastructure projects in Sacramento County, Sutter County, the Natomas Basin, and the City of Rancho Cordova under the "Water" portion of the project (as defined above). For the purposes of this discussion, these projects that may have a cumulative effect on the resources in the SPA, the off-site improvements, or the Off-site Water Facilities Study Area will often be referred to as the "related projects." These related projects are identified in Exhibits 4-1 and 4-2 and Tables 4-2 and 4-3 (note that the map numbers identified for each related project in Tables 4-2 and 4-3 correspond with the numbers that appear on the map in Exhibits 4-1 and 4-2, respectively). The analysis of cumulative environmental impacts associated with the "Land" and "Water" portions of the project addresses the potential incremental contributions of the "Land" and "Water" portions of the project in combination with these related projects. The projects listed in Tables 4-2 and 4-3 are not intended to be an all-inclusive list of projects in the region, but rather an identification of larger projects approved or planned in eastern Sacramento County, western El Dorado County, and the Cities of Folsom and Rancho Cordova that may affect the same resources as the Folsom South of U.S. 50 Specific Plan project.



LEGEND

- Urban Services Boundary
- ▨ Urban Policy Boundary



Base Map:
Sacramento County 2009

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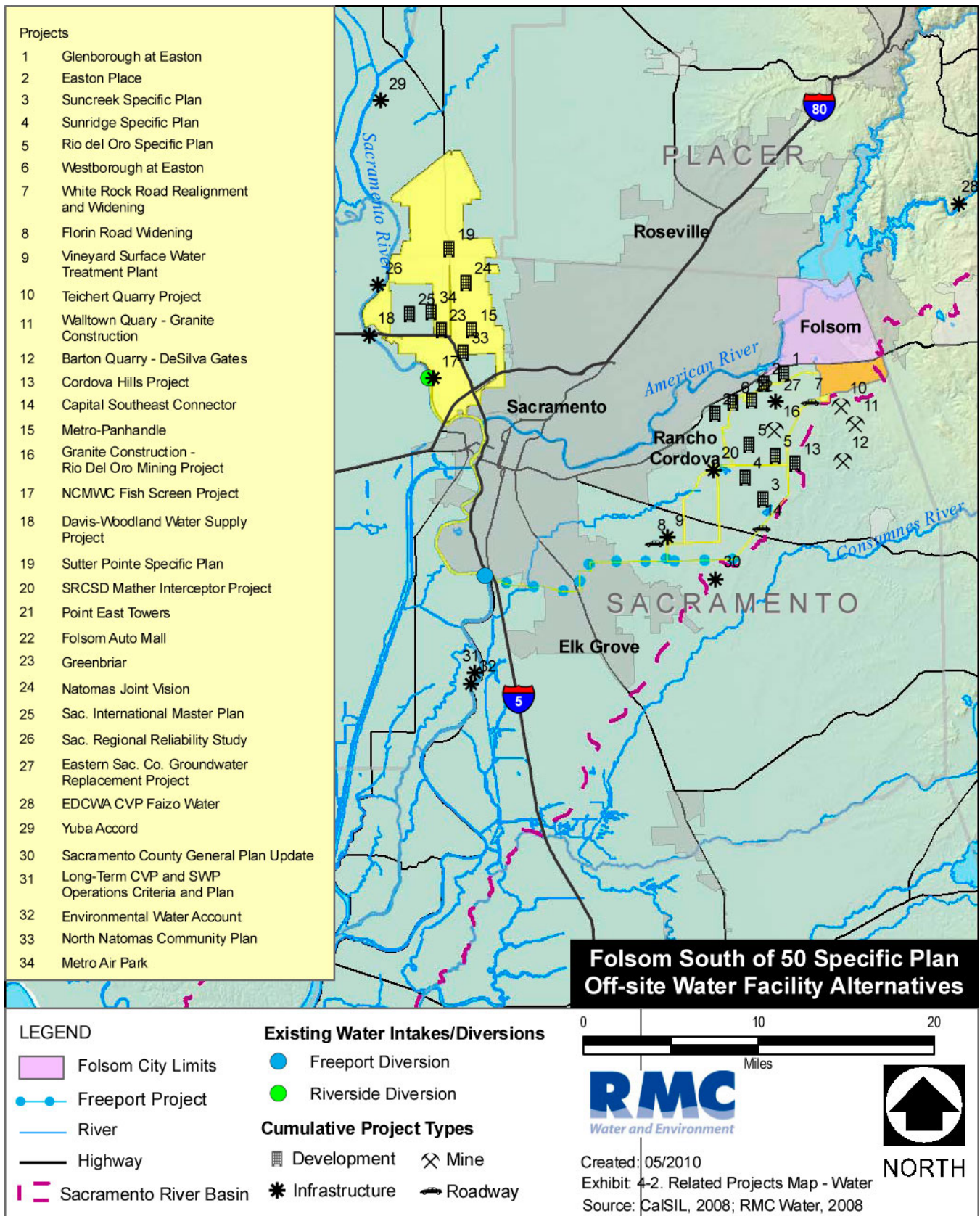
City of Folsom Projects

- | | |
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| <ul style="list-style-type: none"> 1 Vizcaya 2 Folsom Electric & Power Company 3 Valencia 4 Folsom Corporate Center – Lot 5 5 Walmart Expansion 6 Mammoth Office Building 7 Creekview Manor 8 Union Square | <ul style="list-style-type: none"> 9 Hideaway at Treehouse/
The Oaks at Willow Spring 10 Broadstone Park Profession Center 11 Carefree Senior Apartments 12 Broadstone Crossing 13 Palladio/Kaiser Retail Mall
and Hospital 14 Folsom Pointe 15 Empire Ranch 16 City Corporation Yard |
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Source: City of Folsom 2007, 2009; Sacramento County 2007, 2008; Data adapted by AECOM in 2010

Related Projects Map - Land

Exhibit 4-1



Related Project Map – Water

Exhibit 4-2

In addition to the residential and commercial development identified in Tables 4-2 and 4-3 below, the following large-scale projects are proposed in Sacramento County south of White Rock Road and have been identified for additional detailed consideration in response to the notice of preparation (NOP) of the EIR/notice of intent (NOI) to prepare the EIS: Deer Creek Hills Preserve Master Plan; Teichert Quarry General Plan Amendment, Rezone, Use Permit, Reclamation Plan and Development Agreement (Teichert Quarry); Walltown Quarry General Plan Amendment, Rezone, Use Permit, and Reclamation Plan (Walltown Quarry); and DeSilva–Gates Quarry General Plan Amendment, Rezone, Use Permit, Reclamation Plan and Development Agreement (DeSilva-Gates Quarry).

**Table 4-2
Related Projects under the Land Portion of the Project in
Sacramento County, El Dorado County, and the City of Folsom**

Map Key	Project Name	Location	Status	Total Area (acres)	Dwelling Units	Commercial/ Office Area
Sacramento County						
NA	Easton (Easton Place and Glenborough at Easton)	South of U.S. 50 between Hazel Avenue and Prairie City Road	Proposed	1,391	4,883	4,200,000 sq ft
NA	Cordova Hills	East of Grant Line Road; south of Douglas Road; west of Coyote Creek	Application under review	2,419	8,726	188.8 ac
	Sacramento GreenCycle Project	South of White Rock Road	Proposed	N/A	N/A	N/A
El Dorado County						
NA	Carson Creek	South of U.S. 50, east of the Sacramento County line	Complete	711	1,470	15.5 ac
NA	Valley View	South of U.S. 50; east of Sacramento County line	Complete	2,038	2,840	40 ac
NA	Promontory	South of Folsom Lake, north of U.S. 50	Complete	999	1,097	7 ac
NA	El Dorado Hills	North of U.S. 50; east of Sacramento County line	Complete	3,646	4,481	301 ac
NA	Bass Lake	North of U.S. 50; east of Sacramento County line	Complete	1,166	1,025	---
City of Folsom						
1	Vizcaya	East Natomas Street and Green Valley Road	Complete	---	105	---
2	Folsom Electric & Power Company	602 – 604 Sutter Street	Approved, awaiting building permit submittal	0.7	---	29,998 sq ft
3	Valencia	1700 Parkway Drive North	Under construction	---	209	---
4	Folsom Corporate Center – Lot 5	Between Sutter Street, Wool Street, Leidesdorff Street and the Folsom light rail station	Application under review	7.74	---	100,000 sq ft
5	Walmart Expansion	1018 Riley Street	Proposed	0.6	---	27,310 sq ft expansion
6	Mammoth Office Building	Southeast corner of East Bidwell Street and Creekside Drive	Approved, awaiting building permit submittal	4.25	---	58,016 sq ft
7	Creekview Manor	1700 Creekside Drive	Complete	30.4	138	---
8	Union Square	550 Willard Drive	Complete	---	114	---
9	Hideaway at Treehouse/ The Oaks at Willow Spring	900 Outcropping Way	Under construction	41	346	10,000 sq ft
10	Broadstone Park Profession Center	1855 Iron Point Road	Entitlements granted	8.16	---	73,829 sq ft

**Table 4-2
Related Projects under the Land Portion of the Project in
Sacramento County, El Dorado County, and the City of Folsom**

Map Key	Project Name	Location	Status	Total Area (acres)	Dwelling Units	Commercial/Office Area
11	Carefree Senior Apartments	Broadstone Parkway and Cavitt Drive	Under construction	1.4	348	---
12	Broadstone Crossing	Southeast Corner of East Bidwell Street and Iron Point Road	Approved	11.1	---	208,482 sq ft
13	Pallidio/Kaiser Retail Mall and Hospital	Northwest Corner of Iron Point Road and East Bidwell Street	Under construction	4.0	---	930,000 sq ft
14	Folsom Pointe	East of East Bidwell; west of Old Placerville Road	Approved, awaiting building permit submittal	12.4	---	12.4 ac
15	Empire Ranch	East of Empire Ranch Road, west of Dry Creek Road	Under construction	1,738	3,644	20 ac
16	City Corporation Yard	Southeastern corner of White Rock Road and Prairie City Road	Proposed	?		

Notes: NA = not applicable; ac = acre; sq ft = square feet
Source: City of Folsom 2009, City of Folsom 2008, County of Sacramento 2008 and 2009, City of Folsom Community Development Department 2008, County of Sacramento 2008, City of Rancho Cordova and U.S. Army Corps of Engineers, Sacramento District 2006, County of El Dorado 2003

**Table 4-3
Related Projects under the Water Portion of the Project in
Sacramento County, Sutter County, and the City of Rancho Cordova**

Map Key	Project Name	Location	Status	Total Area (acres)	Dwelling Units	Commercial/Office Area
Sacramento County						
15	Natomas Panhandle Annexation and Planned Unit Development	Northwest corner of Del Paso Road and Sorento Road	Approved	1,430	3,075	27 ac
23	Greenbriar Specific Plan	Northwest corner of SR 99 and Elkhorn Boulevard	Approved	577	3,473	27.5 ac
33	North Natomas Community Plan	South of the Natomas Joint Vision area, west and northwest of I-5 5, and northeast of I-80	Under construction	9,038	33,257	2,195 ac
34	Metro Air Park	North of I-5 and east of the Sacramento River within the Sacramento International Airport Master Plan area	Approved	1,983	---	1,400 ac
Sutter County						
19	Sutter Pointe Specific Plan	Immediately north of the Sacramento/Sutter County line	Approved	7,500	17,500	2,181 ac
City of Rancho Cordova						
3	SunCreek Specific Plan	South of Douglas Road, north of SR 16, west of Grant Line Road, and east of Sunrise Boulevard	Proposed	1,253	5,634	19 ac
4	Sunridge Specific Plan	South of Douglas Road, east of Sunrise Boulevard, and small areas north of Grant Line Road	Under construction	2,606	9,337	173 ac

**Table 4-3
Related Projects under the Water Portion of the Project in
Sacramento County, Sutter County, and the City of Rancho Cordova**

Map Key	Project Name	Location	Status	Total Area (acres)	Dwelling Units	Commercial/Office Area
5	Rio del Oro Specific Plan	South of White Rock Road, north of Douglas Road, and east of Sunrise Boulevard	Proposed	3,828	11,601	521 ac
6	Westborough at Easton	South of U.S. 50, north of White Rock Road, and east of the Folsom South Canal	Proposed	1,137	5,910	45 ac
	Westborough Station	Mine Shaft Lane, south of Folsom Boulevards and the Folsom Light Rail line			900	75,000 sq ft
21	Point East Towers	Northeastern corner of Point East Drive and Folsom Boulevard				19,000 sq ft
22	New Folsom Auto Mall	South side of Folsom Boulevard at Aerojet Road		29	---	
	The Ranch at Sunridge	South of Douglas Road, north of Kiefer Boulevard, east of Sunrise Boulevard, and west of Grant Line Road	Proposed	530	2,703	165,000 sq ft
	Arboretum-Waegell	South of Kiefer Boulevard, north of SR 16, north and northwest of Grant Line Road, and east of Sunrise Boulevard	Proposed	900	5,000	465,000 sq ft
Notes: ac = acre; sq ft = square feet; SR = State Route; I-5 = Interstate 5; I-80 = Interstate 80; U.S. 50 = U.S. Highway 50 Source: RMC 2009						

ROADWAY IMPROVEMENT PROJECTS

Roadway improvement projects planned in the Off-site Water Facilities Study Area include the White Rock Road Realignment and Widening Project, Florin Road Widening Project, and the Capital Southeast Connector. Initial improvements for these roadway projects are planned for construction sometime between 2010 and 2012. The approximate locations of these roadway improvements are shown in Exhibit 4-2. As shown, these projects would be constructed within Zone 4 of the Off-site Water Facilities Study Area.

WATER SUPPLY INFRASTRUCTURE PROJECTS

Davis-Woodland Water Supply Project

The Cities of Davis and Woodland in Yolo County are jointly proposing to divert up to approximately 46,000 acre-feet per year (AFY) of surface water from the Sacramento River. The cities are proposing to use an existing diversion/intake facility operated by Reclamation District (RD) 2035. This intake location is located north of Zone 2 in the Off-site Water Facilities Study Area.

Sacramento River Water Reliability Study

The U.S. Bureau of Reclamation (Reclamation) and Placer County Water Agency (PCWA) are proposing the Sacramento River Water Reliability Study (SRWRS), which would consist of a package of water supply infrastructure components, including new or expanded diversion(s) from the Sacramento River, and new or expanded water treatment and pumping facilities, storage tanks, and major transmission and distribution pipelines. The Sacramento River diversion site is situated north of Zone 2 in the Off-site Water Facilities Study Area.

Vineyard Surface Water Treatment Plant

As described in Chapter 2, “Alternatives,” the Sacramento County Water Agency (SCWA) is in the initial stages of constructing the Vineyard surface water treatment plant (SWTP) with operation anticipated by 2012. The later phases of construction may potentially overlap with construction of the water portion of the project. The Vineyard SWTP is within Zone 4 of the Off-site Water Facilities Study Area.

Yuba River Accord

The purpose of the Yuba River Accord is to resolve instream flow issues associated with operation of the Yuba Project in a way that protects and enhances lower Yuba River fisheries and local water supply reliability. For discussion purposes, the Yuba Project includes: storage and hydropower facilities located in the Yuba River basin; the riparian corridor along the North Yuba River downstream of New Bullards Bar Dam; the lower Yuba River downstream of Englebright Dam to the confluence with the Feather River; the Yuba County Water Agency (YCWA) Member Unit water service areas; the local groundwater basin; and lands overlying the groundwater basin. In addition, Reclamation and the California Department of Water Resources’ (DWR’s) goals for the project include obtaining water for CALFED to use for protection and restoration of Sacramento-San Joaquin Delta (Delta) fisheries and for improvements in statewide water supply reliability, including supplemental water for the Central Valley Project (CVP) and State Water Project (SWP). As a state agency party to the Yuba Accord, DWR also would be involved in the purchase of Yuba Project water for use in the Environmental Water Account (EWA) Program (described further below) and for SWP contractor supplies. The flows for the Yuba River Accord may provide up to 60,000 AFY for EWA, in the lower Yuba River (estimated to provide up to 48,000 AF of additional Delta export), and may provide additional water to the CVP and SWP and their contractors in drier years.

The Yuba Accord includes a Fisheries Agreement that contains new minimum in-stream flows for the lower Yuba River that are intended to maintain or increase protection of the river’s fisheries resources. To help provide these flows, the YCWA would implement conjunctive use agreements to establish a comprehensive conjunctive use program that would provide for comprehensive management of the surface water and groundwater supplies. The flow schedules are based on water availability, including inflow into New Bullards Bar Reservoir and reservoir carry-over storage. The cumulative analysis acknowledges the existence of these new minimum instream flow requirements on the Lower Yuba River, which contribute to the total flow within the Sacramento River, north of the Natomas Central Mutual Water Company (NCMWC). The Yuba Accord is northeast of Zone 1.

Environmental Water Account

The EWA consists of two primary elements: (1) facilitation of fish population recovery through asset (water) acquisition and management, and (2) use of the acquired assets to replace water deliveries (or supplies) interrupted by changes in CVP/SWP operations. The Preferred Alternative, or the Flexible Purchase Alternative for the EWA, would allow the EWA agencies the ability to acquire up to 600,000 AF of water assets (although the EWA agencies would typically acquire 200,000 to 300,000 AFY, except in years with high fish needs) to address pump reductions and other fish actions, and to compensate the CVP/SWP for water otherwise lost due to those actions.

A Supplement to the Final EIS/EIR (State Clearinghouse No. 1996032083) for the EWA was prepared by DWR and Reclamation in 2007, which provides an evaluation of the effects associated with extending the current EWA through 2011. For the purposes of the cumulative analysis, it is assumed that the EWA would continue as currently established through the 2030 timeframe.

Reclamation/ El Dorado County Water Agency Central Valley Project Water Supply Contract

This project involves a new CVP Municipal and Industrial (M&I) Water Service Contract between Reclamation and the El Dorado County Water Agency (EDCWA) for up to 15,000 AFY. This contract would have a 40-year

term and would be subjects to renewals. EDCWA intends to allocate this new contract water to both El Dorado Irrigation District (EID) and Georgetown Divide Public Utility District (GDPUD) based on these parties individual water needs and timing requests. The cumulative analysis assumes that this surface water supply is allocated to EID or GDPUD under future cumulative conditions and diverted upstream of the Off-site Water Facilities Study Area.

MATHER INTERCEPTOR PROJECT

The Sacramento Regional County Sanitation District (SRCSD) is proposing the installation of a new sewer trunk and pump station project to serve new development with in southern Rancho Cordova. The project currently includes five sewer interceptor alternatives, which would serve the general area north of the Jackson Highway (SR 16) and east of Sunrise Boulevard. Construction is planned for 2009 through 2010. These improvements would overlap with Alternatives 2, 2A, 3, 3A, 4, and 4A of the “Water” portion of the project.

EASTERN SACRAMENTO COUNTY GROUNDWATER REPLACEMENT PROJECT

This project would construct the necessary conveyance and pumping facilities to use remediated groundwater from Aerojet and McDonnell Douglas Corporation (MDC)/Boeing groundwater extraction and treatment (GET) facilities. Following its discharge to local waterways, remediated water from the GET facilities would be diverted by Sacramento County Water Agency (SCWA) and other water purveyors as replacement water for groundwater production capacity lost as a result of contaminated wells that have been taken out of service in Sacramento County and the City of Rancho Cordova, for: (1) new development within eastern Sacramento County; and (2) environmental benefit, namely supplement flows for fishery enhancement and groundwater recharge in the Cosumnes River. The GET water would be diverted at Reclamation’s Folsom South Canal (FSC), City of Sacramento Fairbairn WTP Diversion, and the Freeport Project diversion, on the Sacramento River, downstream of the American River confluence. Based on the implementation of this project, groundwater pumped and conveyed from GET facilities is not lost from the basin, but rather diverted by SCWA and delivered to local wholesale and retail water agencies. For the purposes of this cumulative analysis, it is assumed the continuation of the Regional Water Supply Plan (RWSP) estimated at 35,890 AFY.

DEER CREEK HILLS PRESERVE

The Deer Creek Hills Preserve consists of 4,062 acres, bordered by Scott Road to the west and Michigan Bar Road to the east. The Deer Creek Hills Preserve is administered by the Sacramento Valley Conservancy, the County of Sacramento, and State Parks. Land uses at this site include open space, habitat preservation, cattle grazing, and public recreation (Sacramento County 2008a:1-1).

