

3A.16 UTILITIES AND SERVICE SYSTEMS - LAND

3A.16.1 AFFECTED ENVIRONMENT

WASTEWATER COLLECTION AND TREATMENT

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 Sacramento Regional County Sanitation District (SRCSD) and the remaining 189 acres east of Empire Ranch Road is within both the SRCSD and El Dorado Irrigation District (EID) service areas. Existing and proposed on- and off-site facilities are shown in Exhibit 2-9 in Chapter 2, “Alternatives.”

Sacramento Regional County Sanitation District

Wastewater Collection

Sanitary-sewer service for approximately 3,313 acres of the SPA would be provided by SRCSD, and SRCSD would provide off-site interceptor conveyance and sanitary sewer treatment and disposal for this portion of the SPA. SRCSD is responsible for collection by interceptors (sanitary sewers that are designed to carry flows in excess of 10 million gallons per day [mgd]) and for wastewater treatment in Sacramento County. This district owns, operates, and is responsible for the public collection, trunk, and interceptor sewer systems throughout Sacramento County as well as the Sacramento Regional Wastewater Treatment Plant (SRWTP) located south of the community of Freeport.

The Proposed Project Alternative would construct an off-site sewer force main to connect with SRCSD’s Folsom East Interceptor. Sacramento County evaluated the environmental impacts of constructing trunk and interceptor sewers that would serve most of the Sacramento region (including the SPA) at a programmatic level in the *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Final Program Environmental Impact Report* (State Clearinghouse [SCH] No. 2001112085) (SRCSD 2003a). This EIR was certified and the master plan approved in March 2003.

The purpose of the *SRCSD Interceptor System Master Plan 2000* (SRCSD 2003b) is to identify near- and long-term improvements needed for the regional wastewater conveyance system. The master plan describes the regional interceptor projects, along with their timing and costs, so that existing and future deficiencies in the regional system can be more accurately identified and predicted and strategic approaches to remedying these deficiencies can be developed. The plan uses new information regarding population growth, wastewater flow generation, and actual system responses to wet weather. The SRCSD’s Master Plan 2000 includes the Folsom East Interceptor, which was constructed to convey project-related wastewater flows.

The wastewater flows generated by the Proposed Project Alternative, including the 189-acre portion of the SPA that would be served by EID, have been planned for in the SRCSD Master Plan 2000. The master plan estimates that buildout of the SPA would generate an average dry-weather flow of 6.82 mgd a peak wet-weather flow of 14.48 mgd (SRCSD 2003b:Table 3-1). The master plan assumes buildout of the SPA would be beyond the plan’s 2020 planning horizon; however, the wastewater flows generated by the project at buildout were planned for and evaluated in the master plan. Because 189 acres of the SPA would be served by EID, project-related wastewater flows would be less than those identified in the SRCSD Master Plan 2000.

The Proposed Project Alternative would connect to an existing 24-inch force main located within Iron Point Road north of U.S. 50 downstream of the existing Folsom East 3B Pump Station. Exhibit 2-9 illustrates the location of this off-site connection. The existing 24-inch force main is currently a dry pipeline and was constructed as part of the Folsom East Interceptor for future use by the Proposed Project Alternative. The existing 24-inch force main runs parallel to the Folsom East 3B 18-inch force main, and these force mains travel west in Iron Point Road to

the intersection of Iron Point Road and McAdoo Road where they connect to the Folsom East Interceptor Section 3A 36-inch gravity sewer pipe.

Wastewater Treatment

Wastewater flows collected from the SRCSD interceptors are ultimately transported into the SRWTP. 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. In 2000, flows were approximately 155 mgd and were projected to increase and surpass the 181 mgd capacity by 2007. However, flows to the SRWTP have since decreased and there is currently 40 mgd of available capacity within the 181 mgd.

Wastewater conveyed to the SRWTP is treated to a secondary level and is ultimately discharged into the Sacramento River. The SRWTP has a National Pollutant Discharge Elimination System (NPDES) permit issued by the Central Valley Regional Water Quality Control Board (RWQCB) for discharge of up to 181 mgd of treated effluent into the Sacramento River. SRCSD certified the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (SRCSD 2004) (SCH No. 2002052004) in June 2004. The adequacy of the EIR has been challenged, and the case is pending review in the 3rd District Court of Appeal. The Court of Appeal could overturn or uphold the Superior Court's determination in whole or in part. The Court of Appeal has not yet issued its own ruling, and it would be speculative to predict the outcome. However, a decision by the court is expected in 2010 (*see Contra Costa Water District v. Sacramento County Regional Sanitation District*, appellate case number C058460, available at http://appellatecases.courtinfo.ca.gov/search/case/mainCaseScreen.cfm?dist=3&doc_id=1202308&doc_no=C058460&search=number&start=1&query_caseNumber=C058460). Significant impacts were identified in the EIR, and a summary of the environmental impacts have been incorporated by reference and are summarized in this section as they relate to the contributions to the potential need for expansion of the SRWTP by the project.

The *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan* (2001) provides for the expansion of the SRWTP to 218 mgd based on growth rates expected to be achieved in the Sacramento County region, and provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements through the year 2020. The master plan addresses both public health and environmental protection issues while ensuring reliable service at affordable rates for SRCSD customers. The key goals of the master plan are to provide sufficient capacity to meet growth projections and an orderly expansion of SRWTP facilities, comply with applicable water quality standards, and provide for the most cost-effective facilities and programs from a watershed perspective.

As part of the 2005 permit renewal process, the SRWTP applied to the Central Valley RWQCB for a NPDES permit to accommodate these additional discharges into the Sacramento River. In June 2010 the SRCSD removed its formal request to the Central Valley RWQCB for an increase in permitted wastewater discharge capacity. Flows to the SRWTP have decreased from water conservation efforts over the last 10 years and it is anticipated that State legislation passed in 2009, which mandates further water conservation efforts, could substantially reduce the amount of wastewater in the future. In addition, the SRCSD has prioritized its goals to increase water recycling in the region as an element to support the comprehensive effort to promote water supply reliability and Delta sustainability. Therefore, the SRCSD has determined the SRWTP can provide capacity to future development beyond what was originally anticipated. (SRCSD 2010).

El Dorado Irrigation District

Wastewater Collection

An approximately 189 acre portion of the SPA east of Empire Ranch Road is within the EID service area. Within the vicinity of the SPA there are existing EID sewer mains in El Dorado Hills. These sewer mains include: a 6-inch sewer main at Winterfield Court, a 6-inch sewer main at the intersection of Stonebriar Drive and Prima Way, and a 6-inch sewer main at Ranch Bluff Way south of White Rock Road. The sewer flows from this community

are conveyed to an existing pump station at the intersection of White Rock Drive and Winterfield Drive (Exhibit 2-7 in Chapter 2, “Alternatives.”). Wastewater flows collected from EID’s sewer system are ultimately transported into the El Dorado Hills Wastewater Treatment Plant (WWTP).

Wastewater Treatment

EID adopted its *Wastewater Master Plan Update* in November 2001 (HDR Engineering 2001). The master plan update includes estimates of existing and projected wastewater flows from the area served by EID’s sewer collection system, projects wastewater treatment needs for the EID service area through 2025, and identifies system expansions and upgrades needed to meet projected increases in wastewater flows. Project-related wastewater flows were not evaluated in the EID Master Plan Update.

Currently, the El Dorado Hills WWTP’s design capacity is 3.0 mgd average dry-weather flow and 7.6 mgd peak wet-weather flow. As of 2009, the average dry-weather flow is approximately 2.86 mgd and peak wet-weather flow is 8.04 mgd (Central Valley RWQCB 2007; Caulfield, pers. comm. 2009). Expansion of the WWTP is required to provide wastewater treatment capacity for land uses in El Dorado Hills as identified by the El Dorado County General Plan (2003), to meet anticipated regulatory requirements for water quality, and to help meet recycled water demands (EID 2007:2).

The environmental impacts of the expansion and operation of the El Dorado Hills WWTP were analyzed in an initial study/mitigated negative declaration (IS/MND) (SCH No. 2006082058), which was adopted by EID in June 2007 (EID 2007). Improvements to the WWTP identified and analyzed in the IS/MND include: new headworks, pumping stations, tertiary filters, ultraviolet disinfection, odor control, an administrative building, storage pond lining, and chemical feed system improvements. The capacity of the treatment plant would be expanded to 5.4 mgd in two phases. The first phase of the treatment plant expansion to 4.0 mgd is expected to be completed in 2010, with full buildout to 5.4 mgd by 2025 (Caulfield, pers. comm. 2009).

Treated effluent from the El Dorado Hills WWTP is discharged to Carson Creek under standards established by the Central Valley RWQCB. A portion of the effluent from the El Dorado Hills WWTP is pumped into the 1.0-million-gallon “960” storage tank south of the treatment plant. Flow are pumped from the 960 storage tank to the Silva Valley booster pump station, which pumps a maximum of 3,900 gpm, and the 2.0-million gallon “Village C” storage tank and booster pump station, which pumps a maximum of 2,600 gpm (HDR Engineering 2002:2-4). These booster pump stations provide reclaimed water for urban irrigation in the Serrano development and two golf courses. During the summer, there is sufficient recycled water demand that no flow is discharged to Carson Creek (HDR Engineering 2001:1-1.) See Section 3A.18, “Water Supply,” for additional information on reclaimed water supply and uses.

SOLID WASTE

The City of Folsom Solid Waste Division provides solid waste, recycling, and hazardous materials collection services to the city. Waste is transported to the Kiefer Landfill, near the intersection of Grant Line Road and Kiefer Boulevard.

Sacramento County owns and operates the Kiefer Landfill, and the landfill is the primary solid waste disposal facility in the County. Kiefer Landfill is a total of 1,084 acres in size, with a permitted disposal area of 660 acres. Kiefer Landfill is classified as a Class III municipal solid waste landfill facility and is permitted to accept general residential, commercial, and industrial refuse for disposal, including municipal solid waste, construction and demolition debris, green materials, agricultural debris, and other nonhazardous designated debris. Kiefer Landfill produces enough renewable energy methane gas to power 9,000 homes (Sacramento County 2009a:4-2).

The landfill is permitted to accept a maximum of 10,800 tons per day (tpd) of solid waste; however, the average intake is only approximately 6,000 tpd. The Kiefer Landfill receives over 700,000 tons of waste per year

(Sacramento County 2009a:4-2). The site currently has a permitted capacity of approximately 117 million cubic yards and a remaining capacity of 113 million cubic yards. Currently, the landfill is operating below permitted capacity, and the closure date of the Kiefer Landfill is anticipated to be approximately 2064. (California Integrated Waste Management Board [CIWMB] 2008a.)