The draft environmental impact report (DEIR) for the Deer Creek Hills Preserve Master Plan (State Clearinghouse Number 200705210) was released on December 12, 2008, for a 45-day public review period. As described in the DEIR, the Deer Creek Hills Preserve project would result in various environmental impacts, most of which would be reduced to a less-than-significant level through implementation of mitigation measures. The only significant and unavoidable impact that would occur is the disturbance of sensitive cultural resources (Sacramento County 2008a:1-1).

TEICHERT QUARRY

The proposed Teichert Quarry would be located approximately 0.9-mile south of the SPA in Sacramento County, south of White Rock Road, east of Grant Line Road, and west of Scott Road. The Teichert Quarry project would be located on approximately 380 acres of the 580-acre site and would include construction of an aggregate processing facility, administration complex, parking areas, on-site access road, and various other stockpiles and processing areas (Sacramento County 2008b:S-1). The Teichert Quarry project includes construction of a public

access road for ingress/egress to the property that would extend from the entrance/exit of the property north approximately one mile to White Rock Road.

The maximum proposed annual aggregate production during the life of the quarry would be 7 million tons per year. A maximum of 6 million tons per year would be distributed directly from the quarry site on haul trucks using the proposed access road. A maximum of 3 million tons and a minimum of 1 million tons per year would be conveyed to the existing Grant Line facility for further processing and sale. Mining would continue for up to 25 years through two mining phases. A total of about 135 million tons of material would be mined over the life of the quarry. At the conclusion of aggregate production, a two- to four-year final reclamation phase would extend the total project lifespan to 27 to 29 years. (Sacramento County 2008b:2.0-6.)

The DEIR for the Teichert Quarry Project was released on August 22, 2008, for a 45-day public review period. The requested entitlements for the Teichert Quarry project are the following: a General Plan Amendment and rezoning, a use permit, a grading permit, a reclamation plan, an encroachment permit, and a development agreement (Sacramento County 2008b:1.0-2). As described in the Teichert Quarry Project DEIR, construction and operation of the quarry would result in a number of environmental impacts, most of which would be reduced to a less-than-significant level through implementation of mitigation measures. Significant and unavoidable impacts associated with the quarry would include: adverse effects on a scenic vista; degradation of the existing visual character of the site and its surroundings; introduction of new sources of substantial light or glare; long-term increases in reactive organic gases (ROG) and oxides of nitrogen (NO_x); increases in traffic from deterioration of levels of service below acceptable levels at roadways or intersections operating at an acceptable level, increases in the volume to capacity ratio at roadways not operating at an acceptable levels of service, and increases in delay by more than five seconds at unsignalized intersections; and potential increases in accidents between haul trucks and cars.

The Teichert Quarry project DEIR includes the following cumulatively significant and unavoidable impacts: alteration of the visual character of the SPA and visual incompatibility with surrounding land uses in the vicinity of the SPA; introduction of new sources of substantial light or glare in the vicinity of the SPA; conversion of agricultural lands to nonagricultural uses; long-term degradation of regional air quality; cumulative impacts on biological resources from buildout of Sacramento County; increases in traffic from deterioration of levels of service below acceptable levels at roadways or intersections operating at an acceptable levels, increases in the volume to capacity ratio at roadways not operating at an acceptable levels of service, increases in density on a segment of U.S. 50 operating at unacceptable levels of service without the Teichert project, and increases in delay by more than five seconds at unsignalized intersections; increases in accidents between haul trucks and cars; and increases in greenhouse gas emissions.

WALLTOWN QUARRY

The proposed Walltown Quarry project would be located south of White Rock Road and east of Scott Road approximately 1.2 miles south of the SPA. The quarry site is approximately 1,360 acres in size and the active mining and processing area would be approximately 613 acres. The quarry project includes a new access road on an existing right of way that would extend from the quarry property north to White Rock Road. The quarry project would generally involve excavation and processing of hard rock aggregate. The project includes a request for a 100-year mining permit with a maximum annual production rate of 6 million tons. The mining would result in an open pit averaging 350 feet deep. The proposed reclamation plan for the Walltown Quarry project anticipates a lake in the mining pit as the end use, with a return to seasonal grazing on the other areas of the site. (Sacramento County 2007a:NOP-2.)

An NOP for the proposed Walltown Quarry project was prepared by Sacramento County and circulated for public review in December 2007. The requested entitlements for the Walltown project are the following: a General Plan Amendment and rezoning, a use permit to allow quarry mining and processing of materials, a reclamation plan, an encroachment permit, and a development agreement (Sacramento County 2007a:NOP-3). Potentially significant

environmental impacts associated with development of this site, as identified in the Walltown Quarry project NOP, include impacts on land use, traffic, air quality, drainage and hydrology, water quality, biological resources, noise, geology, aesthetics, and cultural resources.

DESILVA-GATES QUARRY

The proposed DeSilva-Gates Quarry site is located approximately 3.7 miles south of the SPA near the eastern Sacramento County line. Hard rock mining and reclamation would occur on approximately 480 acres within the 3,000-acre Barton Ranch property. Mining permits would allow for up to 6 million tons of rock aggregate production per year over 100 years (Sacramento County 2008c: NOP-3). The City and USACE understand that DeSilva-Gates recently withdrew its application for this project; however, in order to be conservative for purposes of this analysis, it is assumed that DeSilva-Gates quarry project will still go forward in the future with a different project applicant. Therefore, this quarry project is included in this cumulative analysis.

An NOP for the proposed DeSilva-Gates Quarry project was prepared by Sacramento County and circulated for public review in January 2008. The requested entitlements for the DeSilva-Gates Quarry project are the following: a General Plan amendment and rezoning, a use permit to allow quarry mining and processing of materials, a reclamation plan, an encroachment permit, and a development agreement (Sacramento County 2008c:NOP-3). Potentially significant environmental impacts associated with development of this site, as identified in the DeSilva-Gates Quarry project NOP, include impacts on land use, traffic, air quality, drainage and hydrology, water quality, biological resources, noise, geology, aesthetics, and cultural resources (Sacramento County 2008c:NOP-8). Although it is assumed that a different quarry project applicant will come forward in the future, it is reasonably foreseeable that the same types of impacts identified in the NOP discussed above would occur regardless of which entity were operating the quarry project.

4.1.6 REGIONAL PLANNING ENVIRONMENT

Because the “Land” and “Water” portions of the project are influenced by regional development activities, the plan approach is also used to allow a cumulative analysis on this regional scale. The regional cumulative analysis area covers the incorporated and unincorporated areas of Sacramento County, western El Dorado County, the City of Folsom, the City of Rancho Cordova, and the Natomas Basin. This analysis includes an evaluation of the *Sacramento County General Plan* (Sacramento County 1993), *El Dorado County General Plan* (2004), the *City of Folsom General Plan* (1988), the *City of Rancho Cordova General Plan* (2006), the SACOG Sacramento Region Blueprint and Preferred Blueprint Scenario (SACOG and Valley Vision 2004b), Sacramento International Airport Master Plan, the Natomas Joint Vision Plan, and the Long-term CVP and SWP Operations Criteria Plan (OCAP). A summary of the cumulative planning environment in Sacramento County, El Dorado County, the Natomas Basin and the Cities of Folsom and Rancho Cordova that is used for the regional cumulative impact analysis is provided below.

SACRAMENTO COUNTY GENERAL PLAN

1993 Sacramento County General Plan

The Sacramento County General Plan provides for growth and development in the unincorporated area through 2010. Portions of the Sacramento County General Plan contain policies for urban development including urban communities and the infrastructure necessary to serve them. Other sections of the Sacramento County General Plan describe strategies to recognize and preserve areas of open space and natural resources. As a whole, the general plan reflects a balance between the amount and location of land uses in urban areas and those to remain in a rural or natural setting.

Community plans reflect the goals and policies of individual communities and guide land use and development of specific communities on a more detailed basis than the general plan. Sacramento County has adopted the

following community plans: Antelope, Arden-Arcade, Carmichael, Cordova, Delta, Fair Oaks, North Highlands/Foothill Farms, Orangevale, Rio Linda/Elverta, Southeast, South Sacramento, and Vineyard. Specific plans are detailed policy plans that identify allowable land uses and infrastructure needs for a specific geographic area and are most often used to comprehensively plan for development of new growth areas. Sacramento County has adopted the following specific plans: East Antelope, Elverta, Mather, and North Vineyard Station. (Sacramento County 2007b.)

In addition to community and specific plans, the Sacramento County General Plan identifies Commercial Corridor Plans that focus on planning for future improvements within specified commercial and transportation corridors on a more detailed basis than the general plan; Special Planning Areas that impose a “special” set of development standards for select areas that have unique qualities; and Neighborhood Preservation Areas, which are special zoning regulations that are adopted to preserve the unique qualities and characteristics of a neighborhood (Sacramento County 2007a).

The Sacramento County General Plan designates two boundaries that guide policies for growth within the county. The USB is the boundary of the urban area in the unincorporated County. It is a permanent boundary that will not be modified except under extraordinary circumstances and will be used as a planning tool for urban infrastructure providers for developing very long-range master plans that would accompany future urbanization. (Sacramento County 2009:3-11.)

The Urban Policy Area (UPA) defines the area expected to receive urban levels of public infrastructure and services within the 20-year planning period of the Sacramento County General Plan. The UPA provides the geographic basis for infrastructure master plans, particularly for public water and sewage, which require large capital investments and relatively long lead times for the installation of capital improvements. (Sacramento County 2009:3-11.)

SACRAMENTO COUNTY GENERAL PLAN UPDATE

The existing horizon of the Sacramento County General Plan ends in 2010, and the process to update the Sacramento County General Plan was initiated in 2002. In June 2007, Sacramento County prepared a draft general plan and began conducting an environmental review of the Sacramento County General Plan update. An NOP was prepared and circulated for public review in August 2007 (State Clearinghouse Number 2007082086). The DEIR for the general plan update was released on May 1, 2009, for a 45-day public review period. Adoption of the updated general plan is anticipated in mid 2010 (Sacramento County 2010).

The Sacramento County General Plan update will have a planning horizon of 2030, which is consistent with the planning horizons of SACOG’s Sacramento Region Blueprint. The Sacramento County General Plan update contains objectives and policies that are intended to guide the County toward a more compact urban character by concentrating growth within existing urbanized areas and strategically located new growth areas, thereby using land resources as efficiently as possible (Sacramento County 2007b).

EL DORADO COUNTY GENERAL PLAN

The El Dorado County General Plan (2004) establishes a land use development pattern that makes the most efficient and feasible use of existing infrastructure and public services, defines those characteristics that make the County rural, provides guidelines for new and existing development that promotes a sense of community and maintains a rural quality of life, and provides opportunities for positive economic growth.

The general plan delineates areas where future higher density growth and urban/suburban-like activities are anticipated or will be directed. These areas may be defined as the expansion of existing communities within Community Regions and Rural Centers or the projected locations of Rural Regions and Planned Communities. The designations of Community Regions and Rural Center are applied to existing communities that contain the

highest concentration of high- and medium-density residential uses and commercial lands. Community Regions, which include Camino/Pollock Pines, El Dorado Hills, Cameron Park, El Dorado, Diamond Springs, Shingle Springs, and the City of Placerville, are existing larger communities that generally have well-developed infrastructure. Rural Centers are smaller communities, including Coloma, Cool, Georgetown, Grey's Corner, Grizzly Flat, Kelsey, Kyburz, Latrobe, Oak Hill, Phillips, Pilot Hill, Pleasant Valley, and Chrome Ridge, that provide limited services but are focal points for the surrounding rural areas. The designation of Rural Regions and Planned Communities is applied to the remaining unincorporated area and are identified as potential areas of future development. (El Dorado County 2004: 9.)

SUTTER COUNTY GENERAL PLAN

The Sutter County General Plan, adopted in 1996 and most recently amended on December 19, 2006, includes goals, objectives, and policies for the unincorporated areas of the county. The broad purpose of the Sutter County General Plan is to express policies that will guide decisions on future growth, development, and conservation of resources in a manner consistent with the goals and quality of life desired by the county's residents.

SUTTER COUNTY GENERAL PLAN UPDATE

In 2007, Sutter County began a work program to update the 1996 general plan. Thus far, the County has completed a number of public meetings related to the update. In February 2008, the County released the General Plan Update Technical Background Report (Sutter County 2008), which is available on the county's Web site. The technical background report includes an assessment of the current conditions, including the county's land use, economy, housing, and circulation systems. This information will be used as the basis for the development of the updated general plan, as well as preparation of the EIR for the plan. The County is currently preparing an EIR for the general plan update that is anticipated to be released for public review in 2010.

CITY OF FOLSOM GENERAL PLAN

The City General Plan provides for physical, economic, and environmental growth of the City. The City's General Plan is oriented toward the physical development of land uses, a circulation network, and supporting public facilities and services. As a whole, the general plan is intended to retain and enhance Folsom's quality of life, separate identity, and sense of community.

CITY OF RANCHO CORDOVA GENERAL PLAN

The City of Rancho Cordova General Plan serves as a compass to guide planners, the general public, and decision makers on the desired pattern of development in Rancho Cordova. It describes both existing and future land use activity, the latter of which was designed to achieve the city's long-range goals for physical development. The General Plan identifies the distribution, location, and intensity of all land use types throughout the city.

SACRAMENTO AREA COUNCIL OF GOVERNMENTS SACRAMENTO REGION BLUEPRINT

The SACOG Sacramento Region Blueprint depicts a way for the region to grow through the year 2050 as the current population of 2 million increases to more than 3.8 million, the number of jobs increases from 921,000 to 1.9 million, and the amount of housing increases from 713,000 to 1.5 million units (inclusive of the development described above). In December 2004 the SACOG Board of Directors adopted the Preferred Blueprint Scenario, a vision for growth that promotes compact, mixed-use development and more transit choices as an alternative to low-density development. The Preferred Blueprint Scenario predicts that undertaking a realistic long-term planning process will result in long-term environmental benefits and avoidance of impacts; these benefits are intended to minimize the extent of the inevitable physical expansion of the overall regional urban area. As a result, natural resources that might be lost under a traditional approach would be protected because less land would be required for urban uses and less agricultural land would be converted. In addition, the Preferred

Blueprint Scenario predicts less time per person devoted to travel, fewer car trips, and fewer miles traveled to work and local businesses. The reduction in traffic compared with what would occur under traditional patterns would lead to long-term reductions in air quality emissions in the region by reducing the amounts of vehicular carbon monoxide (CO) and particulate matter that would otherwise be emitted under traditional, lower density development patterns. (SACOG and Valley Vision 2004b.)

Although it is only advisory, the Blueprint provides policy guidance in the Sacramento region for long-term regional land use and transportation planning. A number of jurisdictions either are adopting the Blueprint concepts or are considering and encouraging projects consistent with the Blueprint. Although not establishing “buildout targets,” the SACOG Blueprint Preferred Scenario anticipates an additional 24,400 households and 31,700 jobs in Folsom between 2000 and 2050 (SACOG and Valley Vision 2004c). With regard to the Folsom South of U.S. 50 Specific Plan project, the SACOG Blueprint Preferred Scenario anticipates approximately 12,000 households and 7,500 jobs would be generated by development of the SPA (City of Folsom 2007). The Blueprint assumes the city would have a population of 105,000 by 2050 and most of this growth would be located on vacant land within the current city boundaries and within the SPA. Further, the Blueprint anticipates the SPA would provide open space consistent with City policies and would be developed primarily with housing in similar amounts of detached and attached single-family units, rowhouses, townhomes, condominiums, and apartments to provide housing opportunities for the city’s growing employment centers. (See Exhibit 3.10-2 in Section 3A.10, “Land Use and Agricultural Resources.”).

SACRAMENTO INTERNATIONAL AIRPORT MASTER PLAN

The Sacramento International Airport Master Plan (Sacramento County Airport System 2007a) was adopted by the Sacramento County Board of Supervisors in August 2007. This plan represents the first full-scale master planning effort for the Airport since the mid-1970s. The master plan includes an evaluation of current conditions; definition of objectives, obstacles, and alternatives; an extensive public involvement program; and an implementation plan. The master plan is intended to guide airport development for at least the next 20 years. Phase 1 of the Master Plan (2007–2013) has been permitted and is under construction within the southern portions of “Zone 1” of the “Water” Study Area.

NATOMAS JOINT VISION PLAN

The Natomas Joint Vision Plan is a collaborative effort between the City and County of Sacramento to develop a vision for the area of the County known as Natomas. The Natomas Joint Vision Plan Project Area covers a contiguous land area of approximately 20,000 acres in the unincorporated northwestern area of Sacramento County, north of the city of Sacramento, and includes large sections of land within the south-eastern portion of NCMWC’s service area. The joint vision strategy is grouped into five major phases, with Phase 1 complete, and Phase 2, outreach, currently in process. Phase 3 of the vision strategy will include a General Plan Amendment, and an amendment to City of Sacramento’s Sphere of Influence. Phases 4 and 5 would consist of the eventual annexation and development of the vision area. Although the Natomas Joint Vision is not a specific development proposal, but rather would consist of numerous individual development projects, this planning process is integral to future development within the Natomas Basin and, therefore, the City considered this planning process as part of its cumulative analysis for Zone 1 of the “Water” Study Area.

An EIR is currently in preparation for use by the City, County, and LAFCo in their evaluation of the effects of the City of Sacramento’s SOI amendment and necessary text and map amendments to both the City of Sacramento and Sacramento County General Plans. The EIR is being prepared jointly by LAFCo and the City of Sacramento as co-lead agencies with the County participating as a responsible agency. The draft EIR has been delayed pending the development of a more precise project description.

LONG-TERM CENTRAL VALLEY PROJECT AND STATE WATER PROJECT OPERATIONS CRITERIA AND PLAN

The CVP/SWP OCAP consists of the continued operation of the CVP and SWP and includes the operation of the temporary barriers project in the south Delta and the 500 cubic feet per second increase in SWP Delta export limit July through September. In addition to current day operations, several other actions are included in the OCAP and the supporting Biological Opinion (BO) issued by the National Marine Fisheries Service (NMFS) as part of the Section 7, Federal Endangered Species Act consultation. These actions include the following improvements: (1) an intertie between the California Aqueduct and the Delta-Mendota Canal (DMC); (2) the operation of permanent gates, which will replace the temporary barriers in the South Delta; (3) changes in the operation of the Red Bluff Diversion Dam (RBDD); and (4) Alternative Intake Project for the Contra Costa Water District.

According to the OCAP, the CVP has 253 water service contracts (including Sacramento River Settlement Contracts). These water service contracts have had varying water shortage provisions (e.g., in some contracts, M&I and agricultural uses have shared shortages equally; in most of the larger M&I contracts, agricultural water has been shorted 25% of its contract entitlement before M&I water was shorted, after which both shared shortages equally).

Lastly, the OCAP assumes that annual demands on the American and Sacramento Rivers are estimated to increase from about 324,000 AF in 2005 and 605,000 AF in 2030 without the Freeport Project maximum of 133,000 AF during drier years. In addition, the OCAP accounts for Reclamation's ongoing negotiations relating to the renewal of 13 long-term water service contracts, four Warren Act contracts, and has a role in six infrastructure or Folsom Reservoir operations actions influencing the management of American River Division facilities and water use for local water purveyors including the City, Placer County Water Agency, EID, San Juan Water District, and the Carmichael Water District.

4.1.7 ANALYSIS OF CUMULATIVE IMPACTS

The following sections discuss the cumulative effects anticipated from implementation of the "Land" and "Water" portions of the Folsom South of U.S. 50 Specific Plan project, together with the related projects and regional development, for each of the 16 environmental issue areas evaluated in this EIR/EIS. The analysis conforms with CCR Section 15130 of the State CEQA Guidelines, which specifies that the "discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great a detail as is provided of the effects attributable to the project alone." The Council on Environmental Quality (1997) provides for a similar approach.

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 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 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.

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.

Cumulative Mitigation Measure AIR-1-Land: Implement Measures to Reduce Exposure of Sensitive Receptors to Operational Emissions of Toxic Air Contaminants from Quarry Truck Traffic.

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 of Sacramento. The City's authority to control the activities of the quarry trucks includes restrictions or actions that would be applicable within the City's jurisdictional boundaries. For example, the City could designate truck routes through the City consistent with California Vehicle Code section 21101(c), including truck routes in the Folsom South of U.S. 50 project area, so as to prohibit or limit quarry trucks' use of City roads adjacent to areas where projected truck traffic volumes would otherwise result in exposure of sensitive receptors to operational emissions of toxic air contaminants from quarry truck traffic and/or traffic safety hazards. If this approach is selected by the City, then prior to the approval of the first tentative subdivision map or any other discretionary project approval that would place sensitive receptors along any roads the quarry trucks could use to access U.S. 50, the City's traffic department and consultants shall analyze and propose to the City Council for approval designated truck routes from the quarries through City jurisdiction to access U.S. 50 that would allow a level of truck traffic that would avoid any potentially significant impact on sensitive receptors from toxic air contaminant emissions within the Folsom South of U.S. 50 project area, as well as any other existing or planned uses that would contain sensitive receptors, so as to ensure that the risk of cancer to sensitive receptors is no more than 296 in one million (or such different threshold of significance recommended by SMAQMD or ARB at the time, if any) as may be determined by a Health Risk Assessment (HRA) paid for by the applicant.

As an alternative to designating truck routes, the following measures could be voluntarily implemented by the quarry project applicant(s) (Teichert, DeSilva Gates, and Granite [Walltown]) to reduce exposure of sensitive receptors to TACs generated by quarry truck traffic and are encouraged:

- ▶ 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 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 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 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 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.

**Table 4-4
Summary of Roadside TAC Analysis**

Road Segment Characteristics	Prairie City Road between Easton Valley Parkway and White Rock Road	Oak Avenue Parkway between Easton Valley Parkway and Road "A"	Oak Avenue Parkway between Road "A" and White Rock Road	Scott Road North between Easton Valley Parkway and Road "A"	Scott Road North between Road "A" and White Rock Road	White Rock Road between Prairie City Road and Scott Road South	White Rock Road between Scott Road South and Oak Avenue Parkway	White Rock Road between Oak Avenue Parkway and Scott Road North	White Rock Road between Scott Road North and Placerville Road
Road segment orientation	north-south	north-south	north-south	north-south	north-south	east-west	east-west	east-west	east-west
Side(s) of road on which project would locate receptors	east side	west side east side	west side east side	west side east side	west side east side	north side	north side	north side	north side
Setback distance(s) to property line of receptor (feet)	27	33 31	29 27	28 28	28 28	48	48	48	48
Proposed Project Alternative									
No Additional Quarry Truck Traffic									
Existing Vehicle Fleet (Year 2010)	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
Year 2030 Vehicle Fleet	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
With Additional Quarry Truck Traffic									
Existing Vehicle Fleet (Year 2010)	PS	PS	PS	LTS	PS	LTS	PS	LTS	PS
Year 2030 Vehicle Fleet	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
Resource Impact Minimization Alternative									
No Additional Quarry Truck Traffic									
Existing Vehicle Fleet (Year 2010)	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
Year 2030 Vehicle Fleet	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
With Additional Quarry Truck Traffic									
Existing Vehicle Fleet (Year 2010)	PS	PS	PS	PS	PS	LTS	PS	LTS	PS
Year 2030 Vehicle Fleet	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
Centralized Development Alternative									
No Additional Quarry Truck Traffic									
Existing Vehicle Fleet (Year 2010)	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
Year 2030 Vehicle Fleet	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
With Additional Quarry Truck Traffic									
Existing Vehicle Fleet (Year 2010)	PS	PS	PS	PS	PS	LTS	PS	LTS	PS
Year 2030 Vehicle Fleet	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
Reduced Hillside Development Alternative									
No Additional Quarry Truck Traffic									
Existing Vehicle Fleet (Year 2010)	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
Year 2030 Vehicle Fleet	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
With Additional Quarry Truck Traffic									
Existing Vehicle Fleet (Year 2010)	PS	PS	PS	PS	PS	LTS	LTS	LTS	PS
Year 2030 Vehicle Fleet	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
No Federal Action Alternative									
No Additional Quarry Truck Traffic									
Existing Vehicle Fleet (Year 2010)	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
Year 2030 Vehicle Fleet	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS
With Additional Quarry Truck Traffic									
Existing Vehicle Fleet (Year 2010)	PS	PS	PS	PS	PS	LTS	PS	LTS	PS
Year 2030 Vehicle Fleet	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS	LTS

Notes: PS = potentially significant; LTS = less than significant
Source: Data compiled by AECOM 2010.

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.

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 4-5, 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.

Table 4-5 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		

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 4-6. Each of these habitats has the potential to support special-status species, as listed in Table 4-6. Therefore, project implementation would result in a cumulatively considerable incremental contribution to the decline of these species in the region.

Table 4-6 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
Annual Grassland	Northwestern pond turtle
	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	

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 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 percentage 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 percentage (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," 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," 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," 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.

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.

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.

ENVIRONMENTAL JUSTICE

Past, present, and probable future projects used for this cumulative analysis are restricted to those projects that have occurred or are planned to occur within the Cities of Folsom and Rancho Cordova boundaries, Sacramento County, and El Dorado Hills. According to the Council on Environmental Quality and U.S. Environmental

Protection Agency (EPA) guidelines, a minority population is present in a study area if the minority population of the affected area exceeds 50%, or if the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. Under the same guidelines, a low-income population exists if a study area is composed of 50% or more people living below the poverty threshold, as defined by the U.S. Census Bureau, or if the percentage of people living below the poverty threshold in the study area is substantially greater than the poverty percentage of the general population or other appropriate unit of geographic analysis.

As discussed in Section 3A.6, “Environmental Justice - Land,” no minority population exceeds 50% in Folsom, Sacramento County, or El Dorado Hills. The median household and per capita income and the poverty rate in Folsom and El Dorado Hills is less than that of Sacramento County, and the Folsom and El Dorado Hills’ median household and per capita income and poverty rate is not meaningfully greater than the county’s rate. Therefore, Implementation of the “Land” portion of the project would not cause a disproportionately high and adverse impact on minority and low-income populations.

A portion of the alternative conveyance pipeline alignments under the “Water” portion of the project would cross through an area identified as a low-income community south of Mather Airport. Poverty rates for this area are expected to decrease substantially as a result of new development and redevelopment activities with implementation of the *Mather Airport Master Plan*. In addition, these conveyance pipeline alternative alignments would be underground and would not create a nuisance or other adverse effects on low-income and minority populations.

Therefore, the “Land” and “Water” portions of the project and related projects would not contribute to disproportionate placement of environmental impacts on low-income and minority populations or communities and no cumulatively considerable impacts would result.

GEOLOGY, SOILS, MINERALS, AND PALEONTOLOGICAL RESOURCES

Geology and Soils

The “Land” and “Water” portions of the project and the related projects are located within the western margin of the Sierra Nevada foothills and the eastern margin of the Sacramento Valley. The geologic formations and soil types vary depending on project location, and therefore are site-specific. The SPA is not underlain by or adjacent to any known faults; however, structures in the SPA could be subject to seismic ground shaking from an earthquake along active faults in Lake Tahoe. In addition, the SPA is underlain by expansive soils and subject to seasonal subsurface water flows from surface infiltration that could adversely affect development. The booster pump station, alternative WTP sites, and alternative pipeline conveyance alignments under the “Water” portion of the project are also subject to seismic ground-shaking and underlain by expansive soils as well as corrosive soils. Implementation of mitigation measures contained in Sections 3A.7 and 3B.7, “Geology, Soils, Minerals, and Paleontological Resources,” would reduce these impacts to less-than-significant levels through completion of site-specific geotechnical studies and implementation of construction and design measures developed in response to the studies, in addition to compliance with the California Building Standards Code.

Implementation of the various related projects and other projects in the region could expose additional structures and people to seismic and soils hazards. However, each project considered in this cumulative analysis must individually meet building code requirements as well as the requirements of local policies (i.e., grading and erosion control plans), and therefore no additive effect would result and no cumulatively considerable impact related to seismic or soil hazards would occur. Implementation of the “Land” and “Water” portions of the project would not create additional facilities under increased risk of hazards and would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to geology and soils. 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 geology, soils, minerals, and paleontological resources) that are related to land coverage, there would be no change from the City's existing General Plan.

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.

Paleontological Resources

Fossil discoveries resulting from excavation and earth-moving activities associated with development are occurring with increasing frequency throughout the state. The value or importance of different fossil groups varies

depending on the age and depositional environment of the rock unit that contains the fossils, their rarity, the extent to which they have already been identified and documented, and the ability to recover similar materials under more controlled conditions (such as for a research project). Unique, scientifically-important fossil discoveries are relatively rare, and the likelihood of encountering them is site-specific and is based on the type of specific geologic rock formations found underground. These geologic formations vary from location to location.

A records search of the University of California Museum of Paleontology's Paleontology Collections database in Berkeley, California, did not identify any previously recorded fossil localities within the SPA or within the alternative WTP sites or conveyance pipeline alternative alignments. 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. However, the western edge of the SPA is underlain by Eocene-age sediments of the Ione Formation, the off-site detention basin west of Prairie City Road would be located within the Mehrten Formation, and the Off-site Water Facilities Study Area would include elements in the Riverbank, Ione, and Mehrten Formations. Because of the large number of fossils that have been recovered from the Mehrten, Ione, and Riverbank Formations throughout the Central Valley, they are considered paleontologically sensitive rock units, thus suggesting that there is a potential for uncovering additional similar fossil remains during construction-related earthmoving activities in these formations in the SPA and off-site detention basin. Mitigation measures are contained in Sections 3A.7 and 3B.7, "Geology, Soils, Minerals, and Paleontological Resources," that would reduce impacts on previously undiscovered paleontological resources to less-than-significant levels.

When unique, scientifically-important fossils are encountered by construction activities, the subsequent opportunities for data collection and study generally provide a benefit to the scientific community. Therefore, because of the site-specific nature of unique paleontological resources; the low probability that any project would encounter unique, scientifically-important fossils; and the benefits that would occur from recovery and further study of those fossils if encountered, development of the related projects and other development in the region are not considered to result in a cumulatively considerable impact related to paleontological resources. Therefore, the "Land" and "Water" portions of the project would not result in a cumulatively considerable contribution to a significant cumulative impact related to paleontological resources.

HAZARDS AND HAZARDOUS MATERIALS

Health and safety impacts associated with the past or current uses of a project site usually occur on a project-by-project basis, rather than in a cumulative nature. Implementation of the "Land" and "Water" portions of the project could result in hazards and hazardous materials impacts related to exposure to on-site hazardous materials during construction development on a known hazardous materials site, and exposure to wildland fires. Within the SPA, impacts related to potential blast-related injuries during construction, exposure to electric and magnetic fields, and public health hazards from mosquitoes attracted by water features could occur. Construction of the "Water" alternatives could result in interference with adopted emergency response plans. However, mitigation measures identified in Sections A3.8 and B3.8, "Hazards and Hazardous Materials," would reduce the project-specific health and safety hazards to less-than-significant levels. Under cumulative conditions, implementation of the "Land" and "Water" portions of the project in conjunction with development of related projects is not anticipated to present a public health and safety hazard to residents.

The "Land" and "Water" portions of the project and related projects would all involve the storage, use, disposal, and transport of hazardous materials to varying degrees during construction and operation. Impacts from these activities are less than significant for the project because the storage, use, disposal, and transport of hazardous materials are extensively regulated by various Federal, state, and local laws, regulations, and policies. It is foreseeable that the project and the related projects would implement and comply with these existing hazardous materials laws, regulations, and policies. Therefore, the related projects would not cause a cumulative impact, and the "Land" and "Water" portions of the project would not result in a cumulatively considerable incremental contribution to a cumulative impact related to transport of hazardous materials. The proposed GPA would change

permitted densities, but would not change the physical locations or land uses 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 hazards and hazardous materials) which are related to land coverage, there would be no change from the City's existing General Plan.

HYDROLOGY, WATER QUALITY, AND GROUNDWATER RESOURCES

Local hydrology, drainage, and water quality conditions are often affected by regional activities, in addition to local activities and related projects. Past and present projects from the Sierra Nevada (dams and reservoirs, mining operations, logging, urban development) to the Sacramento–San Joaquin Delta (water supply diversions, agricultural diversions, flood control projects, urban development, river channelization) affect hydrology and water quality conditions in Sacramento and El Dorado Counties. The following evaluation of cumulative hydrology and water quality impacts is made in light of the extent to which local and regional activities can affect hydrologic conditions in these counties. Implementation of the “Land” use portion of the project focuses on effects on water bodies in the project vicinity and immediately upstream and downstream and how the project and related projects may affect the hydrology and water quality conditions locally. The “Water” portion of the project includes water supply projects and larger statewide planning efforts that could substantially influence cumulative operational conditions along the Sacramento River. The potential cumulative impacts are discussed in detail below.

The proposed GPA would change permitted densities, but would not change the types of uses or physical locations identified for Single Family, Multi-family Medium Density, and Multi-family High Density development in the existing General Plan. For issue areas (such as hydrology and water quality) which are related to land coverage or type of use, there would be no change from the City's existing General Plan.

Surface Water Quality

Construction activities during implementation of the “Land” and “Water” portions of the project would involve extensive grading and movement of earth. Substantial construction-related alteration of on-site drainages could result in soil erosion and stormwater discharges of suspended solids, increased turbidity, and potential mobilization of other pollutants 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. 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. Accidental spills of construction-related contaminants, such as fuels, oils, paints, solvents, cleaners, and concrete, could occur during construction activities in the SPA, resulting in surface soil contamination. The “Land” and “Water” portions of the project must prepare a storm water pollution prevention plan (SWPPP) consistent with the existing statewide National Pollutant Discharge Elimination System (NPDES) discharge permits from the Central Valley Regional Water Quality Control Board (RWQCB). Implementation of these regulatory requirements in addition to mitigation in Sections 3A.9 and 3B.9, “Hydrology and Water Quality,” would reduce the potentially significant water quality and erosion impacts from construction activities to a less-than-significant level. Although there are no assurances that the related projects would incorporate the same degree or methods of treatment as the project, each related project that would discharge stormwater runoff would be required to comply with NPDES discharge permits from the Central Valley RWQCB. Therefore, the “Land” and “Water” portions of the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact.

Implementation of the “Land” and “Water” portions of the project would create new impervious surfaces and landscape features that would increase the volume of runoff that could cause or contribute to long-term discharges of urban contaminants (e.g., sediment, oil and grease, fuel, trash, pesticides, fertilizer). This increase in impervious surface would increase the peak discharge rate of stormwater runoff generated in the SPA and from areas upstream (e.g., contribution of flow from off-site watersheds to Alder Creek within the SPA). Under the

“Water” portion of the project, all drainage runoff from the alternative WTP sites would enter Buffalo Creek, which flows west and is tributary to the Lower American River. The Low Impact Development (LID) principles summarized in Section 3A.9, “Hydrology and Water Quality - Land,” and conformance with applicable state and local regulations regulating surface water runoff, including the procedures outlined in the Sacramento City/County Drainage Manual and the El Dorado County Storm Water Management Plan, would reduce potential water quality and erosion impacts from an increase in stormwater runoff to a less-than-significant level. Under the “Water” portion of the project, implementation of mitigation measures in Section 3B.9, “Hydrology and Water Quality - Water,” and conformance with applicable state and regulations regulating surface water runoff, including the procedures outlined in the Sacramento City/County Drainage Manual, would reduce the impacts to a less-than-significant level. Although there are no assurances that the related projects would incorporate the same degree or methods of treatment as the project, each related project that would discharge stormwater runoff would be required to comply with NPDES discharge permits from the Central Valley RWQCB, which adjusts requirements on a case-by-case basis to avoid significant degradation of water quality. 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 surface water quality.

Implementation of the “Land” portion of the project would convert a large area of undeveloped land to residential and commercial uses, thereby changing the amount and timing of potential long-term waste discharges in stormwater runoff to Alder Creek, Buffalo Creek, Coyote Creek, Carson Creek, and other drainages on- and off-site. The storm drainage system for the project is 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. Under the “Water” portion of the project, storm drainage system for the White Rock WTP or Folsom WTP would be incorporated into project designs. The incorporation of LID principles summarized in Section 3A.9, “Hydrology and Water Quality - Land,” and conformance with applicable state and local regulations regulating surface water runoff, including the procedures outlined in the Sacramento City/County Drainage Manual and the El Dorado County Storm Water Management Plan, would reduce the potentially significant impact associated with potential long-term water quality effects of urban runoff to less-than-significant levels. Under the “Water” portion of the project, implementation of mitigation measures in Section 3B.9, “Hydrology and Water Quality - Water ,” and conformance with applicable state and regulations regulating surface water runoff, including the procedures outlined in the Sacramento City/County Drainage Manual, would reduce the impacts to a less-than-significant level. 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 surface water quality.

Surface Water Flows

The Off-site Water Facility Alternatives, along with other existing, planned, and foreseeable future projects and other changes to water management and system operations (e.g. north of Delta Storage, isolated conveyance), could directly affect Sacramento River flows by diverting water from the Sacramento River, or indirectly by inducing changes in Delta hydrologic conditions that could trigger changes in CVP and SWP reservoir operations and pumping from the south Delta.

Diversion of surface water at Freeport as opposed to NCMWC would not be considered an additional diversion, but rather a modification of an existing diversion under a new M&I delivery schedule. Table 3B.9-3 provides an indication of the changes in monthly diversions on the Sacramento River as a result the changes in the delivery schedule and reduced return flow. As shown, the modeled values indicate only minor fluctuations in monthly river flow would occur in conjunction with cumulative conditions and operation of the “Water” portion of the project. The change in the delivery schedule would require minor changes in releases from upstream CVP facilities, but would not contribute to discernable decreases (<0.04%) in Delta inflow. Therefore, changes in downstream Sacramento River flow would be minor and would not conflict with other water management objectives (e.g. BDCP, OCAP) or beneficial uses (e.g. cold water fisheries).

The amount of carryover storage has an effect on the balance between CVP and SWP long-term average annual and dry year exports. Reduced reservoir carryover storage could result in reduced SWP and CVP water deliveries in subsequent years with certain hydrologic conditions. In the case of the Off-site Water Facility Alternatives, the change to an M&I delivery schedule would incrementally add to carryover storage in CVP reservoirs by reducing diversions in summer months and more evenly distributing demand throughout the year.

Based on the changes in delivery schedule shown in Table 3B.9-3 and related effects to surface flows within the Sacramento River, the impacts of the “Water” portion of the project on hydrologic conditions within the Delta are not expected to adversely affect CVP and SWP reservoir operations or pumping in the south Delta. Because the “Water” portion of the project would not divert more than 10 cubic feet per second on average from the Sacramento River and that this diversion consists of existing CVP contract water, its direct potential maximum effect on flows of the Sacramento River and Delta would be minor. Conceivably, if other water transfer projects are proposed, they could contribute to some extent to further changes in Sacramento River flow. In addition, other larger water supply projects, such as Site Reservoir and the Bay Delta Conservation Plan, could contribute to further reductions in Sacramento River flows in the long-term. However, based on the magnitude of change in river flows associated with the Off-site Water Facility Alternatives, these changes would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related changes in Delta inflow and outflow that could otherwise interfere with any CVP and SWP export diversions.

Flood Protection

The SPA is not in an area protected by levees and is not located within the Folsom Dam inundation zone; however, there are two ponds within the site and one pond upstream of the site. These ponds are formed behind existing on-site dams in topographically low areas along existing drainages. The height of the two dams and/or volume of water in the associated impoundments are unknown. 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. Implementation of mitigation described in Section 3A.9, “Hydrology and Water Quality - Land,” would reduce the potential for increased risk of flooding as a result of dam failure to a less-than-significant-level because 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.

The SPA is located within an area that at this time is not included in the 200-year floodplain as defined by California Water Code Section 9610[a], pursuant to Senate Bill (SB) 5. Furthermore, site-specific modeling has been performed to determine where the 200-year floodplain in the SPA would be located under pre-development and post-development conditions. Therefore, implementation of the “Land” portion of the project would not subject people and/or structures to impacts related to flooding as a result of a 200-year storm because the project development would comply with SB 5 criteria protecting the proposed development from the 200-year flood.