The CIWMB provides an average per-capita solid-waste disposal rate for Sacramento County of 0.36 ton per resident per year (CIWMB 2008b). Business waste disposal rates calculated by CIWMB range from 0.3 ton per year for general-merchandise stores to 3.1 tons per year for restaurants (CIWMB 2008c).

Construction of the two roadway connections into El Dorado Hills would generate temporary, short-term construction-related debris and solid waste. In El Dorado County, solid waste is disposed of at the Lockwood Regional Landfill located in Sparks, Nevada. The Lockwood Landfill is a Class I landfill that currently accepts an average of 7,700 tpd of solid waste. The existing permit does not restrict the maximum daily and yearly tonnage that may be received by the landfill, and the facility has a remaining capacity of 32.5 million tons. The landfill currently operates on 1,100-acre site, and the closure year of the landfill at 2035. (City of Sacramento 2009a:6.11-95, El Dorado County 2003:5.6-20).

Recycling Facilities

The California Integrated Waste Management Act (CIWMA) of 1989, also commonly known as Assembly Bill (AB) 939, requires local agencies to implement source reduction, recycling, and composting (see discussion under “Regulatory Framework” below). The Sacramento County Integrated Waste Management Plan, adopted in March 1996, consists of a siting element, summary plan, source reduction and recycling, household hazardous wastes, and non-disposal facility elements (Sacramento County 2009a:4-13). The countywide Integrated Waste Management Plan requires recycling programs that are expected to result in a 50% diversion away from landfills, thereby extending the life of landfills. According to the 2006 Regional Waste Management Authority Annual Report, Sacramento County showed that 56% of the solid waste generated in the county was diverted from landfills through recycling, composting, and other waste diversion methods (CIWMB 2008d).

Sacramento County requires all contractors to comply with the Construction and Demolition Ordinance (Title 6, Chapter 6.20), which applies to all new commercial, office, industrial, multifamily residential, and public/quasi-public building permits over \$250,000 in value (Sacramento County 2009b). The City of Folsom also requires all contractors to comply with the Construction and Demolition Recycling Ordinance (Title 8, Chapter 8.30), which requires construction and demolition contractors for projects with a valuation equal to or in excess of \$100,000 to reduce all project waste by weight from entering landfill facilities by 50% through recycling (City of Folsom 2006). Covered projects must recycle five different types of debris and materials: scrap metal; inert materials (concrete, asphalt paving, bricks); corrugated cardboard; wood pallets; and clean wood waste. Both the County and City require contractors to document types of building materials and estimated quantities on a “Waste Management Plan” before obtaining building permits; within 30 days of project completion contractors must complete the “Waste Management Plan” to document the actual quantity of construction or demolition waste generated and demonstrate the actual quantities recycled, salvaged or reused, and/or disposed.

Similarly, El Dorado County requires all contractors to comply with the County’s Construction and Demolition Debris Recycling Ordinance (Title 8, Chapter 8.43), which requires projects in excess of 5,000 square feet to reduce all project waste by weight from entering landfill facilities by 50% through recycling. Under this ordinance, contractors are required to submit a “Debris Recycling Acknowledgment” for review and approval at the time of submitting an application for a building permit. Within 60 days after completion and/or occupancy contractors must submit a “Debris Recycling Report” to document the actual quantity of construction or demolition wastes generated and demonstrate the actual quantities recycled, salvaged or reused, and/or disposed. (El Dorado County 2009.)

ELECTRICAL SERVICE

Sacramento Municipal Utility District (SMUD) generates, transmits, and distributes electric power to a 900-square-mile territory in Sacramento County, including the City of Folsom, and a small portion of Placer County. SMUD serves a population of 589,599 customers (522,228 residential and 67,361 commercial) with 2,226 employees, 473 miles of transmission lines (110 kilovolts [kV] or more), and 9,784 miles of distribution lines (typically 12 kV) (SMUD 2007a, 2008a). 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-megawatt (MW) Cosumnes Power Plant (CPP), which provides the utility 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 million MW of electricity during a normal water year, which is enough energy to power about 180,000 homes (SMUD 2009).

SMUD has long-term contracts with other generators to provide an additional 1,189 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 July 2006, SMUD experienced a record peak electricity daily demand of 3,299 MW (SMUD 2008b). Table 3A.16-1 shows SMUD’s historic electrical consumption and forecasts of future consumption.

Table 3A.16-1 SMUD Service Area Electrical Consumption and Forecast	
Year	Consumption (Gigawatt Hours) ¹
1990	8,358
2000	9,491
2005	10,523
2008	11,174
2013	12,053
2016	12,555

Note:
¹ Gigawatt equals one billion watts.
 Source: CEC 2007:148

An electrical transmission corridor traverses the western portion of the SPA between U.S. Highway 50 (U.S. 50) and White Rock Road. The corridor contains one 115-kV and one 230-kV Pacific Gas & Electric Company (PG&E) double-circuit transmission lines that extend south from PG&E’s Gold Hill Substation. The corridor also contains a SMUD 230-kV double-circuit transmission line that originates from SMUD’s Lake Substation. The transmission line travels south from the substation and through the SPA (Capitol Utility Specialists 2009:2). Listed below are the other electrical transmission lines in the vicinity of the SPA include (Capitol Utility Specialists 2009:2 and 3).

- ▶ A 69-kV overhead single-circuit transmission line located in the south-central portion of the SPA. This transmission line travels south through the SPA for approximately 2,100 feet then turns west onto Prairie City Road.

- ▶ A 69-kV single-circuit transmission line that extends south along Prairie City Road until it reaches the point where the road curves west. The transmission line continues south approximately 7,700 feet along the west side of Prairie City Road to White Rock Road.
- ▶ A 69-kV single-circuit transmission line that extends south from U.S. 50 on the east side of Placerville Road where it terminates just within the SPA.
- ▶ A 12-kV overhead transmission line that extends north from White Rock Road along the east side of Placerville Road where it terminates with service facilities on U.S. 50.

Energy Conservation

SMUD has created two separate programs to grow renewable energy supplies for its customers: a green pricing program called Greenergy and a Renewables Portfolio Standard (RPS) program. Accounting for SMUD's renewable energy supply is done separately for these two programs and aggregated as SMUD's total, non-large hydro-renewable energy supply.

SMUD has had the green pricing program called "Greenergy" since 1997. Greenergy allows customer choice in selecting renewable energy supply for 100% or 50% of their electricity based on a simple monthly fee of \$6.00 or \$3.00, respectively. Commercial Greenergy customers pay \$0.1 per kilowatt-hour (kWh) for 100% renewables and \$0.5 per kWh for 50% renewable energy. In 2006, there were about 36,000 participating customers in the Greenergy program, of which approximately 34,000 were residential customers. (SMUD 2008b.)

SMUD's RPS program was approved by SMUD's elected board one year before the state RPS program was approved by the legislature and governor. To meet its annual renewables goals, SMUD both contracts for renewable electricity from independent power producers and builds and owns renewable energy power plants. SMUD has renewable energy supply goals of 23% for 2011 (20% RPS + 3% Greenergy in 2011). The final supply numbers compiled for 2006 show that SMUD provided about 13% of retail sales of eligible, non-large hydro-renewable electricity supply. (SMUD 2007b:2.)

SMUD has supported several new renewables projects that have begun providing electricity to the grid since 2002. The SMUD-owned Solano wind project installed wind turbines generating 39 MW in 2002, and an additional 63 MW of wind turbines were installed in 2007. This wind project is expected to have turbines generating over 200 combined megawatts installed by 2011. SMUD also recently signed a Power Purchase Agreement (PPA) contract for the second phase of the Kiefer Landfill gas-to-electricity project, which is online now and providing an additional 5.7 MW. SMUD also signed a PPA several years ago for a California wind project that came online in phases from 2003 to 2007, and it now provides a total of 75 MW. (SMUD 2007b:3.)

NATURAL GAS SERVICE

Natural gas service in Folsom is provided by PG&E through portions of PG&E's 46,000 miles of natural gas distribution pipelines. In 2007, PG&E delivered approximately 4,562 million therms (MM therms) of natural gas throughout its service area (CEC 2008b). Table 3A.16-2 shows PG&E's historic natural gas consumption and forecasts of future consumption.

Whenever possible, PG&E adds capacity in an existing easement either by replacing smaller mains with larger mains, by constructing additional mains parallel to the existing facilities, or by increasing the operating pressure of existing mains (Sacramento County 2007:69). A 10-inch natural gas distribution feeder main is located in the east side of Placerville Road. This main extends south and then east along the south side of White Rock Road and into El Dorado County (Capitol Utility Specialists 2009:4).

**Table 3A.16-2
PG&E Service Area Natural Gas Consumption and Forecast**

Year	Consumption (MM Therms)
1990	5,275
2000	5,291
2005	4,724
2008	4,895
2018	5,144

Source: CEC 2007:204

In addition, the following natural gas transmission mains are located in the vicinity of the SPA (Capitol Utility Specialists 2009:6):

- ▶ a 6-inch transmission main on the west side of Prairie City Road approximately 915 feet north of U.S. 50,
- ▶ a 4-inch transmission main on Oak Avenue approximately 1,250 feet north of U.S. 50,
- ▶ a 6-inch transmission main at the intersection of East Bidwell Street and Iron Point Road approximately 1,280 feet north of U.S. 50,
- ▶ an 8-inch transmission main on Placerville Road north of U.S. 50, and
- ▶ a 6-inch transmission main at Stonebriar Road and White Rock Road.

PG&E has several natural gas regulator stations that could serve the SPA. Regulator stations in the vicinity of the SPA are located on East Bidwell Street at Oak Avenue, on Blue Ravine Road at Riley Street, and at Stonebriar Drive and White Rock Road in El Dorado County (Capitol Utility Specialists 2009:6).

TELECOMMUNICATIONS

AT&T Inc. (AT&T) would be provided telecommunications service to the SPA. Currently, there are no existing telephone lines in the SPA. AT&T has existing underground telephone lines extending east from Prairie City Road along both side of White Rock Road. In addition, AT&T has existing overhead fiber optic cable that extends west from the El Dorado County line and parallels U.S. 50 on the south side where it connects to SMUD’s 12kV overhead transmission line. (Capitol Utility Specialists 2009.)

CABLE TELEVISION AND COMMUNICATIONS

Comcast would provide cable television and communications service to the SPA. Comcast serves the city with a combination of underground and overhead fiber-optic cable and copper coaxial cable. Additional improvements or relocations of hub sites are generally made as the need arises to meet customer demand.