As discussed in Section 3B.9, “Hydrology and Water Quality - Water,” the alternative WTP sites would not be located in a 100-year floodplain. Portions of the conveyance pipeline alternative alignments would be located within a 100-year floodplain; however, these facilities would be located underground. Therefore, the “Water” portion of the project would result in less-than-significant impacts related to the increased risk of flooding and flood hazards.

Some of the related projects in the region may also result in the placement of structures in areas designated as 100- or 200-year floodplains. However, as with the “Land” portion of the project, the related projects would be required by law to comply with all applicable state and local regulations regarding flooding and flooding hazards, including protection of residents and workers from 100- and 200-year flood flows. Therefore, implementation of the related projects would not result in a cumulative impact, and the “Land” portion of the project’s contribution to the impact from 100- and 200-year flood flows would not be cumulatively considerable.

Surface Drainage

Implementation of the “Land” portion of the project would convert a large area of undeveloped land to residential and commercial uses, which could substantially alter drainage courses and runoff patterns from existing conditions. Compacting soils and constructing impervious surfaces can reduce the net amount of infiltration of rain water into the soil, thereby increasing runoff rates and volumes. As discussed above, the storm drainage system for the project is 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 incorporation of LID principles summarized in Section 3A.9, “Hydrology and Water Quality - Land,” and conformance with applicable state and local regulations regulating surface water runoff, including the procedures outlined in the Sacramento City/County Drainage Manual and the El Dorado County Storm Water Management Plan, would reduce the long-term impacts from changes in drainage and runoff patterns in the SPA to a less-than-significant level. As a result, no adverse project-specific impacts would occur.

Under the “Water” portion of the project, operation of the WTP alternatives would contribute additional stormwater runoff to Buffalo Creek, resulting in potential downstream flooding. Implementation of mitigation measures in Section 3B.9, “Hydrology and Water Quality - Water,” and conformance with applicable state and regulations regulating surface water runoff, including the procedures outlined in the Sacramento City/County Drainage Manual, would reduce the long-term impacts from changes in drainage and runoff patterns to a less-than-significant level.

In other new developments within Sacramento County, Folsom, and Rancho Cordova, stormwater conveyance would also consist of surface runoff to detention basins, swales, or other detention facilities. Such new development, like the project, would be required to comply with the requirements of the design criteria identified in the Stormwater Quality Design Manual for the Sacramento and South Placer Regions. In addition, cumulative impacts of related projects would undergo separate environmental review to ensure that design criteria facilities are included as part of those projects. 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 changes in drainage and runoff patterns and stormwater conveyance.

Groundwater Recharge

Planned development under the “Land” portion of the project would include increases in impervious surfaces and the amount of surface runoff generated by proposed development. Soils in the SPA and surrounding area have a poor capacity for groundwater recharge, with most of the substantial recharge occurring along active stream channels. Those areas within the SPA that are most conducive to groundwater recharge, such as the Alder Creek stream and tributary corridors as well as the retention basins, would be sited and designed to maximize infiltration. Furthermore, no new wells would be established for domestic use, and increased seasonal groundwater recharge from landscape irrigation activities would occur. Impacts on groundwater recharge would be less-than-significant. Therefore, the “Land” portion of the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to groundwater recharge.

Groundwater Resources

Construction of the conveyance pipeline alternative alignments, booster pump station, and WTP alternatives 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. Groundwater withdrawn from the construction areas would be subsequently discharged to local waterways or drainage ditches, or via land application, and could result in soil erosion and stormwater discharges of suspended solids, increased turbidity, and potential mobilization of other pollutants from project-related construction sites. Implementation of mitigation measures in Section 3B.17, “Groundwater Resources - Water,” would reduce impacts associated with construction dewatering to a less-than-significant level. Because construction dewatering

of shallow groundwater would be temporary, it would not act in combination with other projects to result in a cumulatively considerable incremental contribution to a significant cumulative impact on local groundwater resources.

Construction of the White Rock WTP or Folsom Boulevard WTP under the “Water” portion of the project would include increases in impervious surfaces and the amount of surface runoff generated by proposed development. However, these impermeable surfaces would be limited in extent to less than 0.5-acre of the 10-acre alternative WTP sites (including buildings, paved roads, storage and treatment facilities, and parking lots) and only a portion of the well sites (including access roads and auxiliary facilities). This area would be very small in comparison to adjacent areas that would remain open and permeable. Impacts on groundwater recharge from implementation of the “Water” portion of the project would be less-than-significant. Therefore, the “Water” portion of the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to groundwater recharge.

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.

LAND USE AND AGRICULTURAL RESOURCES

The SPA is generally located in eastern Sacramento County immediately south of the Folsom city limits and west of the Sacramento/El Dorado County line. Under the “Water” portion of the project, the alternative WTP sites are located within unincorporated Sacramento County and the conveyance pipeline alternative alignments would be installed within the boundaries of the City of Rancho Cordova and unincorporated Sacramento County. Proposed, planned, and approved development in El Dorado and Sacramento Counties and regional development anticipated by the SACOG Blueprint must be considered for the purpose of evaluating land use impacts on a cumulative level (Exhibits 4-1 and 4-2). Under cumulative conditions, future projects will increase development and provide additional housing, employment, shopping, and recreational opportunities.

The SPA consists of livestock grazing lands, and there is only one existing single-family residence and associated agricultural outbuildings located on the western side of the SPA. No residential land uses are located on the alternative WTP sites or within the conveyance pipeline alternative alignment under the “Water” portion of the project. Therefore, implementation of the “Land” and “Water” portions of the project would not physically divide an established community and it would not contribute to a cumulative impact on this basis.

Future growth under cumulative conditions may result in a variety of physical impacts related to consistency with adopted land use plans. Impacts involving adopted land use plans or policies and zoning generally would not combine to result in cumulative impacts. The determination of significance for impacts related to these issues, as described by Appendix G of the State CEQA Guidelines, and referenced earlier in Sections 3A.10 and 3B.10, “Land Use and Agricultural Resources,” is whether a project would conflict with any applicable land use plan or policy adopted for the purpose of avoiding or mitigating environmental impacts. Such a conflict is site-specific; it is addressed on a project-by-project basis. Implementing the “Land” and “Water” portions of the project would not result in significant land use planning impacts, and the project’s ultimate consistency with adopted local land use plans, policies, and zoning is provided for through entitlements to revise the City of Folsom General Plan and Zoning Code under the “Land” portion of the project and the Sacramento County General Plan and Zoning Code.

Any land use inconsistencies of future projects, by themselves, are not considered a significant cumulative effect because it is a land use regulation, not an environmental impact. However, implementation of those plans and policies adopted for the purpose of avoiding or mitigating environmental impacts could lead to physical environmental impacts, which are considered in the appropriate sections of this EIR/EIS. Because land use impacts would occur on a project-specific basis rather than a cumulative basis, the project would not contribute to cumulatively considerable land use impacts. The proposed GPA would change permitted densities, but would not change permitted uses or 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 land use and agricultural resources) which are related to land coverage, there would be no change from the City’s existing General Plan.

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).

The Sacramento County Important Farmland map, published by DOC’s Division of Land Resource Protection, designates the SPA, the off-site freeway interchange improvements, the sewer force main, and the detention basin under the “Land” portion of the project, and the alternative WTP sites and conveyance pipeline alternative alignments under the “Water” portion of the project, as Grazing Land and/or Urban and Built-Up Land (DOC 2006). The two off-site roadway extensions from the Folsom Heights property into El Dorado Hills are designated by the El Dorado County Important Farmland Map as Grazing Land and Urban and Built-Up Land. These farmland designations are not considered Important Farmland under CEQA (California Public Resources Code Sections 21060.1 and 21095 and State CEQA Guidelines Appendix G). 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 conversion of Important Farmland to nonagricultural uses.

NOISE

CUMULATIVE IMPACTS - 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.

Temporary, Short-Term Exposure of Sensitive Receptors to Potential Groundborne Noise and Vibration

Groundborne noise and vibration levels from construction of the aforementioned related projects would be similar in nature and magnitude to those discussed in section 3A.11 and 3B.11, "Noise." Specifically, construction activities would result in varying degrees of temporary groundborne noise and vibration, depending on the specific construction equipment used and activities involved (see, for example, Table 3A.11-17). Although detailed information is not currently available, construction of the related projects would be anticipated to result in maximum groundborne noise and vibration levels 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 PPV (87 and 109 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. The exact locations of bulldozing activities and blasting points have not been determined at this time; however, nearby sensitive receptors could be located within the distances modeled above that are correlated with the Caltrans- and FTA- recommended exceedance levels. Therefore, the related projects could result in a significant impact from short-term exposure of sensitive receptors to potential groundborne noise and vibration. As discussed in Sections 3A.11 and 3B.11, "Noise," construction of the "Land" and "Water" portion of the project would result in a significant impact from temporary, short-term groundborne noise and vibration levels in the immediate vicinity and possibly during the same time frame as the related projects. Implementation of Mitigation Measures contained in Sections 3A.11 and 3B.11, "Noise" would reduce this impact, but not to a less-than-significant level. Thus, the incremental contribution of the "Land" portion of the project to this significant cumulative impact would be cumulatively considerable. Under the "Water" portion of the project, construction-related blasting activities would be temporary and short-term and located a sufficient distance away from existing structures, including residencies, such that this impact would be less than significant.

Long-Term Exposure of Sensitive Receptors to Increased Stationary-Source Noise

Stationary-source noise from the aforementioned related projects would be similar in nature and magnitude to those discussed from the "Land" and "Water" portions of project in Sections 3A.11 and 3B.11 for mechanical HVAC equipment, emergency electrical generators, parking lot activities, loading dock and delivery activities, emergency facilities, and outdoor recreational and educational activities. With respect to the City Corporation

Yard, noise sources could include on-site truck and forklift activities (e.g., idling and circulating), generators, fans, air compressors, maintenance shops, metal fabricating shops, welders, cutting equipment, grinders, outdoor speakers, blowers, loading docks, and pallets dropping. New stationary noise sources at the booster pump station and White Rock WTP or Folsom Boulevard WTP under the “Water” portion of the project include generators, pumps, and heavy equipment. According to EPA and other documented references, noise levels for such equipment can range from approximately 76 to 91 dB at 3 feet from the source depending on the exact type and at 50 feet typical from 55 to 75 dB L_{eq} and from 80 to 84 dB L_{max} (EPA 1971). Operation of the related projects could result in the long-term stationary source noise levels that exceed applicable standards at nearby sensitive receptors and/or result in substantial increases in ambient noise levels. While these types of noise levels could be controlled and associated noise levels reduced at the source (e.g., noise walls, enclosures, located in shielded locations, properly equipped and maintained), there is no guarantee these would be included in all of the related projects. Therefore, a significant impact could occur from the related projects. As discussed in Sections 3A.11 and 3B.11, operation of the “Land” and “Water” portions of the project could result in a significant impact from long-term stationary source noise levels; however, implementation of Mitigation Measures in Sections 3A.11 and 3B.11 would reduce this impact to a less-than-significant level in the direct vicinity of the related projects. Thus, the incremental contribution of the “Land” and “Water” portions of the project to this significant cumulative impact would not 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 percent 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. In addition, even when considering the addition of quarry-related traffic under future conditions, implementation of the project would still result in substantial increases when comparing future no project with future plus project conditions as indicated in bold in Table 4-8 below.

Table 4-8 Summary of Modeled Traffic Noise Levels of the "Land" Portion of the Project Under Future (2030) No Project and Future Plus Project Conditions, With Quarry Truck Trips															
Roadway Segment	Between		Predicted Noise Level (dB L _{nd} /CNEL) at Approximate Road Corridor Boundary												
			NP (Without Quarry Trucks)	With Quarry Trucks											
				NP	Δ in dB	PP	Δ in dB	RIM	Δ in dB	CD	Δ in dB	RHD	Δ in dB	NF	Δ in dB
Prairie City Road	Blue Ravine Road	Iron Point Road	72.0	73.2	1.2	73.6	1.6	73.6	1.6	73.7	1.7	73.7	1.7	73.6	1.6
Prairie City Road	Iron Point Road	U.S. 50	72.4	73.5	1.1	74.1	1.7	74.1	1.7	74.2	1.8	74.2	1.8	74.1	1.7
East Bidwell Street	Blue Ravine Road	Oak Avenue Parkway	74.2	75.1	0.9	75.3	1.0	75.3	1.1	75.4	1.2	75.4	1.2	75.4	1.2
East Bidwell Street	Oak Avenue Parkway	Broadstone Parkway	76.3	76.8	0.6	77.2	0.8	77.2	0.9	77.2	1.0	77.3	1.0	77.2	1.0
East Bidwell Street	Broadstone Parkway	Iron Point Road	75.9	76.5	0.6	77.0	1.1	77.2	1.3	77.3	1.3	77.3	1.4	77.2	1.3
East Bidwell Street	Iron Point Road	U.S. 50	76.7	77.2	0.5	77.8	1.1	78.1	1.4	78.3	1.6	78.4	1.7	78.2	1.5
Scott Road	U.S. 50	Easton Valley Parkway	71.7	76.9	5.2	77.2	5.6	77.2	5.5	77.7	6.0	77.8	6.1	77.4	5.7
Scott Road	Easton Valley Parkway	Road "A"	71.7	76.9	5.2	74.2	2.6	74.8	3.1	74.8	3.2	75.0	3.3	74.7	3.0
Scott Road	Road "A"	White Rock Road	0.0	0.0	0.0	76.2	0.0	76.7	0.0	77.2	0.0	77.3	0.0	76.8	0.0
Oak Avenue Parkway	U.S. 50	Easton Valley Parkway	0.0	0.0	0.0	74.8	0.0	74.8	0.0	75.4	0.0	75.7	0.0	74.6	0.0
Oak Avenue Parkway	Easton Valley Parkway	Road "A"	0.0	0.0	0.0	74.8	0.0	74.8	0.0	75.3	0.0	75.4	0.0	75.0	0.0
Oak Avenue Parkway	White Rock Road	White Rock Road	77.0	81.0	4.0	81.3	4.3	81.4	4.5	81.5	4.5	81.5	4.5	81.5	4.5
Grant Line Road	Centennial Road	Centennial Road	76.8	80.9	4.1	81.1	4.4	81.3	4.6	81.4	4.6	81.4	4.6	81.4	4.6
Grant Line Road	Douglas Road	Keifer Boulevard	75.8	80.3	4.4	80.4	4.6	80.5	4.7	80.6	4.7	80.6	4.7	80.6	4.7
Grant Line Road	Keifer Boulevard	Jackson Road	74.0	80.0	6.0	80.1	6.1	80.2	6.2	80.3	6.2	80.3	6.2	80.3	6.2
Grant Line Road	Jackson Road	Sunrise Boulevard	74.7	79.4	4.6	79.5	4.7	79.6	4.9	79.6	4.9	79.6	4.9	79.6	4.9
Jackson Road (SR 16)	Grant Line Road	Dillard Road	72.0	72.3	0.3	72.2	0.1	72.1	0.1	72.1	0.1	72.1	0.1	72.1	0.1
Jackson Road (SR 16)	Dillard Road	Stone House Road	72.3	72.5	0.2	72.5	0.2	72.5	0.2	72.5	0.2	72.5	0.2	72.5	0.2
Prairie City Road	U.S. 50 eastbound ramp	Easton Valley Parkway	73.8	76.8	3.0	76.9	3.1	76.7	3.0	77.3	3.6	77.4	3.6	76.8	3.0
Prairie City Road	Easton Valley Parkway	White Rock Road	71.8	75.9	4.1	76.7	4.9	76.6	4.9	76.8	5.0	76.8	5.0	76.5	4.7
Scott Road (south)	White Rock Road	Latrobe Road	62.6	77.1	14.6	77.2	14.7	77.4	14.8	77.5	14.9	77.5	14.9	77.4	14.9

**Table 4-8
Summary of Modeled Traffic Noise Levels of the “Land” Portion of the Project Under Future (2030) No Project and
Future Plus Project Conditions, With Quarry Truck Trips**

Roadway Segment	Between		Predicted Noise Level (dB L _{nd} /CNEL) at Approximate Road Corridor Boundary															
			NP (Without Quarry Trucks)	With Quarry Trucks							Without Quarry Trucks							
				NP	Δ in dB	PP	Δ in dB	RIM	Δ in dB	CD	Δ in dB	RHD	Δ in dB	NF	Δ in dB			
Stonehouse Road	Latrobe Road	Jackson Road (SR 16)	64.2	0.6	65.8	1.7	66.0	1.8	66.1	2.0	66.1	2.0	66.1	2.0	66.1	2.0	66.1	2.0
White Rock Road	Villagio Parkway	Grant Line Road	71.6	2.0	74.3	2.7	74.3	2.7	74.4	2.8	74.5	2.9	74.3	2.9	74.3	2.7	74.3	2.7
White Rock Road	Grant Line Road	Prairie City Road	77.6	3.5	81.5	3.9	81.7	4.0	81.8	4.1	81.8	4.1	81.7	4.1	81.7	4.1	81.7	4.1
White Rock Road	Prairie City Road	Scott Road (south)	76.4	5.2	81.6	5.3	81.9	5.5	81.9	5.5	81.9	5.6	81.9	5.6	81.9	5.5	81.9	5.5
White Rock Road	Scott Road (south)	Oak Avenue Parkway	76.5	2.8	79.3	2.9	79.6	3.2	79.7	3.2	79.7	3.3	79.7	3.3	79.7	3.2	79.7	3.2
White Rock Road	Oak Avenue Parkway	Scott Road (north)	76.5	2.8	80.2	3.8	80.5	4.0	80.5	4.1	80.6	4.1	80.5	4.1	80.5	4.0	80.5	4.0
White Rock Road	Scott Road (north)	Placerville Road	74.8	0.6	75.5	0.7	75.6	0.9	75.7	0.9	75.8	1.0	75.6	0.9	75.6	0.9	75.6	0.9
White Rock Road	Placerville Road	Empire Ranch Road	76.1	0.5	77.0	0.9	77.8	1.7	78.0	1.8	78.1	1.9	77.8	1.9	77.8	1.7	77.8	1.7
White Rock Road	Empire Ranch Road	Carson Crossing Road	76.1	0.5	78.1	1.9	74.6	-1.5	74.8	-1.4	75.0	-1.1	74.7	-1.1	74.7	-1.5	74.7	-1.5
White Rock Road	Zinfandel Drive	Sunrise Boulevard	64.7	5.0	69.7	4.9	69.6	4.9	69.6	4.8	69.6	4.9	69.5	4.9	69.5	4.7	69.5	4.7
White Rock Road	Sunrise Boulevard	Rancho Cordova Parkway	72.8	1.4	74.2	1.3	74.1	1.3	74.1	1.3	74.1	1.3	74.1	1.3	74.1	1.2	74.1	1.2
White Rock Road	Rancho Cordova Parkway	International Drive	68.1	3.2	71.3	3.2	71.2	3.1	71.2	3.1	71.3	3.1	71.2	3.1	71.2	3.0	71.2	3.0
White Rock Road	International Drive	Rio del Oro Parkway	68.8	3.1	72.2	3.4	72.1	3.4	72.1	3.3	72.2	3.4	72.1	3.4	72.1	3.3	72.1	3.3
White Rock Road	Rio del Oro Parkway	Villagio Parkway	68.9	3.3	72.7	3.7	72.6	3.7	72.6	3.7	72.7	3.8	72.5	3.8	72.5	3.6	72.5	3.6
White Rock Road	Villagio Parkway	Grant Line Road	72.3	2.0	75.0	2.7	75.0	2.7	75.1	2.8	75.1	2.9	75.0	2.9	75.0	2.7	75.0	2.7
White Rock Road	Carson Crossing Road	Stonebriar Drive	72.7	0.8	73.8	1.1	74.6	2.0	74.8	2.1	74.9	2.2	74.6	2.2	74.6	1.9	74.6	1.9
White Rock Road	Stonebriar Drive	Windfield Way	73	0.8	74.9	2.1	71.5	-1.3	71.7	-1.1	71.9	-0.9	71.6	-0.9	71.6	0.0	71.6	0.0
White Rock Road	Windfield Way	Latrobe Road	70	1.2	71.9	1.5	73.2	2.8	73.2	2.8	73.2	2.8	73.2	2.8	73.2	0.0	73.2	0.0
White Rock Road	Latrobe Road	Valley View Parkway	70	1.2	71.6	1.6	72.0	2.0	72.1	2.1	72.1	2.1	72.0	2.1	72.0	0.0	72.0	0.0
White Rock Road	Valley View Parkway	U.S. 50	71.5	0.9	72.4	0.9	72.5	1.0	72.6	1.0	72.6	1.1	72.6	1.1	72.6	1.0	72.6	1.0
U.S. 50	Zinfandel Drive	Sunrise Boulevard	80.4	0.5	81.0	0.6	81.1	0.6	81.1	0.6	81.1	0.7	81.1	0.7	81.1	0.7	81.1	0.7

Table 4-8 Summary of Modeled Traffic Noise Levels of the "Land" Portion of the Project Under Future (2030) No Project and Future Plus Project Conditions, With Quarry Truck Trips																		
Roadway Segment	Between		Predicted Noise Level (dB L _{dnf} /CNEL) at Approximate Road Corridor Boundary															
			NP (Without Quarry Trucks)	With Quarry Trucks														
				NP	Δ in dB	PP	Δ in dB	RIM	Δ in dB	CD	Δ in dB	RHD	Δ in dB	NF	Δ in dB			
U.S. 50	Sunrise Boulevard	Rancho Cordova Parkway	80.0	80.5	0.5	80.7	0.7	80.8	80.8	0.8	80.9	0.9	80.9	0.9	80.9	0.9	80.8	0.8
U.S. 50	Rancho Cordova Parkway	Hazel Avenue	80.2	80.7	0.5	80.8	0.7	80.9	80.9	0.8	81.0	0.9	81.0	0.9	81.0	0.9	81.0	0.8
U.S. 50	Hazel Avenue	Folsom Boulevard	79.4	80.0	0.6	80.4	1.0	80.6	80.6	1.2	80.7	1.3	80.7	1.4	80.7	1.4	80.7	1.3
U.S. 50	Folsom Boulevard	Prairie City Road	78.1	78.9	0.8	79.3	1.2	80.1	80.1	2.0	80.3	2.2	80.3	2.2	80.3	2.2	80.2	2.1
U.S. 50	Prairie City Road	Oak Avenue Parkway	78.8	79.2	0.4	79.4	0.7	79.6	79.6	0.9	79.7	1.0	79.8	1.0	79.8	1.0	79.7	1.0
U.S. 50	Oak Avenue	Scott Road	77.8	78.3	0.5	78.3	0.5	78.5	78.5	0.7	78.7	0.8	78.7	0.9	78.7	0.9	78.6	0.8
U.S. 50	Scott Road to Empire Ranch Road	Empire Ranch Road	76.9	77.2	0.3	77.5	0.6	78.1	78.1	1.2	78.1	1.2	78.2	1.3	78.2	1.3	78.1	1.2
U.S. 50	Empire Ranch Road	Latrobe Road	77.6	77.8	0.2	78.0	0.4	77.9	77.9	0.3	77.9	0.3	78.0	0.4	78.0	0.4	77.9	0.3
U.S. 50	Latrobe Road	Silva Valley Parkway	76.1	76.4	0.3	76.6	0.5	76.7	76.7	0.6	76.7	0.6	76.7	0.7	76.7	0.7	76.7	0.6
U.S. 50	Silva Valley Parkway	Bass Lake Road	76.5	76.9	0.4	77.1	0.6	77.2	77.2	0.7	77.2	0.7	77.2	0.7	77.2	0.7	77.2	0.7

Notes: CNEL = Community Noise Equivalent Level; dB = A-weighted decibels; L_{dn} = day-night average noise level; Δ = Change; NP = No Project; PP = Proposed Project Alternative; RIM = Resource Impact Minimization Alternative; CD = Centralized Development Alternative; RHD = Reduced Hillside Development Alternative; NF = No Federal Action Alternative

Bold: Represents the potential for substantial increase (e.g., 3 dB L_{dnf}/CNEL where existing or projected future traffic noise levels are greater than 65 dB L_{dnf}/CNEL, 1.5 dB L_{dnf}/CNEL where existing or projected future traffic noise levels are greater than 65 dB L_{dnf}/CNEL) in comparison to existing No Project conditions.

Refer to Appendix J for detailed modeling input data and output results.

Source: Data provided by AECOM in 2009

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.

Cumulative Mitigation Measure Noise-1-Land: Implement Measures to Reduce Exposure of Sensitive Receptors to Increased Traffic Noise Levels from Quarry Truck Traffic.

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 of Sacramento. The City’s authority to control the activities of the quarry trucks includes restrictions or actions that would be applicable within the City’s jurisdictional boundaries. For example, the City could

designate truck routes through the City consistent with California Vehicle Code section 21101(c), including truck routes in the Folsom South of U.S. 50 project area, so as to prohibit or limit quarry trucks' use of City roads adjacent to areas where projected truck traffic volumes would otherwise result in exposure of sensitive receptors to operational noise from quarry truck traffic and/or traffic safety hazards. If this approach is selected by the City, then prior to the approval of the first tentative subdivision map or any other discretionary approval that would place sensitive receptors along any roads the quarry trucks could use to access U.S. 50, the City's traffic department and consultants shall analyze and propose to the City Council for approval designated truck routes from the quarries through City jurisdiction to access U.S. 50 that would allow a level of truck traffic that would avoid any potentially significant impact on sensitive receptors from truck traffic noise within the Folsom South of U.S. 50 project area, as well as any other existing or planned uses that would contain sensitive receptors, 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.

As an alternative to designating truck routes, the following measures could be voluntarily implemented by the quarry project applicant(s) (Granite [Walltown], Teichert, and DeSilva Gates) to reduce exposure of new sensitive receptors developed in the SPA to increases in traffic noise levels generated by quarry truck traffic, and are encouraged.

- ▶ 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 percentage 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 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 L_{dn} 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 L_{dn} with the inclusion of quarry truck traffic.

Implementation: The project applicant(s) of the Folsom South of 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 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.

PARKS AND RECREATION

Regional recreational facilities are located near the SPA, including Bass Lake in El Dorado County and Folsom Lake, Lake Natoma, the Powerhouse State Historic Park, the Prairie City State Vehicular Recreation Area (OHV Park), and the American River Parkway in Sacramento County. Neighborhood and community parks are located throughout Sacramento and El Dorado Counties. The City of Folsom provides and maintains a full range of recreational activities and park facilities.

Implementation of the “Land” portion of the project would generate demand for parks and recreational facilities. Table A3.12-1, in Section 3A.12, “Parks and Recreation - Land,” summarizes park facilities and total acreage and developed acreage of parkland in the City. A total of 385.35 acres of parkland are currently located within the City of Folsom (City of Folsom 2008). Currently, the City’s parkland acreage to population ratio is currently 5.3 acres per 1,000, which is slightly above the City’s park acreage standard of 5 acres per 1,000 residents. As shown

on Table 3A.12-3, in Section 3A.12, “Parks and Recreation - Land,” between 84.8 and 170.0 acres of developed parks and active recreation areas would be created depending on the alternative chosen for development. All of the “Land” alternatives would meet the City’s requirement of 5 acres of parkland per 1,000 residents thereby providing sufficient park facilities to meet the demand generated by the projected population at buildout. Therefore, while the related projects may result in a cumulatively considerable impact, the “Land” portion of the project would not contribute to such an impact. For the proposed GPA, existing Parks and Recreation planning in the City of Folsom has considered the growth which could occur in Multi-family Density and Multi-family High Density areas under the existing Folsom General Plan. Only the excess units (951 in total) which would be permitted under the increased density maximums are not accounted for in local park planning. The City of Folsom has an existing park surplus, with approximately 5.3 acres per 1,000 residents. Addition of 951 excess residents would lower this ratio to approximately 5.2 acres per 1,000 residents, still a surplus of park land.

In addition to the on-site facilities, the new residents would also be expected to use existing off-site recreational facilities such as those at Folsom Lake State Recreational Area, Folsom Powerhouse State Historic Park, the Prairie City OHV Park, Bass Lake, and the American River Parkway, including bicycle trails, campgrounds, boat launch facilities, and sports parks. Additional use of facilities could cause the potential physical deterioration of existing off-site local and regional park facilities. Although it cannot be fully ascertained with any degree of certainty exactly how many residents and with what frequency they would choose to use off-site recreational facilities, for purposes of this analysis, it is assumed that revenues from use charges and admission fees of these off-site facilities would increase along with increased usage, thus supporting increased maintenance. Similarly, increases in use from the related projects would be expected to result in an increase in admission revenues for park maintenance. As a result, the “Land” portion of the project, the proposed GPA, and related projects would not contribute to physical deterioration of regional park facilities, and the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to regional park facilities.

Within the Off-site Water Facilities Study Area, the Sacramento River provides water-dependent activities, such as boating and fishing, and recreational activities including camping, hiking, picnicking, and sightseeing. Implementation of the “Water” portion of the project would result in very minor changes in flows within the Sacramento River. These changes are generally attributed to changes in the surface water delivery schedule and quantity of return flow back to the Sacramento River. As discussed in Section 3B.12, “Parks and Recreation - Water,” this operational change would result in a negligible change in the frequency with which flows in the Sacramento River are within a range suitable for water-dependent recreation during the peak recreation season (May to September). Therefore, the “Water” portion of the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to water-dependant recreational opportunities.

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.)

The jobs/housing index prepared for the "Land" portion of the project is not applicable to the No Project Alternative because the No Project Alternative consists of development of only 44 rural residences scattered over 3,500 acres. Therefore, the No Project Alternative would have a negligible effect on the jobs/housing balance .

PUBLIC SERVICES

In terms of cumulative impacts, the appropriate service providers are responsible for ensuring adequate provision of public services within their jurisdictional boundaries. As indicated in Section A3.14, "Public Services," public services would be provided to the SPA by the City of Folsom Fire Department, the City of Folsom Police Department, and the Folsom-Cordova Unified School District (FCUSD). The related projects within the City of

Folsom would use these same service providers. Related projects outside the City of Folsom would rely on different service providers, within Sacramento and El Dorado Counties. Significant impacts of the project analyzed in the EIR/EIS associated with the potential to impede the provision of emergency services during construction, increase demand for fire protection services and facilities, and adequate water pressure for fire flow would be reduced to less-than-significant levels through implementation of the mitigation measures identified in Chapter 3A.14, "Public Services - Land."

Future development in the City of Folsom would increase the demand for public services. In terms of cumulative impacts, appropriate service providers are responsible for ensuring adequate provision of public services within their jurisdictional boundaries. At this time, it is unknown whether sufficient police, fire, school facilities and other public services are planned to serve the related projects. While some of the related projects include proposals for the construction of service facilities, including schools, others do not. However, it is clear that sufficient police facilities, fire stations, and schools would need to be constructed to serve the related projects.

For the "Land" portion of this project, proposed on-site elementary and high schools would have sufficient capacity to accommodate students living in the SPA. In addition, these elementary and high school facilities would potentially have capacity for some additional students generated by related projects. Proposed on-site middle school facilities would have sufficient capacity to accommodate students generated under the Resource Impact Minimization, Centralized Development, and No Federal Action Alternatives. However, under the Proposed Project and Reduced Hillside Development Alternatives, the middle school would not accommodate all students, resulting in a shortfall of school services. The Proposed Project and Reduced Hillside Development Alternatives could potentially result in a significant cumulative environmental effect associated with the development of new school facilities. California Government Code Section 65996 provides that payment of school impact fees constitutes adequate CEQA mitigation for all project-specific and cumulative effects relating to adequacy of school facilities as a result of residential development.

Although a cumulative shortage of public services and facilities would not represent in itself a significant environmental impact under CEQA because these are not physical impacts on the environment, such a shortage would lead to the need to develop additional public-services facilities, which could in turn lead to significant construction- and operation-related physical impacts on the environment. It is assumed that the development of the related projects, and development of the additional public-services facilities required to serve them, would be preceded by the required CEQA review. However, conducting the required CEQA review of the related projects would not necessarily guarantee that significant environmental effects associated with construction of new fire, police, school facilities, and other public services would not occur. Hence, significant cumulative environmental indirect impacts associated with the development of new fire, police, school facilities, and other public services associated with the related projects could result in a cumulatively considerable impact.

At this time, it is unknown whether sufficient police, fire, school facilities and other public services are planned to serve the additional residential units which could be built under the proposed GPA. Implementation of existing City regulations and mitigation measures proposed in Section 3A.14, "Public Services - Land," would reduce these impacts to a less-than-significant level, but could require construction of new or expanded facilities to serve the new population, potentially resulting in a considerable contribution to a cumulatively significant impact.

Measure W would require the project applicant(s) to fund and construct fire, police, and school facilities in the SPA without reducing current service levels in the City. With payment of the state-mandated school impact fees, implementation of the "Land" portion of the project would also have a less-than-significant impact on school services and facilities. Therefore, the implementation of the "Land" portion of the project would not result in cumulatively considerable incremental contribution to a significant cumulative impact related to the development of necessary public services facilities.

Implementation of the "Water" portion of the project would allow the City to provide water service to new development within the SPA, including water service for fire protection, public safety, and educational activities.

Therefore, the “Water” portion of the project would have no impacts related to increased demand for public services and no cumulatively considerable impacts would occur.

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.

Construction of the “Water” portion of the project would generate temporary and short-term and intermittent reductions of roadway capacities associated with the movement of construction equipment. Related projects within the Off-site Water Facilities Study Area include roadway improvement projects such as the White Rock Road Realignment and Widening Project, the Florin Road Widening Project, and the Capital Southeast Connector Project. Mitigation in Section 3B.15, “Traffic and Transportation - Water,” would reduce the potential for traffic disruptions and temporary delays to a less-than-significant level through preparation of a traffic control plan. 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 or Folsom Boulevard WTP and routine maintenance and inspection activities of the conveyance pipeline and booster pump station. Therefore, the “Water” portion of the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to long-term increased traffic on local or regional roadways.

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,” 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.

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 on 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.

Solid Waste

Operation of the "Land" portion of the project and the proposed GPA would incrementally increase generation of solid waste throughout buildout in the year 2030. Depending on the project (action) alternative chosen for development, approximately 67.3 to 113.9 tons per day (tpd) of solid waste would be generated for disposal at

Kiefer Landfill. The landfill is permitted to accept 10,800 maximum tpd of solid waste; however, the average intake is only approximately 6,000 tpd. The landfill is permitted to accept a maximum of 10,800 tpd of solid waste. The Kiefer Landfill receives over 700,000 tons of waste per year (Sacramento County 2009a:4-2). The landfill has a total capacity of 117 million cubic yards, and a remaining capacity of 113 million cubic yards. Currently, the landfill has a closure date of 2064. (California Integrated Waste Management Board [CIWMB] 2008.) The project-related impact from increased generation of solid waste is less than significant. Because Kiefer Landfill would have adequate capacity to serve the “Land” portion of the project, the GPA and other development in its service area, implementation of the “Land” portion of the project, the GPA, and the related projects would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to solid waste.

Electricity

SMUD is the electrical service provider for Folsom and would provide electrical service for the “Land” and “Water” portions of the project. Depending on the project alternative chosen for development under the “Land” portion of the project, the project would increase electrical demand in the SMUD service area by an average of 35.7 to 55.5 megavolt amperes (MVA) with a peak demand of 75.9 to 118.7 MVA (Capitol Utilities Specialists 2009:4). SMUD concurs with this assessment; however, SMUD has calculated the worst-case scenario as increasing electrical demand by a total of 120 MVA (Capitol Utilities Specialists 2009:5; Kim, pers. comm., 2009).

The “Land” and “Water” portions of the project and cumulative development of the related projects would increase the demand for electricity within SMUD’s service area. SMUD has long-term contracts with other generators to provide an additional 1,189 megawatt (MW) of electricity for distribution per day. Throughout the year, SMUD buys and sells energy and capacity on a short-term basis to meet load requirements and reduce costs. In 2007, SMUD generated approximately 10,917 million kilowatt (kW) hours of electricity within its service area (California Energy Commission [CEC] 2008a).

SMUD received approval from CEC to build the first phase of the 500-MW Cosumnes Power Plant (CPP), which provides SMUD with 1,000 MW of power to ensure SMUD’s long-range plans to meet the growing power needs of Sacramento County. The gas-fired plant, which came on line in 2006, provides enough power to meet the annual needs of 450,000 single-family homes (SMUD 2006). In addition to the CPP, SMUD has the Upper American River Project, which consists of 11 reservoirs and eight powerhouses that generate enough electricity to meet nearly 15% of SMUD’s customer demand. The Upper American River Project can provide approximately 1.8 billion kW hours of electricity during a normal water year, which is enough energy to power about 180,000 homes (SMUD 2009).

SMUD currently has existing capacity to serve the “Land” portion of the project and the GPA from its electrical distribution system north of U.S. 50 (Capitol Utility Specialists 2009:5). To provide service within the SPA, SMUD has determined that a minimum of three distribution substations would be required to serve the proposed development. Also, a new 69-kV overhead transmission line would be constructed along Old Placerville Road from U.S. 50 to White Rock Road. Additional overhead transmission lines may be required depending on the location of the distribution substations. SMUD has stated that it has adequate electricity supplies to support the “Land” portion of the project without affecting service to existing customers and that it would provide new electrical infrastructure (Kim, pers. comm., 2009).

For the “Water” portion of the project, the booster pump station and WTP alternatives would increase demands for electricity. Electrical distribution infrastructure exists adjacent to each of the WTP alternatives sites and any improvements and extensions required to accommodate the “Water” portion of the project would be limited to on-site locations and performed in consultation with SMUD prior to installation. Therefore, the project-related impact from increased demand for electricity supplies and infrastructure is less than significant and the “Land”

and “Water” portions of the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to increased demand for electrical service.

Natural Gas

PG&E is the natural gas supplier for Folsom and would provide natural gas service for the “Land” portion of the project, the proposed GPA, and related projects within its service area. Depending on the alternative chosen, natural gas demand would increase by 655.9 to 1,050.7 thousand cubic feet per hour within the PG&E service area.

The “Land” portion of the project and cumulative development of the related projects would increase the demand for natural gas. Implementation of the “Land” portion of the project would require two additional transmission mains and two natural gas regulator stations to provide service to the “Land” portion of the project at full build-out. PG&E has indicated that it currently has capacity in its system to serve the SPA and the related projects within its service area. PG&E is able to provide natural gas and associated infrastructure to the SPA and the increase in demand for natural gas would not be substantial in relation to existing natural-gas consumption in PG&E’s service area. Therefore, the project-related impact from increased demand for natural gas is less than significant and the “Land” portion of the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to increased demand for natural gas.

The “Water” portion of the project would not require natural gas service. Therefore, the “Water” portion of the project would have no impacts related increased demand for natural gas and no cumulatively considerable impacts would occur.

Communications and Cable Television

The “Land” and “Water” portions of the project, the proposed GPA, and cumulative development of related projects would increase the demand for communications and cable television service. AT&T would provide communications service and infrastructure to the SPA. The “Land” portion of the project would receive service from the Folsom Nimbus Wire Center and the El Dorado Wire Center. Residential service would be provided via fiber-optic cable and commercial and retail service would be provided via copper or fiber-optic cable. AT&T would be able to provide the necessary telecommunications services and infrastructure without affecting service to its existing customers.

Comcast would provide cable television service and infrastructure to the SPA. Comcast generally improves or relocates hub sites as the need arises to meet customer demand. Comcast would extend service to the SPA via existing facilities. The “Water” portion of the project would not require cable television service; therefore, the “Water” portion of the project would have no impacts related increased demand cable television and no cumulatively considerable impacts would occur.

Because AT&T and Comcast would provide communications and cable television service and associated infrastructure to the SPA, the project-related impact from increased demand for communications and cable television services is less than significant. Therefore, related projects and other development in the region are not considered to result in a cumulatively considerable impact related to communications and cable television service, and the proposed project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact.