Currently, there are no existing cable television and communications facilities in the SPA. In the vicinity of the SPA, Comcast has existing facilities on Prairie City Road and along Iron Point Road north of U.S. 50 (Capitol Utility Specialists 2009:8).

3A.16.2 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

There are no Federal plans, policies, regulations, or laws related to utilities and service systems that apply to the Proposed Project or alternatives under consideration.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the California Legislature passed the CIWMA of 1989 (AB 939), effective January 1990 (CIWMB 2007). According to the CIWMA, all cities and counties were required to divert 25% of all solid waste from landfill facilities by January 1, 1995, and 50% by January 1, 2000. Each city is required to develop solid waste plans demonstrating integration of the CIWMA plan with the county plan. The plans must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal.

California Public Utilities Commission Decision 95-08-038

The California Public Utilities Commission (CPUC) Decision 95-08-038 contains the rules for the planning and construction of new transmission facilities, distribution facilities, and substations. The decision requires permits for the construction of certain power line facilities or substations if the voltages would exceed 50 kV or if the substation would require the acquisition of land or an increase in voltage rating above 50 kV. Distribution lines and substations with voltages less than 50 kV do not need to comply with this decision; however, the utility must obtain any nondiscretionary local permits required for the construction and operation of these projects. CEQA compliance is required for construction of facilities constructed in accordance with the decision.

California Building Energy Efficiency Standards

The project would be required to comply with changes to Title 24 of the California Code of Regulations regarding energy efficiency that became effective on October 1, 2005. These new energy efficiency standards were developed in response to the state's energy crisis as well as AB 970 (Chapter 329, Statutes of 2000), the California Energy and Reliability Act of 2000. The goals of the recent changes to Title 24 are to improve the energy efficiency of residential and nonresidential buildings, minimize impacts during peak energy-usage periods, and reduce impacts on overall state energy needs.

Implementation of these standards is expected to reduce the growth in electricity use by 478 gigawatt-hours per year (GWh/y) and reduce the growth in natural gas use by 8.8 million therms per year. The savings attributable to new nonresidential buildings are 163.2 GWh/y of electricity savings and are expected to reduce the growth in electricity use by 478 GWh/y and reduce the growth in natural gas use by 8.8 MM therms per year. The savings attributable to new nonresidential buildings are 163.2 GWh/y of electricity savings and 0.5 MM therms. Additional savings result from the application of the standards on building alterations. In particular, requirements for cool roofs, lighting, and air distribution ducts are expected to save about 175 GWh/y of electricity.

In addition, the 2008 California Building Code (Part 11 of Title 24) standards were adopted on July 1, 2008 and became effective on August 1, 2009. This code was developed to enhance the design and construction of buildings and sustainable construction practices through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental air quality. It is the intent of this code to encourage green buildings to achieve to achieve more than a 15% reduction in energy usage when compared to existing standards, to reduce indoor potable water demand by 20%, to reduce landscape water usage by 50%, and to reduce construction waste by 50%.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND LAWS

Sacramento County General Plan

There are no goals and policies of the Sacramento County General Plan (1993) that are applicable to the Proposed Project or alternatives under consideration.

El Dorado County General Plan

There are no goals and policies of the El Dorado County General Plan (2004) that are applicable to the Proposed Project or alternatives under consideration.

City of Folsom General Plan

The following goals and policies of the City of Folsom General Plan (1988) are applicable to the Proposed Project and the other four action alternatives. There are no City of Folsom goals and policies that would apply to the No Project Alternative.

Housing Element

GOAL 22: To promote energy conservation.

- ▶ **Policy 22.2:** Include energy conservation guidelines as part of the development standards for the specific plan area.

Public Facilities Element

GOAL 40: To set targets for ultimate build-out of the City, to plan for the provision of public facilities and services to meet this level of development, and to phase development according to the capacity of public facilities and services to meet those targets.

- ▶ **Policy 40.1:** No permit for construction shall be issued for any new development not served by existing municipal facilities until the following conditions have been met:
 - The applicant can provide for the installation and/or financing (through fees or other means) of needed public facilities.
 - The project is included in the area covered by an existing facilities plan approved by the City.
 - The project can be served by on-site or private facilities meeting City and County health and safety requirements.
- ▶ **Policy 40.2:** The City shall require the preparation of a facilities plan for an identified area when:
 - Development of an area necessitates the provision, extension, and/or expansion of municipal services and facilities which are not customarily constructed by a developer, or
 - There is a need for services or facilities not otherwise funded by regular City fees, or
 - The construction of the necessary services and facilities cannot be logically or economically provided by one landowner/development in the normal sequence of orderly development.
- ▶ **Policy 40.3:** An area facilities plan shall include, but not limited to the following:

- Description of the plan area, the basis for the selection of the proposed boundaries, and the development potential of the area which is based on a comprehensive land use map.
 - A statement of the plan’s consistency with the Folsom General plan and the City’s Urban Development Policy.
 - Identification of the nature and extent of facilities necessary to serve the area and a schedule of estimated time within which facilities must be constructed.
 - Engineer’s estimate of the total cost of such improvements (including plan preparation).
 - A plan for the equitable apportionment of costs among benefited properties and adjustments thereof based on the time such costs are paid.
 - The nature of the obligation of each land-owner or developer.
 - Discussion of the options available to finance the improvements including, but not limited to, construction by developers.
 - Provisions for amendments to the plan which may result from changes in the plan area, development patterns, etc.
 - Provisions to refund or reimburse landowners who construct facilities with capacity beyond the ultimate need of their developments.
 - A statement which recognizes that the financial commitments required pursuant to such plans are not in lieu of other municipal service and facilities fees. The financial commitments of landowners/developers shall be taken into account by the City in determining the extent of the imposition of such other municipal service and facilities fees.
 - A statement which recognizes that the area facilities plan is not intended to be responsible for the provision of all possible public facilities that will be needed in the future and that there are or may be additional costs/fees established by the City and other jurisdictions (such a school district) that may apply to the area. However, the plan must address the need for public facilities which may reasonably be assumed to be necessary during buildout of the area.
 - Provisions for administration of the area plan and the collection and distribution of funds.
- **Policy 40.4:** All new development projects shall be planned for an urban level of services:
- Sanitary sewer lines of appropriate size to accommodate the project and that will tie into the City’s main lines.

3A.16.3 ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G, and based on Appendix F as related to energy, of the State CEQA Guidelines. These thresholds also encompass the factors taken into account under NEPA to determine the significance of an action in terms of its context and the intensity of its impacts. The Proposed Project or alternatives under consideration were determined to result in a significant impact related to utilities and service systems if they would do any of the following:

- ▶ exceed wastewater treatment requirements of the applicable RWQCB;
- ▶ require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- ▶ result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- ▶ generate solid waste beyond the capacity of existing landfills;
- ▶ violate Federal, state, or local statutes and regulations related to solid waste; or
- ▶ result in inefficient, wasteful, and unnecessary consumption of energy.

ANALYSIS METHODOLOGY

Impacts on utilities and service systems that would result from implementation of the Proposed Project and alternatives under consideration were identified by comparing existing service capacity and facilities against future demand associated with project implementation. Evaluation of potential utility and service systems impacts was based on a review of the following documents pertaining to the SPA and surrounding area:

- ▶ *Sacramento County General Plan* (Sacramento County 1993),
- ▶ *Sacramento County General Plan Background to the 1993 General Plan and 2007 General Plan Update* (Sacramento County 2007),
- ▶ *Sacramento County General Plan Update DEIR* (Sacramento County 2009),
- ▶ *City of Folsom General Plan* (City of Folsom 1988),
- ▶ *Wastewater Infrastructure Plan for the Folsom Specific Plan Area* (MacKay & Soms 2008a, provided in Appendix K1),
- ▶ *Addendum No. 1. Wastewater Infrastructure Plan for the Folsom Specific Plan Area* (MacKay & Soms 2008b, provided in Appendix K2),
- ▶ *Wastewater Master Plan Update for El Dorado Irrigation District* (HDR Engineering 2001),
- ▶ *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Final Program Environmental Impact Report* (SCH No. 2001112085) (SRCSD 2003a),
- ▶ *Sacramento Regional County Sanitation District Interceptor System Master Plan 2000* (SRCSD 2003b),
- ▶ *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (SCH No. 2002052004) (SRCSD 2004),
- ▶ *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan* (SRCSD 2001), and
- ▶ *Folsom Plan Area Technical Dry Utilities Study* (Capitol Utility Specialists 2009, provided in Appendix G11).

Additional information was obtained through consultation with appropriate agencies, including SRCSD, EID, SMUD, PG&E, and field review of the SPA and surroundings.

Where possible, a quantitative comparison was used to determine impacts of the project on future demands. Tables 3A.16-3, 3A.16-4, and 3A.16-5 summarize wastewater generation, solid waste generation, and electrical and natural gas service demands, respectively.

Table 3A.16-3 Folsom South of U.S. 50 Specific Plan Wastewater Generation Rates				
Alternative	Wastewater Generated in the SRCSD Service Area		Wastewater Generated in the EID Service Area	
	Average Dry-Weather Flow (mgd)	Peak Wet-Weather Flow (mgd)	Average Dry-Weather Flow (mgd)	Peak Wet-Weather Flow (mgd)
Proposed Project	5.58	11.99	0.28	0.70
Resource Impact Minimization	4.24	9.38	0.22	0.55
Centralized Development	4.59	9.96	0.05	0.14
Reduced Hillside Development	5.66	11.96	0.23	0.59
No USACE Permit	3.83	8.58	0.31	0.78

Notes: mgd = million gallons per day
 Development of residences under the No Project Alternative would use on-site septic systems for wastewater treatment.
 Source: MacKay & Soms 2008b; Zoller, pers. comm. 2009

Table 3A.16-4 Folsom South of U.S. 50 Specific Plan Solid Waste Generation Rates			
Alternative	Residential Waste (tpd) ¹	Business Waste (tpd) ²	Total (tpd)
No Project	0.1	--	0.1
Proposed Project	24.0	65.1	89.1
Resource Impact Minimization	19.3	48.0	67.3
Centralized Development	20.4	83.1	103.5
Reduced Hillside Development	24.7	86.2	110.9
No USACE Permit	15.6	64.2	79.8

Notes: tpd = tons per day
¹ Based on CIWMB's average per-capita solid-waste disposal rate for Sacramento County of 0.36 ton per resident per year.
² The business waste-disposal rate calculated by CIWMB for project development was based on an average of 1.8 tons per year per employee.
 Source: Data compiled by AECOM in 2010

IMPACT ANALYSIS

Impacts that would occur under each alternative development scenario are identified as follows: NP (No Project), NCP (No USACE Permit), PP (Proposed Project/Action), RIM (Resource Impact Minimization), CD (Centralized Development), and RHD (Reduced Hillside Development). The impacts for each alternative are compared relative to the PP at the end of each impact conclusion (i.e., similar, greater, lesser).