4.2 GROWTH-INDUCING IMPACTS

4.2.1 INTRODUCTION

According to the CEQA Guidelines (CCR Section 15126.2[d]), an EIR must discuss the growth-inducing impacts of a project. In other words, the EIR must examine whether a project would lead to economic or population growth or would encourage development or other activities that could result in physical impacts on the environment. Specifically, CEQA states that the EIR shall:

[d]iscuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Direct growth-inducement would result if a project involved construction of new housing. Indirect growth-inducement would result, for instance, if implementing a project resulted in any of the following:

- ▶ substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises);
- ▶ a construction effort with substantial short-term employment opportunities that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; or,
- ▶ removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area) or adding development adjacent to undeveloped land.

Growth-inducement itself is not an environmental effect, but it may foreseeably lead to environmental effects. These environmental effects may include increased demand on other community and public services and infrastructure, increased traffic and noise, degradation of air or water quality, degradation or loss of plant or animal habitats, or conversion of agricultural and open space land to urban uses.

4.2.2 SUMMARY OF GROWTH PLANNED IN THE CITY OF FOLSOM GENERAL PLAN

The City of Folsom General Plan (1988) provides for physical, economic, and environmental growth of the City. The City's General Plan is oriented toward the physical development of land uses, a circulation network, and supporting public facilities and services. As a whole, the general plan is intended to retain and enhance Folsom's quality of life, separate identity, and sense of community.

The following population data for the City of Folsom are taken from City of Folsom General Plan Housing Element Background Report, adopted June 25, 2002. The population data in the City's adopted Housing Element is drawn largely from the City's 1992 Housing Element, 1990 and 2000 U.S. Census Bureau data, DOF, and SACOG. As presented in the background report, Folsom's population was anticipated to increase from 51,884 in 2000 to 74,185 in 2010, an average annual growth rate of 3.6%. As of January 1, 2009, the population of Folsom was estimated to be 71,018 (DOF 2009), indicating that growth was closely tracking projections.

The City is the process of updating its General Plan Housing Element for the planning period of January 1, 2006 to June 30, 2013. The Draft Housing Element is based on 2000 U.S. Census Bureau data, DOF data (2007), and SACOG's most recent projections released in 2007. The City's Draft Housing Element (2008) estimates the population of Folsom will grow to 69,800 in 2013 and 76,333 in 2015 (but also show that expected population levels in 2013 may have already been eclipsed). These population projections show a substantial decline in growth from what occurred between 1990 and 2008. By 2035, population is anticipated to increase to 97,485 persons. These projections do not include population that would be generated by the project or the excess 546 units which could occur under the proposed GPA.

4.2.3 GROWTH-INDUCING IMPACTS OF THE PROJECT

DENSITY OF DEVELOPMENT

The SPA is located in unincorporated Sacramento County immediately south of the Folsom city limits (see Exhibits 2-1 and 2-2 in Chapter 2, "Alternatives"). The SPA is currently designated by the Sacramento County General Plan (1993) as General Agriculture (80 acres) and General Agriculture (80 acres)/Resource Conservation Area and is zoned by the Sacramento County zoning codes as AG-80 (Agricultural, 80-acre minimum lot size), AG-20 (Agricultural, 20-acre minimum lot size), A-10 (Interim Agricultural, 10-acre minimum lot size), and SPA (Special Planning Area). As such, up to 44 rural residences could be developed under the existing Sacramento County agricultural land use and zoning classifications.

In June 2001, the Sacramento Local Agency Formation Commission (LAFCo) approved the City's sphere of influence amendment application (Resolution No. LAFC 1196), and the City's sphere of influence was expanded to include the SPA. As part of the amendment approval, LAFCo identified conditions to ensure that future annexation of the SPA would include adequate services for new development within proposed annexation areas; avoid premature conversion of agricultural resources; preserve open space; and encourage planned, logical, and orderly patterns of urban growth. (See Chapter 2, "Alternatives," for a detailed discussion of the project background and history, including the LAFCo resolution, Memorandum of Understanding, and Measure W.)

Following LAFCo's approval of the annexation, if this occurs, Sacramento County would relinquish land use planning authority to the City, and the Sacramento County General Plan would no longer apply to the annexed areas. The project would require approval of a general plan amendment by the City of Folsom designating the SPA for urban uses consistent with the Specific Plan, and the City's jurisdictional boundary would be expanded to include the SPA. These actions are proposed with the project.

Sacramento Area Council of Governments' Sacramento Region Blueprint

The SACOG Blueprint identifies the SPA as a future planned community that would accommodate the long-term needs of Folsom and contribute to the Sacramento region. The SACOG Blueprint Preferred Scenario anticipates the project would generate approximately 7,500 jobs and develop 12,000 households (City of Folsom 2007). The Blueprint's land use designation for the SPA is illustrated in Exhibit 3.10-2, in Section 3.10A, "Land Use and Agricultural Resources - Land." It should be noted that SACOG has no land use authority. SACOG makes clear that the land use designations presented on the Blueprint are conceptual and reflect general land use locations in a local area.

Depending on the alternative selected, project implementation could result in conflicts between the project and the SACOG Sacramento Region Preferred Blueprint Scenario. The Blueprint envisions a higher density of development in the SPA than proposed under the Resource Impact Minimization and No Federal Action Alternatives. Although lower density development 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 can push market demand for development outward toward other areas on the urban periphery, ultimately resulting in a greater overall loss of habitat, open

space, and farmland. In the long term, these alternatives would be growth inducing and could result in greater expansion of the overall regional urban areas.

Although the Proposed Project, Centralized Development, and Reduced Hillside Development Alternatives would include a greater density of residential development and exceed the jobs projections identified in the Blueprint for the SPA, these alternatives fulfill the principles of smart growth identified in the Blueprint. These alternatives would allow for a system of multimodal transportation; would provide a variety of mixed-use areas and a range of housing choices; and would emphasize compact development, quality design, and natural resource conservation. Under smart growth principles, areas that are planned for development are developed at higher than typical densities. Although these higher densities may result in greater on-site impacts on biological, cultural, open-space, and agricultural resources, the overall area of disturbance within the region is reduced in the long term as development is concentrated in particular locations. Further, higher densities make public transit more feasible, potentially taking relative pressure off highways compared with traditional automobile-dependant development. Sacramento County is experiencing demographic pressure reflecting an increasing statewide population and intrastate migration from the San Francisco Bay Area, and the City of Folsom is interested in furthering its goals and objectives of providing a mix of housing and new jobs to its residents. Smart growth principles therefore suggest that developing the site with a higher density use while avoiding wetland areas would focus market demand for development into an area near existing development, infrastructure, and services. Thus, the Proposed Project, Centralized Development, and Reduced Hillside Development Alternatives would be growth-inducing, the higher density of development would likely provide a regional environmental benefit in terms of development patterns over the long term.

ROADWAY IMPROVEMENTS

Access to the SPA would be provided by improved roads along existing roadway alignments in the project vicinity and new roads within the SPA itself. The following off-site roadway improvements would be necessary to serve the Proposed Project or the other four action alternatives, all of which would serve the project and provide access through the SPA to adjacent properties:

- ▶ improvements to the existing interchange at U.S. 50 and Prairie City Road,
- ▶ a new interchange at U.S. 50 and Oak Avenue,
- ▶ 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), and
- ▶ a new interchange at U.S. 50 and Empire Ranch Road.

Growth in the SPA, and as a result of other projects in Sacramento and El Dorado Counties, would result in the need for capacity improvements to existing off-site roadways, including state highways, arterial roadways, and regional intersections. SACOG's Metropolitan Transportation Plan for 2035 (MTP 2035) addresses the regional transportation needs for Sacramento, El Dorado, Placer, Sutter, Yolo, and Yuba Counties through 2035 based on land use assumptions in the Preferred Blueprint Scenario (SACOG 2007: 21-1). The 2035 MTP has several planned roadway improvements in and in the vicinity of the SPA including:

- ▶ U.S. 50 car pool lane extensions and new auxiliary lanes from El Dorado Hills to Shingle Springs interchange;
- ▶ U.S. 50 mainline widening from Silva Ranch Parkway to Empire Ranch Road interchange;

- ▶ U.S. 50 new carpool lanes from Sunrise Boulevard to downtown Sacramento and new auxiliary lanes at various locations in Sacramento;
- ▶ White Rock Road widening to four lanes from Manchester Road to El Dorado/Sacramento County line, from Latrobe Road to U.S. 50/Silva Parkway Interchange, and from Grant Line Road to Prairie City Road;
- ▶ Prairie City Road widening to four lanes from U.S. 50 to White Rock Road; and
- ▶ Oak Avenue widening to four lanes from U.S. 50 to White Road.

These improvements, which would also serve the SPA, were identified as necessary to serve existing traffic and future development anticipated in El Dorado and Sacramento Counties. Roadway improvements are considered growth-inducing because they would serve the project, would provide access through the SPA to adjacent properties, and would provide enhanced access to currently undeveloped areas that are planned for future development. Growth pressure on these lands could potentially result in the loss of agricultural land and biological habitat, the generation of additional traffic, and the creation of air quality and noise impacts.

UTILITIES AND SERVICE SYSTEMS

Stormwater Drainage

No public storm drain facilities currently serve the SPA. Development of the project would require that a new urban storm drainage management system be provided to effectively drain the site, control flooding, and provide water quality benefits. A network of conveyance pipes, inlets, manholes, and regulating structures would direct runoff flows into a network of 16 on-site detention basins and one off-site basin west of Prairie City Road, and would incorporate water quality treatment. The on-site storm system and off-site detention basin would not be sized or intended to serve any new development on lands other than the SPA and therefore would not be growth inducing.

Water Supply

The “Water” portion of the project proposes to acquire not more than 8,000 AFY of CVP contract entitlement water from the NCMWC to meet the water supply demands at buildout of the “Land” portion of the project. 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. The CVP contract supplies acquired by the City as part of the Offsite Water Facilities would more than satisfy demands associated with all phases of development within the SPA during normal and dry years (for information on project phasing, please refer to Section 2.3.1 in Chapter 2, “Alternatives”). 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 project demand at build-out and the available surface water supply. In recognition of this surplus, which ranges from 400 AFY in dry years up to 2,000 AFY, the City intends to make these supplies available to the NCMWC for diversion for irrigation. Under the “Land” portion of the project, the normal-year and dry-year water demands are estimated to be 5,421 AFY and 5,557 AFY respectively, for the Proposed Project Alternative. Based on the demand projections, the capacity of the conveyance and treatment improvements would be sufficient to supply projected growth through 2030. However, in assuming a lower growth rate or the addition of non-potable water supplies, the 10 mgd capacity improvements could be adequate to support additional growth through a longer period, thereby outdating the planning horizon of the Folsom Specific Plan.

The City has identified water supply and associated infrastructure as a constraint to growth within the SPA. Given that the primary objectives of the “Water” portion of the project is to secure a reliable water supply for the SPA and construct the necessary conveyance and treatment improvements to meet peak water demands, the Offsite Water Facilities would remove this obstacle. With additional conservation or recycled water, this water supply acquired for the SPA could be reasonably stretched to serve areas outside the SPA beyond 2030; although no

specific development proposal has been filed with Sacramento County. In this context, the “Water” portion of the project could indirectly facilitate growth and related secondary effects beyond the SPA in future years beyond 2030. The potential secondary effects could include the following types of impacts that are analyzed programmatically for the “Land” portion of the project:

- ▶ impacts to air quality from ozone precursors, particulate matter, TACs, and GHGs;
- ▶ increases in the ambient noise environment;
- ▶ increased traffic delay and intersection congestion;
- ▶ potential land use conflicts;
- ▶ potential impacts to special-status biological resources, wetlands, and vegetation, and other sensitive communities;
- ▶ potential impacts to historical and/or archaeological resources; and
- ▶ increased demands for public services and utility infrastructure.

Based on the discussion provided above, the degree of growth accommodation offered by “Water” portion of the project is attributed to the provision of a critical public infrastructure, in the form of potable water supplies and related infrastructure. This infrastructure would serve planned development within the SPA and new projects that might be proposed in conjunction beyond the SPA in future years beyond 2030. In this context, the securing of 8,000 AFY of CVP water and constructing the necessary conveyance and treatment infrastructure could contribute to significant and unavoidable impacts associated with the secondary effects of growth inducement.

Mitigation measures conditioned on new development in the future would be speculative to infer in this EIR/EIS. In this context, even following the application of mitigation, several of these secondary effects of growth could remain significant and unavoidable. Because the Proposed Project and the other four action alternatives would also result in a surplus of water that could be used to serve other projects in future years beyond 2030, implementing the Proposed Project or any of other four action alternatives would also contribute to significant and unavoidable impacts associated with the secondary effects of growth inducement.

There are no public water supply facilities in the SPA. On-site water supply distribution facilities (including transmission and distribution pipelines, aboveground water storage tanks, booster pumps, and potentially an on-site WTP) would be constructed specifically to serve the “Land” portion of the project and would not be connected to any existing water supply system. The on-site water transmission system and WTP would be sized to accommodate project-related water demands; therefore, on-site water supply distribution facilities would not be growth inducing.

Wastewater Conveyance and Treatment Facilities

The SPA is presently not served by any municipal wastewater collection and treatment systems. Project implementation would result in increased generation of wastewater and construction of wastewater collection and conveyance facilities. The proposed on-site sewer system would be constructed specifically to serve the Project and would be sized to accommodate planned project sewer flows.

Approximately 3,313 acres of the SPA west of the planned extension of Empire Ranch Road is within the SRCSD service area, and the remaining 189 acres east of the planned extension of Empire Ranch Road is within both the SRCSD and EID service areas.

The project-generated wastewater within the 3,313-acre SRCSD service area would ultimately be conveyed to the Folsom South Pump Station north of Easton Valley Parkway and approximately 1,500 feet west of Oak Avenue. From the Folsom South Pump Station, the project 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 project; therefore, it would not be growth-inducing.

Wastewater flows from within the SRCSD service area would ultimately be transported to 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. According to the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan* (2020 Master Plan), the permitted capacity of the SRWTP was expected to be reached before 2010. However, the actual rate of growth in demand has substantially slowed, and flows to the SRWTP have consistently decreased between 2000 and 2008, from 155 mgd to 141 mgd. The 2020 Master Plan provides for the expansion of the SRWTP to 218 mgd based on growth rates expected to be achieved in the Sacramento County region by 2020. This flow rate does not represent a buildout population total for SRCSD; rather, it represents the amount of growth expected within the district 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 and there is no threat that permitted capacity will be reached over the next several years. Over time, additional planning at the SRWTP would occur, and overall capacity would be assessed and additional capacity planned for and added. Upgrades to the SRWTP would occur without development of the Project, are required to serve regional development, and would be needed whether or not the project is developed. Expansion of the SRWTP is planned to be phased to provide for sufficient long-term capacity for regional development. Because the SRWTP is planned to accommodate growth in the region by 2020, development in the SPA that occurs by 2020 would be accommodated by planned SRWTP capacity. 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. The project and regional development would contribute to the need to expand wastewater treatment capacity at the SRWTP facility and therefore would be growth inducing.

Approximately 189 acres of the SPA east of the planned extension of Empire Ranch Road is within the EID service area and off-site wastewater collection and conveyance facilities 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 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. The EID wastewater conveyance facilities would not be sized or intended to serve any new development on lands other than the SPA and therefore would not be growth-inducing.

Currently, the design capacity of the El Dorado Hills WWTP is being expanded 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 late 2010. The full buildout of the treatment plant to 5.4 mgd is expected to occur by 2025. However, the SPA was not included in the planned future capacity of the El Dorado Hills WWTP; therefore, the project would potentially result in increased in wastewater flows that exceed treatment plant capacity. Any additional improvements to the WWTP required to serve the project would not add capacity for use by any new development other than the SPA and therefore would not be growth-inducing.

CONSTRUCTION-RELATED HOUSING DEMAND

Project construction activities would occur at intervals throughout the planning horizon of the project, and the site would ultimately be built out in approximately 19 years (2011-2030). It is estimated, based on prior analyses of similar projects, that project-related construction would generate approximately 500 construction jobs during the peak construction period of each of the four phases (for information on project phasing, please refer to Section 2.3.1 in Chapter 2, “Alternatives”). A greater number of construction workers would be employed during peak construction periods (determined by market demand and overall economic conditions), while fewer construction workers would be employed during nonpeak periods.

Construction workers serving the project can be expected to come from Folsom and El Dorado Hills, and other nearby communities in Sacramento, El Dorado, and nearby counties. According to the latest labor data available from the U.S. Census Bureau (2007), it is estimated that 2,269 residents in Folsom, 54,964 residents in Sacramento County, and 850 residents in El Dorado Hills are employed in the construction industry. These existing residents in the city and counties who are employed in the construction industry would likely be sufficient to meet the demand for construction workers that would be generated by the project. Because construction workers serving the project could be expected to come from Folsom itself and from nearby communities in Sacramento County or El Dorado County, neither substantial population growth nor an increase in housing demand in the region is anticipated as a result of these jobs. Furthermore, because construction workers typically do not change residences each time they are assigned to a new construction site, it is not anticipated that there would be any substantial project-related relocation of construction workers to the immediate project area.

PUBLIC SERVICES

The project includes construction of two fire stations, one police service center, five elementary schools, and one combined middle school/high school, at different locations in the SPA. The timing of construction and staffing of each fire station and the police station would be completed in a manner that ensures that adequate levels of service are provided. Measure W would require the applicants to fund and construct fire, police, and school facilities in the SPA without reducing current service levels in the City.

Five elementary schools and one combined middle school/high school would be constructed in the SPA. The proposed on-site elementary schools and the high school would have sufficient capacity to accommodate students living in the SPA. In addition, these elementary and high school facilities would potentially have capacity for some additional students. Proposed on-site middle school facilities would have sufficient capacity to accommodate students generated under the Resource Impact Minimization, Centralized Development, and No Federal Action Alternatives. However, under the Proposed Project and Reduced Hillside Development Alternatives, the middle school would not accommodate all of the project-generated students, resulting in a shortfall of school services. However, the project applicants must comply with Measure W, and therefore the project applicants would be required to fund and construct sufficient middle school facilities to serve students generated by the Project. At project buildout, the elementary and high schools could accommodate all students generated by the Project as well as other students residing elsewhere in Folsom.

Implementing the Proposed Project or the other four action alternatives would not facilitate additional development with respect to public services (with the exception of schools) because the Proposed Project and the other four action alternatives would provide or ensure that additional public services would be available to meet project demands, and it would not create additional public service capacity in Folsom beyond what would be necessary to serve project development.

JOBS/HOUSING BALANCE

As described in Section 4.1, “Cumulative Impacts,” 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 a jobs/housing balance. 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. For the Proposed Project and the other four action alternatives, the jobs/housing indices were determined by dividing the projected number of jobs by the projected number of housing units.

The estimated number of jobs generated by the project and the number of employable residents in the SPA would depend on the project alternative chosen for development. The jobs/housing index would be 1.3 for the Proposed Project Alternative (13,210 jobs and 10,210 housing units), 1.2 for the Resource Impact Minimization Alternative (9,501 jobs and 7,965 housing units), 1.5 for the Centralized Development Alternative (13,575 jobs and 9,026 housing units), 1.1 for the Reduced Hillside Development Alternative (14,180 jobs and 12,995 housing units), or 1.8 for the No Federal Action Alternative (11,171 jobs and 6,373 housing units). These indices indicate that the project would be job-rich regardless of the alternative implemented, with jobs generated in excess of proposed number of housing units for each alternative.

The jobs/housing index for Folsom was 1.29 in 2005, and is projected to decrease to 1.23 in 2035. Although the city's jobs/housing index is expected to improve, the city would remain job rich (SACOG 2007:15-2). The excess jobs associated with Proposed Project and the other four action alternatives would be considered as contributing to increased housing demand in Folsom.

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 (El Dorado, Placer, Sacramento, 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. If these workers could not be accommodated by housing units in the region, then new housing units beyond those anticipated in the Sacramento region would be needed to meet the housing demand generated by the proposed jobs. In this respect, implementation of the Proposed Project or the other four action alternatives would create a housing demand and would be growth inducing. (SACOG 2007:15-2.)

CONVERSION OF ADJACENT UNDEVELOPED LAND TO URBAN DEVELOPMENT

Surrounding land use designations are primarily determined by El Dorado and Sacramento Counties and the City of Folsom (see Exhibit 3A.10-2 in Section 3A.10, "Land Use and Agricultural Resources - Land"). The lands east of the SPA are located the unincorporated area of El Dorado County and are governed by the El Dorado County General Plan land use designations. These lands are currently developed in residential land uses.

Land north of the SPA is located within the existing Folsom city limits and is governed by the City of Folsom General Plan. This area consists of large residential and commercial developments, several of which are currently under construction or have been recently completed.

Lands south and west of the SPA are located in an unincorporated area regulated by the Sacramento County General Plan. Industrial land owned by Aerojet General Corporation and associated buffer lands are located to the west of Prairie City Road. The majority of these lands are designated by the Sacramento County General Plan as Industrial Extensive and zoned SPA (Special Planning Area) and are intended for future Aerojet General Corporation industrial buffer lands or are part of the Easton Specific Plan area.

Lands south of the SPA are characterized primarily by seasonal grazing land. These lands are designated by the Sacramento County General Plan as General Agriculture (80 acres) and are zoned AG-80 (Agricultural, 80-acre

minimum lot size) and SPA (Special Planning Area), which identifies areas that are intended for long-term agricultural purposes and have parcels large enough to maintain economically viable farming operations.

As the Project is developed, it would place urban development adjacent to undeveloped grazing lands south of the SPA. Historically, economic returns from urban development are typically substantially higher than continued use of undeveloped land, and encroaching urban uses typically make attractive the conversion of other undeveloped land to urban uses. Thus, it could be reasoned that implementing the Proposed Project or the other four action alternatives would place pressure on land south of the SPA to convert to urban uses. No urban development is currently proposed immediately 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. Further, because it would require Sacramento County to amend its general plan, land use designations, and zoning, such a land use conversion to urban development is not assured.

Approximately 2,493 acres of the SPA consists of agricultural lands under existing Williamson Act contracts. 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. Removing the impediment of Williamson Act contracts for urban development in the SPA could induce additional urban development south of White Rock Road, thereby potentially resulting in the cancellation of additional Williamson Act contracts on those lands. Nearby proposed projects, including the Teichert and Walltown quarries, would require cancellation of lands under Williamson Act contracts. Other land uses inconsistent with Williamson Act provisions and resulting in subsequent contract non-renewals could occur. As discussed above, future urban development would require Sacramento County to amend its general plan, land use designations, and zoning, and therefore such a land use conversion to urban development is not assured. Therefore, it would be speculative to try to predict if implementation of these projects would result in the cancellation of Williamson Act contracts.

4.2.4 SUMMARY OF GROWTH-INDUCING IMPACTS

Overall, the Proposed Project and the other four action alternatives would be growth-inducing because they would involve improving and constructing roadways, which would enhance access to currently undeveloped areas; contribute to the need to expand wastewater treatment capacity at the SRWTP facility; and could provide school capacity beyond that needed to serve the Proposed Project or the other four action alternatives. The impacts associated with this growth are discussed above.

The Resource Impact Minimization and No Federal Action Alternatives would conflict with the SACOG Sacramento Region Preferred Blueprint Scenario by developing the SPA at lower densities than anticipated in the Blueprint. Low densities can be considered an inefficient use of finite land resources and can push market demand for development outward toward other areas on the urban periphery. In the long term, these alternatives would be growth-inducing.

The Proposed Project, Centralized Development, and Reduced Hillside Development Alternatives would include a greater density of residential development and exceed the jobs projections identified in the Blueprint for the SPA. Although these higher densities may result in greater on-site impacts on biological, cultural, open-space, and agricultural resources, the overall area of disturbance within the region is reduced in the long term as development is concentrated in particular locations. Therefore, developing the site with a higher density use while avoiding on-site impacts would focus market demand for development into an area near existing development, infrastructure, and services, and the Proposed Project, Centralized Development, and Reduced Hillside Development Alternatives would be growth-inducing.

Implementing the Proposed Project or the other four action alternatives would effectively result in development of a population and employment base that is the size of a small town. These alternatives would result in a condition in which jobs exceed employable residents, potentially generating additional demand for housing in Folsom and the Sacramento region. Although the Proposed Project and the other four action alternatives include the provision of commercial and retail services, on-site services would meet only some of the needs of the project population. The additional population associated with the project would spur an increase in demand for goods and services in Folsom and the Sacramento region, which could result in additional development to satisfy this demand. In this respect, the Proposed Project and the other four action alternatives would be growth-inducing. It would be speculative, however, to try to predict exactly where any such new services would be located. The most logical assumption is that they would be located where the existing Folsom, Sacramento, and El Dorado Counties' and other surrounding communities' general plans currently anticipate them. The general plans have already undergone environmental review and any new individual projects requiring discretionary approvals would be required to undergo their own environmental review.

Implementing the Proposed Project or the other four action alternatives would result in large-scale urban development adjacent to undeveloped grazing lands south of the SPA and could potentially place pressure on these lands to convert to urban uses. As explained above, the land south of the SPA is located in a rural unincorporated portion of Sacramento County beyond the USB and UPA, and it is not expected this area would receive urban levels of public infrastructure and services to support urban development. Further, because it would require Sacramento County to amend its general plan, land use designations, and zoning, such a land use conversion to urban development is not assured.

4.3 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

CEQA requires that irreversible and irretrievable commitment of resources be addressed for certain categories of projects, including the “[t]he adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency” and any project also subject to NEPA. (State CEQA Guidelines CCR Sections 15127[a] and 15127[c].) NEPA requires that an environmental analysis include identification of “...any irreversible and irretrievable commitment of resources which would be involved in the proposed action should it be implemented.” (Section 102 [42 USC Section 4332(c)].) Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that this use could have on future generations. Irreversible effects result primarily from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural resource).

There are several resources, both natural and built, that would be expended in the construction and operation of the “Land” and “Water” portions of the project. These resources include the building materials used in construction of the project and energy in the form of natural gas, petroleum products, and electricity consumed during construction and operation of housing and commercial land uses. Loss of these resources is considered irreversible because their reuse for some other purpose than the project would be impossible or highly unlikely. The project constitutes an irreversible and irretrievable commitment of the site as a land resource, thereby rendering land use for other purposes infeasible. Thus, except to the extent minimized by the designation of the on-site wetland preserve, the land would also be permanently lost as a habitat area. In addition, if the SPA is found to contain a source of kaolin clay, this natural resource would be lost a result of project construction, since buildout of the site with urban land uses would render the clay inaccessible.

4.4 RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Effects on resources are often characterized as being short-term or long-term in duration. Impacts that occur only during construction are considered temporary. Impacts that occur over a period of 3 years or less result from short-term uses of the resources in an area most often associated with construction and up to 3 years after construction ceases. Construction can create temporary water quality effects and increases in noise, emissions, traffic, and human population that can disturb resources in an area but subside when the work is complete. Long-term effects relate to the maintenance and enhancement of long-term productivity—in particular, the consistency of the project with long-term economic, social, regional, and local planning objectives. These impacts may lead to permanent loss or degradation of resources. As required by Public Resources Code section 21001(g), the short- and long-term effects of the “Land” and “Water” portions of the project under consideration are summarized below.

4.4.1 SHORT-TERM USES

Implementation of the Proposed Project, Resource Impact Minimization, Centralized Development, Reduced Hillside Development, or No Federal Action Alternatives, and implementation of any of the “Water” alternatives, would result in temporary and short-term construction-related impacts. As discussed elsewhere in this EIR/EIS, the temporary and short-term construction impacts would be associated predominantly with water quality, traffic, air quality emissions, and noise. The project applicant(s) would implement mitigation measures identified in each topical section to reduce these impacts to a less-than-significant level wherever feasible and available. At the same time, however, construction of the project would create economic benefits during construction, in the form of jobs and the subsequent direct and indirect demand for goods and services.

Under the No Project Alternative/No Water Facilities Alternative, a total of 44 single-family dwelling units could be constructed. All or a portion of these dwelling units could be constructed by individual property owners. Construction of these individual dwelling units would require a minimal number of construction workers and subsequently would create minimal economic benefits during construction and minimal direct and indirect demand for goods and services.

4.4.2 LONG-TERM USES

Implementation of the Proposed Project, Resource Impact Minimization, Centralized Development, Reduced Hillside Development, or No Federal Action Alternatives, and implementation of the “Water” alternatives (Preferred Alternative or alternatives 1, 1A, 2, 2A, 2B, 3, 3A, or 4, 4A) would result in long-term impacts related to the loss of biological resources and habitat, open space, and cultural resources; a change in the visual character and quality of the SPA; air quality emissions; noise; increased traffic; and increased demand for public services and utilities, including water supply, wastewater service, natural gas, electricity, communications service, fire protection, police service, and public schools. However, long-term economic productivity in Folsom and the Sacramento region would be substantially enhanced through development of commercial and retail services. Long-term benefits and increases in productivity from implementation of the project are described below.

- ▶ A well-integrated, mixed-use master-planned community would be developed. A pedestrian-friendly, human-scale community environment would be developed, with a safe and pleasant place for people to live, work, and recreate.
- ▶ The project would provide employment-generating uses, including a regional commercial center, town center, and smaller neighborhoods centers, for Folsom and the surrounding Sacramento region. These uses would

result in long-term community benefits, including generation of substantial permanent employment opportunities and needed retail uses and fiscal benefits from tax-generating land uses.

- ▶ A regional commercial center would be situated along U.S. 50 and Scott Road adjacent to and just north of the mixed-use town center. This adjacency is intended to promote a relationship between this regional-scale commercial and the walkable character of the town center. Additional commercial uses would be of a larger scale and highway oriented. Commercial- and service-based uses would be incorporated into neighborhood centers and include residential elements such as separate, higher density residential buildings.
- ▶ A variety of housing types are proposed to better serve the economic diversity of local homebuyers, including single-family detached and attached homes, apartments, condominiums, and townhomes. This would help alleviate the existing and future jobs/housing imbalance in Folsom and the Sacramento region. Particular emphasis would be placed on affordability and proximity of housing to the major employment-generating centers along the U.S. 50 corridor.
- ▶ Open space, recreational uses, and parks are proposed throughout the community and integrated within its design. Approximately 30% of higher density residential uses would be located near commercial uses, parks, and schools to create walkable communities.
- ▶ A public transit corridor would be included throughout the SPA with connections to the regional commercial center, town center, and neighborhood centers. Bus transit routes would be integrated into systems provided by Folsom and Regional Transit. Multi-use trails, bicycle trails, and pedestrian walkways and sidewalks would be incorporated into the development so that people could complete trips without depending exclusively on major roads, secondary roads, or automobiles.

Under the No Project Alternative/No Water Facilities Alternative, a total of 44 single-family dwelling units could be constructed. Construction of these individual dwelling units would result in substantially fewer than the impacts associated with project development; however, there would be a significant cost to the long-term productivity and future economic and socioeconomic well-being of the area.

4.5 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

CCR Section 15216.2(b) of the State CEQA Guidelines requires EIRs to include a discussion of any significant environmental impacts that cannot be avoided if the project is implemented. Chapter 3 of this EIR/EIS provides a detailed analysis of all significant and potentially significant environmental impacts related to implementing the project; identifies feasible mitigation measures, where available, that could avoid or reduce these significant and potentially significant impacts; and presents a determination whether these mitigation measures would reduce these impacts to less-than-significant levels. Section 4.1 identifies the significant cumulative impacts resulting from the combined effects of the project and related projects. If a specific impact in either of these sections cannot be fully reduced to a less-than-significant level, it is considered a significant and unavoidable adverse impact.

As described below in Sections 4.5.1 through 4.5.14 and listed in Table 4-9, project implementation would result in significant and unavoidable adverse impacts in nine environmental issue areas. Additional significant and unavoidable impacts could occur if mitigation for off-site elements that is outside the control of the lead agencies is not implemented (see Section 4.5.15 below). Finally, the project would make a cumulatively considerable incremental contribution to significant cumulative impacts in seven environmental issue areas (see Section 4.5.16 below).

**Table 4-9
Summary of Project-Related Significant and Unavoidable Impacts**

Section Name/Issue Area/Project Component	Impact Number	Impact Title
Aesthetics - Land	3A.1-1	Substantial alter nation of a scenic vista
	3A.1-2	Damage to scenic resources within a designated scenic corridor
	3A.1-3	Substantial degradation of visual character
	3A.1-4	Temporary, short-term degradation of visual character for developed project land uses during construction
	3A.1-5	New skyglow effects
Air Quality - Land	3A.2-1	Generation of construction emissions of NO _x and PM ₁₀
	3A.2-2	Generation of long-term operational (regional) emissions of ROG and NO _x
	3A.2-4	Exposure of sensitive receptors to short- and long-term emissions of toxic air contaminants
	3A.2-6	Possible exposure of sensitive receptors to odorous emissions
Air Quality - Water	3B.2-1	Exceed Air Quality Standards
Biological Resources - Land	3A.3-1	loss and degradation of Waters of the U.S., including wetlands, and Waters of the State
	3A.3-2	Loss and degradation of habitat for special-status wildlife species and potential direct take of individuals
	3A.3-5	Loss of blue oak woodland and individual oak trees
Biological Resources - Water	3B.3-2	Loss and degradation of habitat for special-status wildlife species and potential direct take of individuals
Climate Change - Land	3A.4-1	Generation of temporary, short-term construction-related GHG emissions
	3A.4-2	Generation of long-term operational GHG emissions
Climate Change - Water	3B.4-1	Net Increase in Greenhouse Gases
Geology, Soils, Minerals, and Paleontological Resources - Land	3A.7-9	Possible loss of mineral resources – kaolin clay
Land Use and Agricultural Resources - Land	3A.10-3	Cancellation of existing on-site Williamson Act contracts
	3A.10-4	Potential conflict with existing off-site Williamson Act contracts
Land Use and Agricultural Resources - Water	3B.10-2	Conflict with applicable local agency land use plans, policies, or regulations.
	3B.10-4	Cancellation of existing on-site Williamson Act contracts
Noise - Land	3A.11-1	Temporary, Short-Term Exposure of Sensitive Receptors to Increased Equipment Noise from Project Construction
	3A.11-3	Temporary, Short-Term Exposure of Sensitive Receptors to Potential Groundborne Noise and Vibration from Project Construction
	3A.11-4	Long-Term Exposure of Sensitive Receptors to Increased Traffic Noise Levels from Project Operation
Noise - Water	3B.11-1	Temporary, short-term exposure of sensitive receptors to increased equipment noise from project construction
	3B.11-3	Permanent increase in ambient noise levels
Traffic and Transportation - Land	3A.15-1d	Unacceptable LOS at the Scott Road (North)/Easton Valley Parkway intersection (Intersection 38)
	3A.15-2	Increased demand for single-occupant automobile travel in the project area

**Table 4-9
Summary of Project-Related Significant and Unavoidable Impacts**

Section Name/Issue Area/Project Component	Impact Number	Impact Title
Utilities and Service Systems - Land	3A.16-3	Increased demand for SRWTP wastewater treatment plant facilities – indirect contribution to significant and unavoidable air quality impact from expansion of treatment plant
	3A.16-4	Increased demand for EID off-site wastewater collection and conveyance facilities – potential direct and indirect contribution to need for new EID collection and conveyance facilities, the environmental effects of which are presently unknown
	3A.16-5	Increased demand for EID wastewater treatment plant facilities - potential direct and indirect contribution for need for EID plant expansion, the environmental effects of which are presently unknown
Notes: NA = no analysis; ROG = reactive organic gases; NO _x = oxides of nitrogen; PM ₁₀ = respirable particulate matter less than ten microns in diameter, and PM _{2.5} = particulate matter 5 micrometers or less; GHG = greenhouse gases; SACOG = Sacramento Area Council of governments; LOS = level of service; SRWTP = Sacramento Regional Wastewater Treatment Plant; EID = El dorado Irrigation District Source: Data compiled by AECOM in 2010		

The detailed discussion of specific significant and unavoidable impacts below follows the issue areas, impacts, and “Land” or “Water” portions of the EIR/EIS that are identified in Table 4-9. If no significant and unavoidable impacts would occur, that topic or that portion of the EIR/EIS is not discussed below.

4.5.1 AESTHETICS - LAND

The SPA consists of a flow from oak woodlands, to gently rolling grasslands, to steep vegetation-covered hillsides. 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. Project implementation would substantially alter the existing scenic vista in the SPA, from open grazing land to urban development (Impact 3A.1-1). 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. Therefore, this impact would be significant and unavoidable.

Scott Road south of White Rock Road is a designated scenic corridor in Sacramento County, because the existing grasslands and cattle-grazing lands are considered exemplary views of the rural Sacramento County landscape. Project implementation would substantially damage views from the portion of Scott Road designated as a scenic corridor because the rural landscape on Scott Road north of White Rock Road, which would be visible from the scenic corridor, would be replaced with urban land uses (Impact 3A.1-2). No feasible mitigation measures are available to reduce impacts associated with the damage to the scenic resources visible on the designated scenic corridor from project development to a less-than-significant level. Therefore, this impact would be significant and unavoidable.

Project implementation would substantially degrade the visual character of the SPA through conversion of grazing land to developed urban uses (Impact 3A.1-3). Because of the large scale and location of the SPA (visible by a large number of viewers along U.S. 50 and within the City of Folsom), there is no feasible mitigation available to fully reduce visual resource impacts associated with the conversion of a large expanse of agricultural land to urban development. Therefore, this impact would be significant and unavoidable.

The presence and movement of heavy construction equipment and staging areas would temporarily degrade the existing visual character and/or quality of the SPA and surrounding area (Impact 3A.1-4). Project implementation would involve four phases of similar types of construction over a 19-year phased buildout period (for information on project phasing, please refer to Section 2.3.1 in Chapter 2, “Alternatives”). During this time, adjacent project

development, including sensitive land uses such as housing, schools, and parks, would be occupied while construction is occurring in a different phase. Construction areas would also be visible to motorists and employees of existing businesses. As required by Mitigation Measure 3A.1-4, the project applicant(s) of all project phases would locate staging and material storage areas as far away from sensitive land uses (i.e., residential areas, schools, parks) developed in earlier development phases, and would provide visual screening, to the maximum extent practicable. However, because screening may not always be feasible (e.g., projects covering a large area or tall buildings), this temporary impact would be significant and unavoidable.

Project implementation would require lighting of new development that could inadvertently cause increased skyglow effects, effectively obscuring views of stars, constellations, and other features of the night sky (Impact 3A.1-6). Implementation of Mitigation Measure 3A.1-5 would partially reduce significant impacts associated with effects from skyglow. However, because of the scale and location of the SPA, these lighting guidelines would not fully reduce new skyglow effects to a less-than-significant level. Therefore, project-related skyglow impacts would be significant and unavoidable.

4.5.2 AIR QUALITY - LAND

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. Also, project-generated construction-related emissions of ROG could exceed EDCAQMD-recommended thresholds for construction of the two off-site roadway extensions from Folsom Heights into El Dorado Hills. 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 (Impact 3A.2-1). Implementation of Mitigation Measures 3A.2-1a and 3A.2-1d would reduce NO_x emissions to levels below the applicable thresholds. However, generation of PM₁₀ from on-site construction activities, and generation of PM₁₀ from the off-site U.S. 50 interchange improvements and the Rowberry Drive Overcrossing, could potentially exceed or contribute substantially to exceedances of the CAAQS and NAAQS at nearby receptors even after implementation of Mitigation Measures 3A.2-1a, 3A.2-1b, 3A.2-1c, 3A.2-1e, and 3A.2-1f. Because no other feasible mitigation measures are available to reduce project-generated construction-related PM₁₀ emissions, this impact would be significant and unavoidable.

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. 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 (Impact 3A.2-2). Implementation of Mitigation Measure 3A.2-2 would reduce ROG and NO_x emissions associated with operation of the project. As described in detail in Impact 3A.2-2, even if operational emissions of NO_x were 35% lower than the levels reported in Tables 3A.2-6 through 3A.2-10 (to account for differences in modeling output and the required air quality mitigation plan), they would still exceed SMAQMD's significance threshold of 65 lb/day. As a result, this impact would be significant and unavoidable.