**Table 3A.16-5
Folsom South of U.S. 50 Specific Plan Electrical and Natural Gas Demands**

Alternative	Electrical Demand		Natural Gas Demand ¹
	Average Demand (MVA)	Peak Demand (MVA)	Peak Demand (MCFH)
No Project	0.1	0.2	2.2
Proposed Project	39.7	87.3	818.3
Resource Impact Minimization	34.5	75.9	694.2
Centralized Development	45.1	97.1	837.7
Reduced Hillside Development	52.0	111.5	978.6
No USACE Permit	35.7	78.0	655.9

Notes: MVA = megavolt amperes, MCFH = thousand cubic feet per hour

¹ No average natural gas demand was provided for the Proposed Project Alternative.

Source: Capitol Utility Specialists 2009

IMPACT **Increased Demand for On-Site Wastewater Collection and Conveyance Facilities and the Off-Site**
3A.16-1 **Force Main.** *Project implementation would result in increased generation of wastewater.*

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. These residences would require the use of on-site septic systems. Therefore, the 44 individual rural residences that could be built under the No Project Alternative would not increase demand for municipal wastewater collection and conveyance facilities and there would be **no direct** or **indirect** impacts. See Section 3A.7, “Geology, Soils, Mineral, and Paleontological Resources - Land,” for a discussion of the suitability of soils for use with septic systems. *[Lesser]*

NCP, PP, RIM, CD, RHD

The SPA is presently not served by municipal wastewater collection and treatment systems, and therefore the project would require construction of on-site wastewater collection and conveyance facilities and an off-site force main.

The wastewater infrastructure plan prepared for the Proposed Project Alternative (MacKay & Soms 2008a) addressed the viability of providing sewer service to the SPA, identified on- and off-site facility needs and design, and evaluated designs for consistency with existing interceptor sewer master plans. The wastewater infrastructure plan presents options for the ultimate sewer conveyance facilities. However, detailed sewer master plans have not been completed. It is anticipated that additional work would be performed to define force mains, trunk, and major collectors; identify phased construction of facilities; and design tentative maps, including collector and lateral systems, to serve each lot. The following discussion provides an overview of the future facilities identified by the conceptual wastewater infrastructure plan (attached as Appendix K).

The sizing and design of the on-site sewer pipelines and pump stations and the off-site force main are based on Sacramento Area Sanitation District design standards. The on-site sanitary sewer system would consist of gravity pipelines and force mains ranging in size from 8 inches to 30 inches in diameter, and where possible, would be

installed at a depth of less than 20 feet. The proposed on-site sewer system and off-site force main would be sized to accommodate planned sewer flows.

Lands within the EID service area and a sub-shed east of Empire Ranch Road would be served by three pump stations. The East Sanitary Sewer Pump Station would be located at the northwest corner of White Rock Road and Empire Ranch Road, Pump Station 3 would be located at the eastern boundary of the SPA near Stonebriar Court, and Pump Station 4 would be located at the eastern boundary of the SPA near Winterfield Court. A combination of force mains and gravity sewers would convey wastewater south along the eastern boundary of the SPA to the East Sanitary Pump Station.

Sewer flows from the EID service area would be conveyed to an existing pump station at the intersection of White Rock Drive and Winterfield Drive and ultimately conveyed to the El Dorado Hills WWTP (see Impact 3A.16-5).

Sewer flows from the SRCSD service area would 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 (see Impact 3A.16-3).

Because the SPA is not served by a municipal wastewater collection system and sufficient on-site wastewater collection and conveyance infrastructure and the off-site force main necessary to serve the project have not been constructed, nor have final design plans and specifications been submitted, this is a **direct, potentially significant** impact. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. *[Similar]*

Mitigation Measure 3A.16-1: Submit Proof of Adequate On- and Off-Site Wastewater Conveyance Facilities and Implement On- and Off-Site Infrastructure Service Systems or Ensure That Adequate Financing Is Secured.

Before the approval of the final map and issuance of building permits for all project phases, the project applicant(s) of all project phases shall submit proof to the City of Folsom that an adequate wastewater conveyance system either has been constructed or is ensured through payment of the City's facilities augmentation fee as described under the Folsom Municipal Code Title 3, Chapter 3.40, "Facilities Augmentation Fee – Folsom South Area Facilities Plan," or other sureties to the City's satisfaction. Both on-site wastewater conveyance infrastructure and off-site force main sufficient to provide adequate service to the project shall be in place for the amount of development identified in the tentative map before approval of the final map and issuance of building permits for all project phases, or their financing shall be ensured to the satisfaction of the City.

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

Timing: Before approval of final maps and issuance of building permits for any project phases.

Enforcement: City of Folsom Community Development Department and City of Folsom Public Works Department.

Off-Site Elements

The sewer force main would provide the necessary infrastructure needed to provide wastewater service to the SPA, and construction of the off-site freeway interchange improvements, sewer force main, and the detention basin in Sacramento County, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses that would increase demand for wastewater

collection and conveyance facilities. Therefore, the off-site elements would have a **direct, less-than-significant** impact on the demand additional wastewater collection and conveyance facilities. The **indirect** physical impacts of constructing the sewer force main are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. *[Similar]*

Mitigation Measure: No mitigation measures are required.

Implementation of Mitigation Measure 3A.16-1 would reduce significant impacts associated with increased demand for on-site wastewater collection facilities under the No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives to a **less-than-significant** level because adequate wastewater conveyance facilities would be documented or adequate financing would be secured before approval final maps and issuance of building permits.

IMPACT 3A.16-2 Increased Demand for SRCSD Off-Site Wastewater Collection and Conveyance Facilities. *The wastewater generated within the 3,313-acre SRCSD service area would require off-site collection facilities to the Folsom East Interceptor.*

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. These residences would require the use of on-site septic systems. Therefore, the 44 individual rural residences that could be built under the No Project Alternative would not increase demand for municipal wastewater collection and conveyance facilities and there would be **no direct** or **indirect** impacts. See Section 3A.7, “Geology, Soils, Mineral, and Paleontological Resources - Land,” for a discussion of the suitability of soils for use with septic systems. *[Lesser]*

NCP, PP, RIM, CD, RHD

The wastewater generated 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 (see Exhibit 2-6 in Chapter 2, “Alternatives”). 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. The existing 24-inch force main travels west in Iron Point Road to the intersection of Iron Point Road and McAdoo Road, where it connects to the 36-inch Folsom East Interceptor Section 3A gravity pipeline. Wastewater flow would ultimately be conveyed to the SRWTP.

SRCSD has designed and constructed the Folsom East Interceptor to serve the project, and this facility would be adequate to serve wastewater generated by the No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives; therefore, the increased demand for SRCSD off-site wastewater collection and conveyance facilities would be a **direct, less-than-significant** impact. **No indirect** impacts would occur. *[Similar]*

Mitigation Measure: No mitigation measures are required.

Off-Site Elements

Construction of the off-site freeway interchange improvements, sewer force main, and the detention basin in Sacramento County, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses that would increase demand for off-site SRCSD wastewater collection and conveyance facilities. Therefore, the off-site elements would have **no direct** or **indirect** impacts.

Mitigation Measure: No mitigation measures are required.

IMPACT 3A.16-3 Increased Demand for SRWTP Wastewater Treatment Plant Facilities. *Project implementation would result in increased generation of wastewater. Collected wastewater flows from the 3,313-acre SRCSD portion of the SPA would ultimately be transported to the SRWTP for treatment and disposal.*

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. These residences would require the use of on-site septic systems. Therefore, the 44 individual rural residences that could be built under the No Project Alternative would not increase demand for municipal wastewater treatment facilities and there would be **no direct** or **indirect** impacts. See Section 3A.7, “Geology, Soils, Mineral, and Paleontological Resources - Land,” for a discussion of the suitability of soils for use with septic systems. *[Lesser]*

NCP

As shown in Table 3A.16-3, implementation of the No USACE Permit Alternative would generate 3.83 mgd of average dry-weather flow, and 8.58 mgd peak wet-weather flow (MacKay & Soms 2008b; Zoller, pers. comm.). The No USACE Permit Alternative average-dry weather flow would be 1.75 mgd and peak-wet weather flow would be 3.41 mgd less than the Proposed Project Alternative.

The wastewater flows generated by 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 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 No USACE Permit Alternative average-dry weather flow would be 2.99 mgd and peak-wet weather flow would be 5.9 mgd less than those identified in the SRCSD Master Plan 2000.

Collected wastewater flows from the SPA would ultimately be transported to the SRWTP for treatment and disposal. 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 projected capacity specifically includes project-related wastewater flows through 2020. At the time the 2020 Master Plan EIR was prepared, it was assumed that flows would increase from 155 mgd and would surpass 181 mgd by 2007. However, flows to the SRWTP have consistently decreased between 2000 and 2008 from 155 mgd to 141 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.

Note that this total does not represent a buildout population total for SRCSD; rather, it represents the amount of growth expected within SRCSD based on projections. The SRCSD has determined that growth within the district is less than what was projected in the 2020 master plan and the SRWTP can provide capacity to future development beyond what was originally anticipated. If substantial population growth or new development occurs before 2020, the SRCSD will reevaluate expansion needs and phase treatment plant expansion to provide for sufficient long-term capacity.

SCRSD prepared the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (SRCSD 2004). As described above, the EIR was determined to be legally deficient by the Sacramento Superior Court and the judgment has been appealed. The legal effect of the pending appeal is to stay the Superior Court's determination of legal deficiency. Thus, this EIR/EIS summarizes below and incorporates by reference the significant impacts that were identified in the 2020 Master Plan EIR as they relate to the project.

Because there is a relationship between the project and the need for expansion the SRWTP, implementation of the No USACE Permit Alternative would contribute indirectly and incrementally to the related impacts (described above), most of which would be reduced to a less-than-significant level through implementation of mitigation measures. The only significant and unavoidable impact related to the treatment plant that was identified would be from short-term increases in NO_x during construction of SRWTP facilities. In addition to these impacts, there is a potential that new significant impacts to water quality could be identified if the EIR for the SRWTP is found inadequate and impacts are reanalyzed. It is too speculative to draw any such conclusion at this point since additional studies would be required to substantiate any new significant impacts.

Because the SRWTP is planned to accommodate growth in Sacramento regional area by 2020, development in the SPA that occurs by 2020 would be accommodated by planned SRWTP capacity. Over time, additional planning at the SRWTP would occur, and overall capacity would be assessed and additional capacity planned for and added. There is expected to be sufficient SRWTP capacity to accommodate project flows under the No USACE Permit Alternative through 2020. However, there would be no assurances that the SRWTP would have adequate capacity for new wastewater flows for project development occurring after 2020. Therefore, the potential lack of treatment capacity past 2020 at full project buildout is a **direct, potentially significant** impact. The No USACE Permit Alternative would also contribute to the need to expand the facility and therefore would contribute **indirectly** to the **significant and unavoidable** short-term impact related to air quality from expansion of the SRWTP identified in the 2020 Master Plan EIR. [*Lesser*]

Mitigation Measure 3A.16-3: Demonstrate Adequate SRWTP Wastewater Treatment Capacity.

The project applicant(s) of all project phases shall demonstrate adequate capacity at the SRWTP for new wastewater flows generated by the project. This shall involve preparing a tentative map-level study and paying connection and capacity fees as identified by SRCSD. Approval of the final map and issuance of building permits for all project phases shall not be granted until the City verifies adequate SRWTP capacity is available for the amount of development identified in the tentative map.

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

Timing: Before approval of final maps and issuance of building permits for any project phases.

Enforcement: City of Folsom Community Development Department and City of Folsom Public Works Department.

PP

As shown in Table 3A.16-3, implementation of the Proposed Project Alternative would generate 5.58 mgd of average dry-weather flow and 11.99 mgd peak wet-weather flow within the SRCSD service area (MacKay & Soms 2008b).

The wastewater flows generated by the Proposed Project Alternative, including the 189-acre portion of the SPA that would be served by EID, have been planned for in the SRCSD Master Plan 2000. The master plan estimates that buildout of the SPA would generate an average dry-weather flow of 6.82 mgd and a peak wet-weather flow of 14.48 mgd (SRCSD 2003b:Table 3-1). Because 189 acres of the SPA would be served by EID, the project-related average-dry weather flow would be 1.24 mgd and peak-wet weather flow would be 2.59 mgd less than those identified in the SRCSD Master Plan 2000.

Collected wastewater flows from the 3,313-acre SRCSD portion of the SPA would ultimately be transported to the SRWTP for treatment and disposal. The SRWTP receives and treats an average of 141 mgd (as of 2008) and has a permitted dry-weather flow design capacity of 181 mgd. Flows to the SRWTP would increase over time as the population in the SRCSD service area increases. At the time the 2020 Master Plan EIR was prepared, it was assumed that flows would increase from 155 mgd and would surpass 181 mgd by 2007. However, flows to the SRWTP have decreased between 2000 and 2008 from 155 mgd to 141 mgd.

As discussed above, SRCSD prepared the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (SRCSD 2004), which was determined to be legally deficient by the Sacramento Superior Court. The judgment has been appealed, and a decision by the 3rd District Court of Appeals on the adequacy of the EIR is not expected until 2010. The Court of Appeal could overturn or uphold the Superior Court's determination in whole or in part. The legal effect of the pending appeal is to stay the Superior Court's determination of legal deficiency. Thus, this EIR/EIS summarizes below and incorporates by reference the significant impacts that were identified in the 2020 Master Plan EIR as they relate to this project.

The 2020 Master Plan, which was approved in 2004, provides for expansion of the SRWTP to 218 mgd based on growth rates expected to be achieved in the Sacramento County region by 2020. This projected capacity specifically includes project-related wastewater flows through 2020. Note that this total does not represent a buildout population total for SRCSD; rather, it represents the amount of growth expected within SRCSD based on projections. The SRCSD has determined that growth within the district is less than what was projected in the 2020 master plan and the SRWTP can provide capacity to future development beyond what was originally anticipated. If substantial population growth or new development occurs before 2020, the SRCSD will reevaluate expansion needs and phase treatment plant expansion to provide for sufficient long-term capacity.

Because there is a relationship between the project and the need for expansion of the SRWTP, implementation of the Proposed Project Alternative would contribute indirectly and incrementally to the related impacts. As described in the 2020 Master Plan EIR (which is incorporated by reference herein), construction and operation of the expanded SRWTP would result in several environmental impacts, and all but one impact would be reduced to a less-than-significant level through implementation of mitigation measures (including impacts on water quality, hydrology, fisheries, traffic, and noise). The only significant and unavoidable impact related to the treatment plant that was identified would be from short-term increases in nitrogen oxide (NO_x) during construction of SRWTP facilities.

In addition to these impacts, there is a potential that new significant impacts to water quality could be identified if the EIR for the SRWTP is found inadequate and impacts are reanalyzed. It is too speculative to draw any such conclusion at this point since additional studies would be required to substantiate any new significant impacts.

Because the SRWTP is planned to accommodate growth in Sacramento regional area by 2020, development in the SPA that occurs by 2020 would be accommodated by planned SRWTP capacity. Over time, additional planning at the SRWTP would occur, and overall capacity would be assessed and additional capacity planned for and added.

The SRWTP site has sufficient land area to accommodate a substantially higher flow than 218 mgd; however, future plans beyond the next 12 years are speculative.

There is expected to be sufficient SRWTP capacity to accommodate project flows under the Proposed Project, Resource Impact Minimization, Centralized Development, Reduced Hillside Development, and No USACE Permit Alternatives through 2020. There would be no assurances that the SRWTP would have adequate capacity for new wastewater flows for project development occurring after 2020. Therefore, the potential lack of treatment capacity past 2020 at full project buildout is a **direct, potentially significant** impact. The project would also contribute to the need to expand the facility and therefore would contribute **indirectly** to the **significant and unavoidable** short-term impact related to air quality from expansion of the SRWTP identified in the 2020 Master Plan EIR.

Mitigation Measure: Implement Mitigation Measure 3A.16-3.

RIM

As shown in Table 3A.16-3, implementation of the Resource Impact Minimization Alternative would generate 4.24 mgd of average dry-weather flow, and 9.38 mgd peak wet-weather flow (MacKay & Soms 2008b; Zoller, pers. comm.). The Resource Impact Minimization Alternative average-dry weather flow would be 1.34 mgd and peak-wet weather flow would be 2.61 mgd less than the Proposed Project Alternative.

The wastewater flows generated by 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 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 Resource Impact Minimization Alternative average-dry weather flow would be 2.58 mgd and peak-wet weather flow would be 5.1 mgd less than those identified in the SRCSD Master Plan 2000.

Collected wastewater flows from the SPA would ultimately be transported to the SRWTP for treatment and disposal. 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 projected capacity specifically includes project-related wastewater flows through 2020. At the time the 2020 Master Plan EIR was prepared, it was assumed that flows would increase from 155 mgd and would surpass 181 mgd by 2007. However, flows to the SRWTP have decreased between 2000 and 2008 from 155 mgd to 141 mgd.

Note that this total does not represent a buildout population total for SRCSD; rather, it represents the amount of growth expected within SRCSD based on projections. The SRCSD has determined that growth within the district is less than what was projected in the 2020 master plan and the SRWTP can provide capacity to future development beyond what was originally anticipated. If substantial population growth or new development occurs before 2020, the SRCSD will reevaluate expansion needs and phase treatment plant expansion to provide for sufficient long-term capacity.

SCRSD prepared the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (SRCSD 2004). As described above, the EIR was determined to be legally deficient by the Sacramento Superior Court and the judgment has been appealed. The legal effect of the pending appeal is to stay the Superior Court's determination of legal deficiency. Thus, this EIR/EIS summarizes below and incorporates by reference the significant impacts that were identified in the 2020 Master Plan EIR as they relate to the project.

Because there is a relationship between the project and the need for expansion the SRWTP, implementation of the Resource Impact Minimization Alternative would contribute indirectly and incrementally to the related impacts (described above), most of which would be reduced to a less-than-significant level through implementation of mitigation measures. The only significant and unavoidable impact related to the treatment plant that was

identified would be from short-term increases in NO_x during construction of SRWTP facilities. In addition to this impact, there is a potential that new significant impacts to water quality could be identified if the EIR for the SRWTP is found inadequate and impacts are re-analyzed. It is too speculative to draw any such conclusion at this point since additional studies would be required to substantiate any new significant impacts.

Because the SRWTP is planned to accommodate growth in the Sacramento regional area by 2020, development in the SPA that occurs by 2020 would be accommodated by planned SRWTP capacity. Over time, additional planning at the SRWTP would occur, and overall capacity would be assessed and additional capacity planned for and added. There is expected to be sufficient SRWTP capacity to accommodate project flows under the Resource Impact Minimization Alternative through 2020. There would be no assurances that the SRWTP would have adequate capacity for new wastewater flows for project development occurring after 2020. Therefore, the potential lack of treatment capacity past 2020 at full project buildout is **direct** and **potentially significant**. The Resource Impact Minimization Alternative would also contribute to the need to expand the SRWTP facility and therefore would contribute **indirectly** to the **significant and unavoidable** short-term impact related to air quality from expansion of the SRWTP identified in the 2020 Master Plan EIR. [*Lesser*]

Mitigation Measure: Implement Mitigation Measure 3A.16-3.

CD

As shown in Table 3A.16-3, implementation of the Centralized Development Alternative would generate 4.59 mgd of average dry-weather flow, and 9.96 mgd peak wet-weather flow (MacKay & Somps 2008b; Zoller, pers. comm.). The Centralized Development Alternative average-dry weather flow would be 0.99 mgd and peak-wet weather flow would be 2.03 mgd less than the Proposed Project Alternative.

The wastewater flows generated by 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 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 Centralized Development Alternative average-dry weather flow would be 2.23 mgd and peak-wet weather flow would be 4.52 mgd less than those identified in the SRCSD Master Plan 2000.

Collected wastewater flows from the SPA would ultimately be transported to the SRWTP for treatment and disposal. 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 projected capacity specifically includes project-related wastewater flows through 2020. At the time the 2020 Master Plan EIR was prepared, it was assumed that flows would increase from 155 mgd and would surpass 181 mgd by 2007. However, flows to the SRWTP have decreased between 2000 and 2008 from 155 mgd to 141 mgd.