Project implementation would result in exposure of sensitive receptors to short- and long-term emissions of TACs from on-site stationary and mobile sources and from off-site mobile sources (Impact 3A.2-4). Implementation of Mitigation Measure 3A.2-4 would lessen health-related risks associated with the operation of off-road diesel powered equipment during construction activity and would lessen health-related risks associated with mobile-source TACs; however, TAC exposure levels would not necessarily be reduced to less-than-significant levels. Because no additional feasible mitigation measures are available, exposure to mobile-source TAC emissions from on-site mobile sources therefore would be a significant and unavoidable impact. This conclusion has been reached

due to the uncertainty about the potential TAC emission 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.

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. 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 in 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 hillside 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.

4.5.3 AIR QUALITY - WATER

Construction of the Off-Site Water Facility Alternatives could result in temporary and short-term, but significant and unavoidable impacts to air quality through the generation of criteria ozone precursors (e.g. NO_x). Even after the application of mitigation, residual construction-related direct and indirect air quality impacts would be significant for the Preferred Off-Site Water Facility Alternative and Off-Site Water Facility Alternatives 1, 1A, 3, 3A, 4, and 4A. Due to the substantially smaller footprint of the Off-Site Water Facilities under Alternative 2, 2A, and 2B, residual construction-related ozone impacts would be less-than-significant without mitigation. Only minor quantities of criteria air pollutants would be generated during the operation of all the Off-site Water Facility Alternatives and, therefore, the residual impact would be less-than-significant with no mitigation required.

4.5.4 BIOLOGICAL RESOURCES - LAND

Implementation of the project could result in the placement of fill material into Waters of the U.S., including wetlands subject to U.S. Army Corps of Engineers jurisdiction under the Federal Clean Water Act, and the potential loss and degradation of wetland habitats protected under state and local regulations (Impact 3A.3-1). Implementation of Mitigation Measure 3A.3-1a and 3A.3-1b would reduce significant direct and indirect impacts, but not to a less-than-significant level. 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 project implementation, it may not be possible to fully mitigate the loss of habitat functions and values provided by the nearly 45 acres of aquatic habitats that would be lost in the SPA. Therefore, the direct impact would be significant and unavoidable. Furthermore, a number of different project-related factors (described in Impact 3A.3-1) could substantially diminish the water quality, hydrologic, and habitat functions of all wetlands remaining on site and downstream in the project vicinity, therefore resulting in indirect impacts that would be significant and unavoidable

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. (Impact 3A.3-2.) Implementation of Mitigation Measures 3A.3-2a, 3A.3-2b, 3A.3-2c, 3A.3-2d, 3A.3-2e would lessen significant direct and indirect impacts on special-status wildlife;

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. 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.

Project implementation would result in the removal of 444 acres of blue oak woodland and thousands of individual oak trees meeting the criteria for protection under Folsom Municipal Code and the Sacramento County Tree Ordinance (Impact 3A.3-5). Implementation of Mitigation Measure 3A.3-5 would reduce significant impacts from loss of blue oak woodland and protected trees, 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. 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, and it is unknown if a suitable site to plant thousands of trees and restore historic or existing blue oak woodland would be available in Sacramento County or even nearby in neighboring counties. Therefore, impacts on blue oak woodland and protected trees would remain significant and unavoidable.

4.5.5 BIOLOGICAL RESOURCES - WATER

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. 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.

4.5.6 CLIMATE CHANGE - LAND

Project implementation would result in increased generation of GHGs, which could contribute to global climate change on a cumulative level. The project would contribute to cumulatively considerable GHG emissions in both the short term and the long term (Impacts 3A.4-1 and 3A.4-2).

Implementation of Mitigation Measures 3A.2-1 and 3A.4-1 would partially reduce GHG emissions from short-term GHG emissions associated with construction activity. Because this analysis is conducted at a program level and the project would be constructed in phases over a 19-year period (for information on project phasing, please refer to Section 2.3.1 in Chapter 2, “Alternatives”), the extent to which feasible technologies and GHG reduction measures will continue to be developed is not known at the time of writing this EIR/EIS. Therefore, this analysis concludes that the reductions achieved by implementing Mitigation Measures 3A.2-1 and 3A.4-1 would not be sufficient to fully reduce the construction-generated GHGs to the extent that they would not be cumulatively considerable.

Although implementation of Mitigation Measures 3A.2-2, 3A.4-2, and 3A.4-3 would reduce the project’s incremental contribution to long-term operational GHG emissions, 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. Therefore, the project’s long-term contribution of operational GHG emissions is considered potentially significant and unavoidable.

4.5.7 CLIMATE CHANGE - WATER

Based on a quantification of the Offsite Water Facility Alternatives’ energy requirements to support conveyance, treatment, and local distribution operations at build-out of the Folsom Specific Plan, the Offsite Water Facility Alternatives are expected to indirectly generate substantial emissions of GHGs. Even with the application of the prescribed mitigation, the collective measures are not expected to reduce Offsite Water Facilities-related GHG emissions below the applied threshold and, therefore, this impact is considered significant and unavoidable.

4.5.8 GEOLOGY, SOILS, MINERALS, AND PALEONTOLOGICAL RESOURCES - LAND

The SPA is located within the Sacramento-Fairfield Production-Consumption Region designated by CDMG and may contain a deposit of kaolin clay (Impacts 3A.7-9 and 3A.7-19). 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. 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 with urban land uses as a result of project development, 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.

4.5.9 LAND USE AND AGRICULTURAL RESOURCES - LAND

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. However, 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 (Impacts 3.10-3 and 3.10-7). No feasible mitigation measures are available to reduce impacts associated with the cancellation of these Williamson Act contracts to a less-than-significant level. Therefore, this impact would be significant and unavoidable.

Project implementation could conflict with lands under Williamson Act contracts south of the SPA; thereby potentially resulting in indirect impacts related to cancellation of those contracts (Impact 3.10-4). Land south of the SPA is characterized primarily by seasonal grazing land in an unincorporated area regulated by Sacramento County, outside of the Urban Service Boundary, and the majority of these lands are under Williamson Act

contracts. 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 as a result of indirect pressure to develop from implementation of the project. No feasible mitigation measures are available to reduce impacts associated with conflicts or cancellation of these Williamson Act contracts on adjacent land to a less-than-significant level. Therefore, this impact would be potentially significant and unavoidable.

Several impacts of the proposed GPA would remain significant and unavoidable after implementation of all feasible mitigation, including aesthetics, air quality, climate change, noise, population and housing, traffic, and water supply. These significant and unavoidable impacts would be similar to those described for the “Land” portion of the project throughout Section 4.5.

4.5.10 LAND USE AND AGRICULTURAL RESOURCES - WATER

Implementation of Mitigation Measure 3B.10-1 could reduce potentially significant impacts related to inconsistencies with existing land use policies and plans under Off-site Water Supply Alternatives 1, 1A, 3, 3A, 4 and 4A to a less-than-significant level by requiring use permits or annexation to the City prior to the construction and operation of the White Rock and Folsom Boulevard WTPs. However, given that discretionary approval conflict would be required by either LAFCo or the corresponding local jurisdiction (e.g. Sacramento County), the City is unable to guarantee that the prescribed mitigation measure reduce inconsistencies associated with potential conflicts with LAFCo’s policies and Sacramento County’s USB to a less-than-significant level. Therefore, this impact remains potentially significant and unavoidable for Off-site Water Facility Alternatives 1, 1A, 3, and 3A, 4 and 4A.

Implementation of Off-site Water Facilities Alternatives PA, 1, 1A, 3, and 3A could conflict with lands under Williamson Act contracts; thereby potentially resulting in indirect impacts related to cancellation of those contracts (Impacts 3B.10-4). Land uses inconsistent with Williamson Act provisions and resulting in subsequent contract non-renewals could occur through annexation and rezoning of these lands as a result of indirect pressure to develop from implementation of the project. No feasible mitigation measures are available to reduce impacts associated with conflicts or cancellation of these Williamson Act contracts on adjacent land to a less-than-significant level. Therefore, this impact would be potentially significant and unavoidable.

4.5.11 NOISE - LAND

Implementation of mitigation measures contained in Section 3A.11, “Noise - Land ” would reduce impacts associated with (1) temporary, short-term exposure of sensitive receptors to increased equipment noise from project construction in all locations except as related to the off-site roadway connections in El Dorado Hills. Sensitive receptors along those El Dorado Hills roadway connections would be exposed to noise levels that would still exceed applicable thresholds even after implementation of all feasible mitigation, and therefore a significant and unavoidable impact would occur. Implementation of mitigation measures contained in Section 3A.11, “Noise - Land ” would also reduce impacts associated with groundborne noise and vibration from project construction, and the long-term exposure of sensitive receptors to increased operational traffic noise levels from project operation, but not to a less-than-significant level, because noise levels would (or could potentially) still exceed applicable thresholds and, therefore, residual significant impacts would occur. All other noise impacts would be reduced to a less-than-significant level following implementation of the recommended mitigation measures.

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 that are under the jurisdiction of El Dorado County, Sacramento County, or Caltrans, are considered potentially significant and unavoidable. If El Dorado County, Sacramento County, and Caltrans cooperate in implementation of the recommended mitigation measures, then those impacts would be reduced to a less-than-significant level.

4.5.12 NOISE - WATER

Although implementation of the recommended 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. Although there are smaller number of receptors potentially affected under Off-site Water Facility Alternatives PA, 1, 1A, 4, and 4A, implementation of the recommended mitigation would not reduce construction-related noise impacts to a less-than-significant level at these locations. 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. Based on the larger number of receptors affected along the conveyance alignments, construction-related noise impacts under Off-site Water Facility Alternatives 2, 2A, 2B, 3, and 3A could also remain significant and unavoidable to these residential centers, because there is no feasible mitigation to fully reduce temporary, short-term construction-related impacts to a less-than-significant level.

The operation of the pumps and generators for Off-Site Water Facilities pump stations and WTP facilities could occur within close proximity of sensitive receptors, thereby resulting in a permanent increase in noise levels. Although the City has identified a series of mitigation measures discussed in Section 3B.11, "Noise - Water" to address potential long-term impacts to adjacent sensitive receptors, given uncertainties regarding the design of these facilities and their respective locations, the City is unable to confirm whether the mitigation imposed would be effective in reducing long-term noise to a less-than-significant level. For this reason, long-term, residual noise impacts from these facilities under Off-site Water Facility Alternatives PA, 1, 1A, 3, 3A, 4, and 4A could be significant and unavoidable.

4.5.13 TRAFFIC AND TRANSPORTATION - LAND

Implementation of the proposed project or the alternatives would result in significant impacts to numerous intersections and roadways. However, mitigation measures, including construction of roadway and intersection improvements, would reduce all but five of these impacts to a less-than-significant level. Two intersection impacts, at Oak Avenue Parkway / East Bidwell Street and East Bidwell Street / Iron Point Road would remain significant and unavoidable because it is contrary to City policy to construct 8-lane roadways, as would be required to fully mitigate the impact. Impacts to three roadway segments on eastbound U.S. 50, including the Zinfandel Drive to Sunrise Boulevard segment, the Rancho Cordova Parkway to Hazel Avenue segment, and the Folsom Boulevard to Prairie City Road segment, would remain significant and unavoidable. The mitigation measures proposed for these segments call for fair-share payments to support the construction of the Southeast Capitol Connector. However, based on available information it cannot be determined that the proposed Southeast Capitol Connector will reduce traffic volumes on U.S. 50 to an acceptable LOS, and so these impacts are considered significant and unavoidable in this document.

Project implementation would increase demand for single-occupant automobile travel on area roadways and intersections causing roadway and intersection impacts (Impact 3.15-2). Implementation of Mitigation Measure 3.15-2a would reduce the demand of the single-occupant vehicle on area roadways and intersections. Implementation of Mitigation Measures 3.15-2b, 3.15-2c, and 3.15-2d would promote usage of alternative transportation modes and increase the supply of these modes. Although implementation of these mitigation measures have the potential to substantially reduce the number of single-occupant vehicles, the project would still to add a large number of single-occupant vehicles in the area. Because there are no additional feasible mitigation measures to further reduce the number of project-generated single-occupant vehicle trips, the impact would be significant and unavoidable.

4.5.14 UTILITIES AND SERVICE SYSTEMS - LAND

Project implementation would result in increased demand for treatment at the SRWTP (Impact 3.16-3). Implementation of Mitigation Measure 3.16-3 would ensure that sufficient wastewater treatment capacity is available to all project phases. However, SRCSD has identified the need for expansion of the SRWTP in the 2020 Master Plan approved in 2004. Because implementing the project would contribute to the need to expand the SRWTP facility, it would contribute directly and indirectly to impacts identified in the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (2020 Master Plan EIR). Implementation of mitigation measures contained in the 2020 Master Plan EIR would reduce impacts in all but one issue area to a less-than-significant level. The 2020 Master Plan EIR identified the following significant and unavoidable impact:

- ▶ air quality: emissions of NO_x during construction.

Implementation of mitigation measures to reduce impacts is the responsibility of SRCSD; such measures would be implemented in accordance with the 2020 Master Plan EIR. However, this air quality impact related to the treatment plant expansion would be significant and unavoidable after implementation of all feasible mitigation measures, and the project would contribute to this significant and unavoidable impact.

Approximately 189 acres of the SPA are within the service area of EID, and would require off-site wastewater collection and conveyance facilities to the EID treatment plant (Impact 3.16-4). Implementation of Mitigation Measure 3.16-4 would reduce significant impacts associated with increased demand for EID off-site wastewater collection facilities 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 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. Therefore, this would be a potentially significant and unavoidable impact.

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. Because the SPA was not included in the planned future capacity of the El Dorado Hills WWTP, the project would potentially result in increased in wastewater flows that exceed treatment plant capacity (Impact 3.16-5). Implementation of Mitigation Measure 3.16-5 would reduce significant impacts associated with increased demand for wastewater treatment plant facilities 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 the existing 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. Improvements at 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., ROG and NO_x) 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 whether feasible mitigation would be available to reduce these impacts to a less-than-significant level. Therefore, this would be a potentially significant and unavoidable impact.

4.5.15 OFF-SITE IMPROVEMENTS RELATED TO “LAND” DEVELOPMENT THAT ARE NOT UNDER LEAD AGENCY JURISDICTION

This EIR/EIS identifies several project-related off-site land improvements associated with development of the SPA that are not under the jurisdiction of either of the co-lead agencies (City of Folsom and USACE) but are under the jurisdiction of several “responsible agencies” as defined under PRC Section 21069. Those improvements are presented in Table 4-10, below.

Table 4-10 Improvements that are Outside the Co-Lead Agencies’ Jurisdiction	
Improvement	Jurisdiction
U.S. 50 interchanges	California Department of Transportation
Roadway and sewer force main extensions from Folsom Heights into El Dorado Hills	El Dorado County Development Services Department
Detention basin west of Prairie City Road	Sacramento County Planning and Community Development Department
Note: See Chapter 1.0, “Introduction,” for a complete list of project-related trustee, responsible, and cooperating agencies. Source: Data compiled by AECOM in 2009	

The EIR/EIS contains the following mitigation measures applied to off-site “Land” development improvements that would require implementation by one or more of the responsible agencies listed in Table 4-10 and therefore are outside of the control of the City or USACE:

- ▶ Aesthetics: 3A.1-4 and 3A.1-5.
- ▶ Air Quality: 3A.2-1a, 3A.2-1c, 3A.2-1d, 3A.2-1f, 3A.2-4, and 3A.2-5.
- ▶ Biological Resources: 3A.3-1a, 3A.3-1b, 3A.3-2a, 3A.3-2b, 3A.3-2c, 3A.3-2d, 3A.3-2e, 3A.3-2g, 3A.3-2h, 3A.3-3, 3A.3-4a, and 3A.3-5.
- ▶ Climate Change: 3A.4-1.
- ▶ Cultural Resources: 3A.5-1b, 3A.5-2, and A3A.5-3.
- ▶ Geology, Soils, Minerals, and Paleontological Resources: 3A.7-1a, 3A.7-1b, 3A.7-3, 3A.7-4, 3A.7-5, and 3A.7-10.
- ▶ Hazards and Hazardous Materials: 3A.8-2, 3A.8-3a, 3A.8-3b, 3A.8-3c, 3A.8-5, and 3A.8-7.
- ▶ Hydrology and Water Quality: 3A.9-1, 3A.9-2, 3A.9-3, and 3A.9-5.
- ▶ Noise: 3A.11-1, 3A.11-2, 3A.11-3, 3A.11-4, and 3A.11-5.
- ▶ Public Services: 3A.14-1.
- ▶ Traffic and Transportation: 3A.15-1g, 3A.15-1h, 3A.15-1i, 3A.15-1j, 3A.15-1k, 3A.15-1l, 3A.15-1m, 3A.15-1n, 3A.15-1o, 3A.15-1p, 3A.15-1q, 3A.15-1r, 3A.15-1s, 3A.15-1t, 3A.15-1u, 3A.15-1v, 3A.15-1w, 3A.15-1x, 3A.15-1y, 3A.15-1z, 3A.15-1aa, 3A.15-1bb, and 3.15-1cc.

Mitigation for these off-site elements that are outside of the City of Folsom’s jurisdictional boundaries and must be coordinated by the project applicant(s) of each applicable project phase with the affected oversight agency(ies).

However, neither the City/USACE nor the project applicant(s) would have control over their timing or implementation; therefore, these impacts for which the co-lead agencies do not have control over mitigation are considered potentially significant and unavoidable. If the responsible agency(ies) implement the required mitigation, then the impact(s) would be reduced to a less-than-significant level.

4.5.16 CUMULATIVELY CONSIDERABLE IMPACTS

As discussed in detail in Section 4.1, “Cumulative Impacts” above, and in Sections 3A.15 and 3B.15, “Traffic and Transportation,” project implementation would result in direct and indirect cumulatively considerable incremental contributions to significant adverse cumulative impacts. Those impacts are summarized below.

AESTHETICS

- ▶ Substantial alteration of a scenic vista - “Land”
- ▶ Substantial degradation of visual character - “Land”
- ▶ Substantial damage to the viewshed of a designated scenic corridor - “Land”
- ▶ New skyglow effects - “Land” and “Water”

AIR QUALITY

- ▶ Exposure of on-site sensitive receptors to TACs from high traffic volumes on local roadways (including quarry truck trips) - “Land”
- ▶ Exposure of on-site sensitive receptors to odorous exhaust emissions generated by equipment at the proposed City corporation yard - “Land”
- ▶ Exposure of new residents to odorous emissions - “Land”

BIOLOGICAL RESOURCES

- ▶ Loss or fill of wetlands and other Waters of the U.S., including wetlands and Waters of the State - “Land” and “Water”
- ▶ Loss or modification of sensitive natural habitats - “Land” and “Water”
- ▶ Decline of special-status plant and animal species in the region - “Land” and “Water”
- ▶ Degradation of wildlife habitat - “Land”
- ▶ Loss of blue oak woodland - “Land”
- ▶ Loss of annual grassland - “Land”

CLIMATE CHANGE

- ▶ Temporary, short-term construction-related generation of greenhouse gases - “Land” and “Water”
- ▶ Long-term operation-related generation of greenhouse gases - “Land”

CULTURAL RESOURCES

- ▶ Loss of known and unknown prehistoric and historic-era cultural sites - “Land” and “Water”

LAND USE AND AGRICULTURAL RESOURCES

- ▶ Cancellation of Williamson Act contracts - “Land”

NOISE

- ▶ Temporary, short-term exposure of sensitive receptors to noise - “Land” and “Water”
- ▶ Temporary, short-term exposure of sensitive receptors to potential groundborne noise and vibration - “Land” and “Water”
- ▶ Long-term exposure of sensitive receptors to increased traffic noise levels - “Land”

TRAFFIC AND TRANSPORTATION

- ▶ Lack of funding through City’s Transportation Impact Fee Program - “Land”
- ▶ Increases to peak-hour and daily traffic volumes resulting in unacceptable levels of service (City of Folsom, Sacramento County, El Dorado County, Caltrans) - “Land” and “Water”

UTILITIES AND SERVICE SYSTEMS

- ▶ Contribution to presently unknown environmental impacts associated with EID sewer conveyance upgrades - “Land”
- ▶ Contribution to presently unknown environmental impacts associated with EID wastewater treatment plant upgrades - “Land”
- ▶ Contribution to significant and unavoidable air quality impact from expansion of SRWTP identified in 2020 Master Plan EIR - “Land”