Note that this total does not represent a buildout population total for SRCSD; rather, it represents the amount of growth expected within SRCSD based on projections. The SRCSD has determined that growth within the district is less than what was projected in the 2020 master plan and the SRWTP can provide capacity to future development beyond what was originally anticipated. If substantial population growth or new development occurs before 2020, the SRCSD will reevaluate expansion needs and phase treatment plant expansion to provide for sufficient long-term capacity.

SCRSD prepared the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (SRCSD 2004). As described above, the EIR was determined to be legally deficient by the Sacramento Superior Court and the judgment has been appealed. The legal effect of the pending appeal is to stay the Superior Court's determination of legal deficiency. Thus, this EIR/EIS summarizes below and incorporates by reference the significant impacts that were identified in the 2020 Master Plan EIR as they relate to the project.

Because there is a relationship between the project and the need for expansion the SRWTP, implementation of the Centralized Development Alternative would contribute indirectly and incrementally to the related impacts (described above), most of which would be reduced to a less-than-significant level through implementation of mitigation measures. The only significant and unavoidable impact related to the treatment plant that was identified would be from short-term increases in NO_x during construction of SRWTP facilities. In addition to these impacts, there is a potential that new significant impacts to water quality could be identified if the EIR for the SRWTP is found inadequate and impacts are reanalyzed. It is too speculative to draw any such conclusion at this point since additional studies would be required to substantiate any new significant impacts.

Because the SRWTP is planned to accommodate growth in Sacramento regional area by 2020, development in the SPA that occurs by 2020 would be accommodated by planned SRWTP capacity. Over time, additional planning at the SRWTP would occur, and overall capacity would be assessed and additional capacity planned for and added. There is expected to be sufficient SRWTP capacity to accommodate project flows under the Centralized Development Alternative through 2020. However, there would be no assurances that the SRWTP would have adequate capacity for new wastewater flows for project development occurring after 2020. Therefore, the potential lack of treatment capacity past 2020 at full project buildout is a **direct, potentially significant** impact. The Centralized Development Alternative also would contribute to the need to expand the facility and therefore would contribute **indirectly** to the **significant and unavoidable** short-term impact related to air quality from expansion of the SRWTP identified in the 2020 Master Plan EIR. [Lesser]

Mitigation Measure: Implement Mitigation Measure 3A.16-3.

RHD

As shown in Table 3A.16-3, implementation of the Reduced Hillside Development Alternative would generate 5.66 mgd of average dry-weather flow, and 11.96 mgd peak wet-weather flow (MacKay & Somps 2008b; Zoller, pers. comm.). The Reduced Hillside Development Alternative average-dry weather flow would be 0.08 mgd more than the Proposed Project Alternative and peak-wet weather flow would be 0.03 mgd less than the Proposed Project Alternative.

The wastewater flows generated by 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 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 Reduced Hillside Development Alternative average-dry weather flow would be 1.16 mgd and peak-wet weather flow would be 2.52 mgd less than those identified in the SRCSD Master Plan 2000.

Collected wastewater flows from the SPA would ultimately be transported to the SRWTP for treatment and disposal. 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 projected capacity specifically includes project-related wastewater flows through 2020. At the time the 2020 Master Plan EIR was prepared, it was assumed that flows would increase from 155 mgd and would surpass 181 mgd by 2007. However, flows to the SRWTP have decreased between 2000 and 2008 from 155 mgd to 141 mgd.

Note that this total does not represent a buildout population total for SRCSD; rather, it represents the amount of growth expected within SRCSD based on projections. The SRCSD has determined that growth within the district is less than what was projected in the 2020 master plan and the SRWTP can provide capacity to future development beyond what was originally anticipated. If substantial population growth or new development occurs before 2020, the SRCSD will reevaluate expansion needs and phase treatment plant expansion to provide for sufficient long-term capacity.

SCRSD prepared the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (SRCSO 2004). As described above, the EIR was determined to be legally deficient by the Sacramento Superior Court and the judgment has been appealed. The legal effect of the pending appeal is to stay the Superior Court's determination of legal deficiency. Thus, this EIR/EIS summarizes below and incorporates by reference the significant impacts that were identified in the 2020 Master Plan EIR as they relate to the project.

Because there is a relationship between the project and the need for expansion the SRWTP, implementation of the Reduced Hillside Development Alternative would contribute indirectly and incrementally to the related impacts (described above), most of which would be reduced to a less-than-significant level through implementation of mitigation measures. The only significant and unavoidable impact related to the treatment plant that was identified would be from short-term increases in NO_x during construction of SRWTP facilities. In addition to these impacts, there is a potential that new significant impacts to water quality could be identified if the EIR for the SRWTP is found inadequate and impacts are reanalyzed. It is too speculative to draw any such conclusion at this point since additional studies would be required to substantiate any new significant impacts.

Because the SRWTP is planned to accommodate growth in Sacramento regional area by 2020, development in the SPA that occurs by 2020 would be accommodated by planned SRWTP capacity. Over time, additional planning at the SRWTP would occur, and overall capacity would be assessed and additional capacity planned for and added. There is expected to be sufficient SRWTP capacity to accommodate project flows under the Reduced Hillside Development Alternative through 2020. However, there would be no assurances that the SRWTP would have adequate capacity for new wastewater flows for project development occurring after 2020. Therefore, the potential lack of treatment capacity past 2020 at full project buildout is a **direct, potentially significant** impact. The Reduced Hillside Development Alternative would also contribute to the need to expand the facility and therefore would contribute **indirectly** to the **significant and unavoidable** short-term impact related to air quality from expansion of the SRWTP identified in the 2020 Master Plan EIR. *[Greater]*

Mitigation Measure: Implement Mitigation Measure 3A.16-3.

Off-Site Elements

The sewer force main would provide the necessary infrastructure needed to provide wastewater service to the SPA, and construction of the off-site freeway interchange improvements, and the detention basin in Sacramento County, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses that would increase demand for wastewater collection and conveyance facilities. Therefore, the off-site elements would have a **direct, less-than-significant** impact on the increased demand wastewater treatment. The **indirect** physical impacts of constructing the sewer force main are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development.

Mitigation Measure: No mitigation measures are required.

Implementation of Mitigation Measure 3A.16-3 would reduce direct significant impacts associated with increased demand for wastewater treatment plant facilities under the No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives to a **less-than-significant** level because an adequate wastewater treatment facilities would be documented before approval final maps and issuance of building permits.

Regarding expansion of the SRWTP, implementation of mitigation measures to reduce air quality impacts is the responsibility of SRCSD. Such measures would be implemented in accordance with the certified SRWTP 2020 Master Plan EIR. The No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives would indirectly contribute to impacts on air quality that would be **significant and unavoidable** after implementation of all feasible mitigation measures.

IMPACT **Increased Demand for EID Off-Site Wastewater Collection and Conveyance Facilities.** *The wastewater generated within the 189-acre EID service area would require off-site wastewater collection and conveyance facilities to the EID facility.*
3A.16-4

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. These residences would require the use of on-site septic systems and the SPA would be under the jurisdiction of Sacramento County, not El Dorado County. Therefore, the 44 individual rural residences that could be built under the No Project Alternative would not increase demand for municipal wastewater collection and conveyance facilities and there would be **no direct** or **indirect** impacts. See Section 3A.7, “Geology, Soils, Mineral, and Paleontological Resources - Land,” for a discussion of the suitability of soils for use with septic systems. *[Lesser]*

NCP, PP, RIM, CD, RHD

Approximately 189 acres of the SPA east of Empire Ranch Road is within the EID service area and off-site wastewater collection and conveyance facilities would be provided by EID. The wastewater infrastructure plan (MacKay & Soms 2008a) has identified three possible points of connection (POCs) to the existing EID conveyance system as described below.

- ▶ POC 1 would be to an existing 6-inch sewer main at Winterfield Court approximately 100 feet east of the SPA boundary. POC 1 would eliminate the need for Pump Station 4.
- ▶ POC 2 would be to an existing 6-inch sewer main at the intersection of Stonebriar Drive and Prima Way. POC 2 would eliminate the need for Pump Station 3.
- ▶ POC 3 would be to an existing 6-inch sewer main at Ranch Bluff Way south of White Rock Road. POC 3 would reduce flow to the East Sanitary Sewer Pump Station.

Sewer flows from the EID service area would be conveyed to an existing pump station at the intersection of White Rock Drive and Winterfield Drive and ultimately conveyed to the El Dorado Hills WWTP (see Impact 3A.16-5).

The existing collection and conveyance facilities may not have the capacity to accommodate wastewater flows generated by the project and could require improvements to meet project demands. Potential improvements include expanding the capacity of existing sewer pipelines, upgrading or replacing the existing pump, and installing an additional manhole; however, it is not known at this time what specific improvements would be required. Any improvements to these facilities would require additional analysis in a subsequent CEQA document to identify specific impacts and any required mitigation measures. Impacts resulting from improvements to EID collection and conveyance facilities could include: temporary, short-term generation of criteria air pollutants, such as PM₁₀ (e.g., respirable particulate matter with a diameter smaller than 10 microns) and emissions of ozone precursors (e.g., reactive organic gases and oxides of nitrogen) during construction; temporary lane closures; increased truck traffic and other roadway impacts during construction; exposure of sensitive receptors to noise levels above noise ordinances during construction; exposure of sensitive noise receptors to new stationary-source noise from potential pump station improvements; and exposure of construction crews and the public to hazardous materials used in construction.

Because it is not known at this time if existing EID collection and conveyance facilities have the capacity to accommodate wastewater flows generated by project development and what improvements would be required, the

No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives could result in **direct** and **indirect, potentially significant** impacts related to improvements to off-site EID collection and conveyance facilities. *[Similar]*

Mitigation Measure 3A.16-4: Submit Proof of Adequate EID Off-Site Wastewater Conveyance Facilities and Implement EID Off-Site Infrastructure Service Systems or Ensure That Adequate Financing Is Secured.

Before the approval of the final map and issuance of building permits for all project phases, the project applicant(s) of all project phases shall obtain proof from EID that an adequate wastewater conveyance system either has been constructed or is ensured through the use of bonds or other sureties. The project applicants of all project phases shall submit this proof to the City of Folsom. EID off-site wastewater conveyance infrastructure sufficient to provide adequate service to project shall be in place for the amount of development identified in the tentative map before approval of the final map and issuance of building permits for all project phases, or their financing shall be ensured to the satisfaction of the City.

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

Timing: Before approval of final maps and issuance of building permits for any project phase.

Enforcement: City of Folsom Community Development Department and City of Folsom Public Works Department.

Off-Site Elements

Construction of the off-site freeway interchange improvements, sewer force main, and the detention basin in Sacramento County, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses that would increase demand for EID off-site wastewater collection and conveyance facilities. Therefore, the off-site elements would have **no direct** or **indirect** impacts.

Mitigation Measure: No mitigation measures are required.

Implementation of Mitigation Measure 3A.16-4 would reduce significant impacts associated with increased demand for EID off-site wastewater collection facilities under the No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives to a **less-than-significant** level because adequate EID off-site wastewater conveyance facilities would be documented or adequate financing would be secured before approval final maps and issuance of building permits.

However, it is unknown if existing collection and conveyance facilities have the capacity to accommodate wastewater flows generated by project development and the project could directly and indirectly contribute to the need for off-site EID wastewater facility improvements. Therefore, the Proposed Project, Resource Impact Minimization, Centralized Development, Reduced Hillside Development, and No USACE Permit Alternatives 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.

IMPACT 3A.16-5 **Increased Demand for El Dorado Hills Wastewater Treatment Plant Facilities.** *Project implementation would result in increased generation of wastewater. Collected wastewater flows from the 189-acre EID portion of the SPA would ultimately be transported to the El Dorado Hills WWTP for treatment and disposal.*

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. These residences would require the use of on-site septic systems and the SPA would be under the jurisdiction of Sacramento County, not El Dorado County. Therefore, the 44 individual rural residences that could be built under the No Project Alternative would not increase demand for municipal wastewater treatment facilities and there would be **no direct** or **indirect** impacts. See Section 3A.7, “Geology, Soils, Mineral, and Paleontological Resources - Land,” for a discussion of the suitability of soils for use with septic systems. *[Lesser]*

NCP

As shown in Table 3A.16-3, implementation of the No USACE Permit Alternative would generate 0.31 mgd of average dry-weather flow and 0.78 mgd peak wet-weather flow within the EID service area (Zoller, pers. comm. 2009). The No USACE Permit Alternative average-dry weather flow would be 0.03 mgd and peak-wet weather flow would be 0.08 mgd more than the Proposed Project Alternative.

Collected wastewater flows from the EID portion of the SPA would ultimately be transported to the El Dorado Hills WWTP for treatment and disposal. Currently, the El Dorado Hills WWTP’s design capacity is 3.0 mgd average dry-weather flow and 7.6 mgd peak wet-weather flow. As of 2007, the average dry weather flow is approximately 2.86 and the peak wet-weather flow is 8.04 mgd. Expansion of the WWTP is required to provide wastewater treatment capacity for land uses in El Dorado Hills as identified by the El Dorado County General Plan (2003), to meet anticipated regulatory requirements for water quality, and to help meet recycled water demands. The treatment plant is currently being expanded to 4.0 mgd, which is anticipated to be completed in December 2009. The full buildout of the treatment plant to 5.4 mgd is expected to occur by 2025.

The SPA was not included in the planned future capacity of the El Dorado Hills WWTP; therefore, the No USACE Permit Alternative would potentially result in increased in wastewater flows that exceed treatment plant capacity. Any improvements the treatment plant would require additional analysis in a separate CEQA document to identify specific impacts and any required mitigation measures. Potential impacts that could result from improvements to the El Dorado Hills WWTP are described above. Because it is not known at this time if the existing El Dorado Hills WWTP has the capacity to treat wastewater flows generated by project development and what improvements would be required, the No USACE Permit Alternative could result in **direct** and **indirect, potentially significant** impacts related to improvements to the El Dorado Hills WWTP. *[Greater]*

Mitigation Measure 3A.16-5: Demonstrate Adequate El Dorado Hills Wastewater Treatment Plant Capacity.

The project applicant(s) of all project phases shall demonstrate adequate capacity at the El Dorado Hills WWTP for new wastewater flows generated by project development. This shall involve preparing a tentative map-level study and paying connection and capacity fees as identified by EID. Approval of the final map and issuance of building permits for all project phases shall not be granted until the City verifies adequate El Dorado Hills WWTP capacity is available for the amount of development identified in the tentative map.

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

Timing: Before approval of final maps and issuance of building permits for any project phases involving the El Dorado Hills WWTP.

Enforcement: City of Folsom Community Development Department and City of Folsom Public Works Department.

PP

As shown in Table 3A.16-3, implementation of the Proposed Project Alternative would generate 0.28 mgd of average dry-weather flow and 0.70 mgd peak wet-weather flow within the EID service area (MacKay & Soms 2008b). Collected wastewater flows from the EID portion of the SPA would ultimately be transported to the El Dorado Hills WWTP for treatment and disposal.

Currently, the design capacity of the El Dorado Hills WWTP is 3.0 mgd average dry-weather flow and 7.6 mgd peak wet-weather flow. As of 2007, the average dry weather flow is approximately 2.86 and the peak wet-weather flow is 8.04 mgd. Expansion of the WWTP is required to provide wastewater treatment capacity for land uses in El Dorado Hills as identified by the El Dorado County General Plan (2003), to meet anticipated regulatory requirements for water quality, and to help meet recycled water demands. The treatment plant is currently being expanded to 4.0 mgd, which is anticipated to be completed in December 2009. The full buildout of the treatment plant to 5.4 mgd is expected to occur by 2025.

The SPA was not included in the planned future capacity of the El Dorado Hills WWTP; therefore, the Proposed Project Alternative would potentially result in increased in wastewater flows that exceed treatment plant capacity. Any improvements the treatment plant would require additional analysis in a separate CEQA document to identify specific impacts and any required mitigation measures. Impacts resulting from improvements to the El Dorado Hills WWTP could include: temporary, short-term generation of criteria air pollutants, such as PM₁₀ and emissions of ozone precursors (e.g., reactive organic gases and oxides of nitrogen) during construction; generation of new odors from operation of expanded treatment plant facilities; degradation of water quality from increased discharges to Carson Creek; temporary roadway lane closures, increased truck traffic, and other roadway impacts during construction; exposure of sensitive receptors to noise levels above noise ordinances during construction; and exposure of construction crews and the public to hazardous materials used in construction.

Because it is not known at this time if the existing El Dorado Hills WWTP has the capacity to treat wastewater flows generated by project development and what improvements would be required, the Proposed Project Alternative could result in **direct and indirect, potentially significant** impacts related improvements to the El Dorado Hills WWTP.

Mitigation Measure: Implement Mitigation Measure 3A.16-5.

RIM

As shown in Table 3A.16-3, implementation of the Resource Impact Minimization Alternative would generate 0.22 mgd of average dry-weather flow and 0.55 mgd peak wet-weather flow within the EID service area (MacKay & Soms 2008b). The Resource Impact Minimization Alternative average-dry weather flow would be 0.06 mgd and peak-wet weather flow would be 0.15 mgd less than the Proposed Project Alternative.

Collected wastewater flows from the EID portion of the SPA would ultimately be transported to the El Dorado Hills WWTP for treatment and disposal. Currently, the design capacity of the El Dorado Hills WWTP is 3.0 mgd average dry-weather flow and 7.6 mgd peak wet-weather flow. As of 2007, the average dry weather flow is approximately 2.86 and the peak wet-weather flow is 8.04 mgd. Expansion of the WWTP is required to provide wastewater treatment capacity for land uses in El Dorado Hills as identified by the El Dorado County General Plan (2003), to meet anticipated regulatory requirements for water quality, and to help meet recycled water demands. The treatment plant is currently being expanded to 4.0 mgd, which is anticipated to be completed in December 2009. The full buildout of the treatment plant to 5.4 mgd is expected to occur by 2025.

The SPA was not included in the planned future capacity of the El Dorado Hills WWTP; therefore, the Resource Impact Minimization Alternative would potentially result in increased in wastewater flows that exceed treatment plant capacity. Any improvements the treatment plant would require additional analysis in a separate CEQA document to identify specific impacts and any required mitigation measures. Potential impacts that could occur as a result of improvements to the El Dorado Hills WWTP are described above. Because it is not known at this time if the existing El Dorado Hills WWTP has the capacity to treat wastewater flows generated by project development and what improvements would be required, the Resource Impact Minimization Alternative could result in **direct and indirect, potentially significant** impacts related to improvements to the El Dorado Hills WWTP. *[Lesser]*

Mitigation Measure: Implement Mitigation Measure 3A.16-5.

CD

As shown in Table 3A.16-3, implementation of the Centralized Development Alternative would generate 0.05 mgd of average dry-weather flow and 0.14 mgd peak wet-weather flow within the EID service area (Zoller, pers. comm. 2009). The Centralized Development Alternative average-dry weather flow would be 0.23 mgd and peak-wet weather flow would be 0.56 mgd less than the Proposed Project Alternative.

Collected wastewater flows from the EID portion of the SPA would ultimately be transported to the El Dorado Hills WWTP for treatment and disposal. Currently, the design capacity of the El Dorado Hills WWTP is 3.0 mgd average dry-weather flow and 7.6 mgd peak wet-weather flow. As of 2007, the average dry weather flow is approximately 2.86 and the peak wet-weather flow is 8.04 mgd. Expansion of the WWTP is required to provide wastewater treatment capacity for land uses in El Dorado Hills as identified by the El Dorado County General Plan (2003), to meet anticipated regulatory requirements for water quality, and to help meet recycled water demands. The treatment plant is currently being expanded to 4.0 mgd, which is anticipated to be completed in December 2009. The full buildout of the treatment plant to 5.4 mgd is expected to occur by 2025.

The SPA was not included in the planned future capacity of the El Dorado Hills WWTP; therefore, the Centralized Development Alternative would potentially result in increased in wastewater flows that exceed treatment plant capacity. Any improvements the treatment plant would require additional analysis in a separate CEQA document to identify specific impacts and any required mitigation measures. Potential impacts that could result from improvements to the El Dorado Hills WWTP are described above. Because it is not known at this time if the existing El Dorado Hills WWTP has the capacity to treat wastewater flows generated by project development and what improvements would be required, the Centralized Development Alternative could result in **direct and indirect, potentially significant** impacts related to improvements to the El Dorado Hills WWTP. *[Lesser]*

Mitigation Measure: Implement Mitigation Measure 3A.16-5.

RHD

As shown in Table 3A.16-3, implementation of the Reduced Hillside Development Alternative would generate 0.23 mgd of average dry-weather flow and 0.59 mgd peak wet-weather flow within the EID service area (Zoller, pers. comm. 2009). The Reduced Hillside Development Alternative average-dry weather flow would be 0.05 mgd and peak-wet weather flow would be 0.11 mgd less than the Proposed Project Alternative.

Collected wastewater flows from the EID portion of the SPA would ultimately be transported to the El Dorado Hills WWTP for treatment and disposal. Currently, the El Dorado Hills WWTP's design capacity is 3.0 mgd average dry-weather flow and 7.6 mgd peak wet-weather flow. As of 2007, the average dry weather flow is approximately 2.86 and the peak wet-weather flow is 8.04 mgd. Expansion of the WWTP is required to provide wastewater treatment capacity for land uses in El Dorado Hills as identified by the El Dorado County General

Plan (2003), to meet anticipated regulatory requirements for water quality, and to help meet recycled water demands. The treatment plant is currently being expanded to 4.0 mgd, which is anticipated to be completed in December 2009. The full buildout of the treatment plant to 5.4 mgd is expected to occur by 2025.

The SPA was not included in the planned future capacity of the El Dorado Hills WWTP; therefore, the Reduced Hillside Development Alternative would potentially result in increased in wastewater flows that exceed treatment plant capacity. Any improvements the treatment plant would require additional analysis in a separate CEQA document to identify specific impacts and any required mitigation measures. Potential impacts that could result from improvements to the El Dorado Hills WWTP are described above. Because it is not known at this time if the existing El Dorado Hills WWTP has the capacity to treat wastewater flows generated by project development and what improvements would be required, the Reduced Hillside Development Alternative could result in **direct and indirect, potentially significant** impacts related to improvements to the El Dorado Hills WWTP. [*Lesser*]

Mitigation Measure: Implement Mitigation Measure 3A.16-5.

Off-Site Elements

Construction of the off-site freeway interchange improvements, sewer force main, and the detention basin in Sacramento County, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses that would increase demand for off-site EID wastewater collection and conveyance facilities. Therefore, **no direct or indirect** impacts would occur.

Mitigation Measure: No mitigation measures are required.

Implementation of Mitigation Measure 3A.16-5 would reduce significant impacts associated with increased demand for wastewater treatment plant facilities under the No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives to a **less-than-significant** level because adequate wastewater treatment facilities would be documented before approval final maps and issuance of building permits.

However, it is unknown if existing the El Dorado Hills WWTP has the capacity to accommodate wastewater flows generated by project development, and the project could directly and indirectly contribute to the need for El Dorado Hills WWTP improvements. Therefore, the No USACE Permit, Proposed Project, Resource Impact Minimization, Centralized Development, and Reduced Hillside Development Alternatives could contribute to the potentially significant environmental effects associated with improvements to treatment plant facilities for which feasible mitigation may not be available to reduce impacts to a less-than-significant level. Therefore, this would be a **potentially significant and unavoidable** impact.

IMPACT Short-Term Generation of Solid Waste during Project Construction. *Project construction would generate*
3A.16-6 *short-term construction-related debris and waste.*

On-Site and Off-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. Construction of 44 individual rural residences within a 3,500-acre area would represent a very small amount of construction-related debris and waste in the SPA. Solid waste generate from construction of these rural residences would be disposed of at the Keifer Landfill, and the Kiefer Landfill has sufficient permitted capacity to accommodate the disposal needs that would be generated under the No Project Alternative. Therefore, the 44 individual rural residences that could be built under the No Project Alternative would have a **direct, less-than-**

significant impact on short-term construction-related debris and waste; **no indirect** impacts would occur. *[Lesser]*

NCP, PP, RIM, CD, RHD

Project construction activities would occur at intervals over the 19-year buildout period. CIWMB calculates solid waste business generation rates based on Federal standard industrial classifications and averages of samples from individual businesses throughout California. CIWMB estimates that construction activities typically generate an average of approximately 3,258 tons per year of solid waste; therefore, construction activities would generate a total of 61,902 tons per year ($19 \times 3,258$) or 169.5 tpd over the buildout period (2011–2030) (CIWMB 2008e).

Solid waste generated by construction activities in the SPA and by construction of the off-site freeway interchanges improvements, the sewer force main, and the detention basin in Sacramento County and Folsom would be disposed of at the Kiefer Landfill. The landfill is permitted to accept 10,800 maximum tpd of solid waste with an average intake of 6,000 tpd. The estimated range of solid waste generated by construction activities (169.5 tpd) during the 19-year buildout period would be approximately 1.6% of the 10,800 maximum tpd that could be received at the landfill. 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.

In addition, the project would be required to comply with the County's Construction and Demolition Ordinance (Title 6, Chapter 6.20) and City's Construction and Demolition Recycling Ordinance (Title 8, Chapter 8.30). Contractors are required to document types of building materials and estimated quantities on a "Waste Management Plan" before obtaining building permits; within 30 days of project completion contractors must complete the "Waste Management Plan" to document the actual quantity of construction or demolition waste generated and demonstrate the actual quantities recycled, salvaged or reused, and/or disposed.

Any solid waste generated by construction of the two roadway connections into El Dorado Hills would be disposed of at the Lockwood Regional Landfill located in Sparks, Nevada. The Lockwood Regional Landfill receives 1.4 million tons of solid waste per year, with a daily average of 7,700 tons. The existing permit does not restrict the maximum daily and yearly tonnage that may be received by the landfill and the facility has a remaining capacity of 32.5 million tons. Currently, the landfill has a projected closure date of 2035. In addition, the roadway connections into El Dorado County would be required to comply with the County's Construction and Demolition Debris Recycling Ordinance (Title 8, Chapter 8.43). This ordinance requires that a "Debris Recycling Acknowledgment" be submitted for review and approval at the time of submitting an application for a building permit. Within 60 days after completion and/or occupancy, contractors must submit a "Debris Recycling Report" to document the actual quantity of construction or demolition wastes generated and demonstrate the actual quantities recycled, salvaged or reused, and/or disposed.

Because the Kiefer Landfill and the Lockwood Landfill have sufficient permitted capacity to accommodate short-term construction-related disposal needs for the on-site and off-site elements, and because the project would comply with the City's Construction and Demolition Debris Recycling Ordinance and County's Construction and Demolition Debris Recycling Ordinance, this **direct** impact is **less than significant**. **No indirect** impacts would occur. *[Similar]*

Mitigation Measure: No mitigation measures are required.

IMPACT 3A.16-7 Increased Long-Term Generation of Solid Waste. *Project implementation would increase long-term solid-waste generation.*

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. Construction of 44 individual rural residences could potentially generate an increased population of 128 persons in Sacramento County. Based on CIWMB's generation rates for Sacramento County (0.36 ton per resident per year), the estimated total population for the No Project Alternative (128 persons) would generate approximately 46.1 tons of solid waste per year (0.36×128), or 0.1 tpd, which would be 32,493 tons per year (89.0 tpd) less than would be generated under the Proposed Project Alternative.

As described above, solid waste collected from the SPA would be hauled to the Kiefer Landfill, which is permitted to accept 10,800 maximum tpd of solid waste. The estimated 0.1 tpd of solid waste generated by the No Project Alternative would be approximately 0.0001% of the 10,800 maximum tpd that could be received at the landfill. Therefore, this landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the No Project Alternative, and this would be a **direct, less-than-significant** impact on construction-related soil erosion; **no indirect** impacts would occur. *[Lesser]*

NCP

Based on the CIWMB's generation rates for Sacramento County, the estimated total population for the No USACE Permit Alternative (15,808) would generate approximately 5,691 tons of solid waste per year ($0.36 \times 15,808$), or 15.6 tpd. The No USACE Permit Alternative would generate a maximum of approximately 13,021 jobs over the 19-year buildout period. Based on an average generation rate of 1.8 tons per employee per year, the No USACE Permit Alternative would generate 23,438 tons of waste per year ($1.8 \times 13,021$) or 64.2 tpd in the SPA. As shown on Table 3A.16-4, combining residential and business solid-waste generation, the total solid-waste generation for the No USACE Permit Alternative would be approximately 29,399 tons per year (80.7 tpd), which would be 3,140 tons per year (9.3 tpd) less than would be generated under the Proposed Project Alternative. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed.

Solid waste collected from the SPA would be hauled to the Kiefer Landfill, which is permitted to accept 10,800 maximum tpd of solid waste. The estimated 79.8 tpd of solid waste generated by the No USACE Permit Alternative would be approximately 0.7% of the 10,800 maximum tpd that could be received at the landfill. Therefore, this landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the No USACE Permit Alternative. Development of the No USACE Permit Alternative would also be required to comply with all Federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this **direct** impact is considered **less than significant**. **No indirect** impacts would occur. *[Lesser]*

Mitigation Measure: No mitigation measures are required.

PP

Based on CIWMB's generation rates for Sacramento County (0.36 ton per resident per year), the estimated total population for the Proposed Project Alternative (24,335 persons) would generate approximately 8,761 tons of solid waste per year ($0.36 \times 24,335$), or 24.0 tpd.

The Proposed Project Alternative would generate a maximum of approximately 13,210 jobs over the 19-year buildout period. The employees in the SPA would be working in jobs within designated waste categories such as commercial/retail stores (0.3 ton of waste per employee per year), other professional services (1.2 tons of waste per employee per year), business services (1.7 tons of waste per employee per year), and restaurants (3.1 tons of waste per employee per year). To estimate a single business waste–disposal rate for project development, the two anticipated extremes among the categories (0.3 ton and 3.1 tons per employee per year) were averaged, resulting in a generation rate of 1.8 tons per employee per year. An average business waste disposal rate of 1.8 tons per employee per year results in generation of 23,778 tons of waste per year ($1.8 \times 13,210$) or 65.1 tpd in the SPA.

As shown on Table 3A.16-4, combining residential and business solid-waste generation, total solid-waste generation for the Proposed Project Alternative would be approximately 32,539 tons per year (89.1 tpd). Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed. As described above, solid waste collected from the SPA would be hauled to the Kiefer Landfill, which is permitted to accept 10,800 maximum tpd of solid waste. The estimated 89.1 tpd of solid waste generated by the Proposed Project Alternative would be approximately 0.8% of the 10,800 maximum tpd that could be received at the landfill. Therefore, this landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Proposed Project Alternative. Development of the Proposed Project Alternative would also be required to comply with all Federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this **direct** impact is considered **less than significant**. **No indirect** impacts would occur.

Mitigation Measure: No mitigation measures are required.

RIM

Based on the CIWMB's generation rates for Sacramento County, the estimated total population for the Resource Impact Minimization Alternative (19,584 people) would generate approximately 7,050 tons of solid waste per year ($0.36 \times 19,584$), or 19.3 tpd. The Resource Impact Minimization Alternative would generate a maximum of approximately 9,749 jobs over the 19-year buildout period. Based on an average generation rate of 1.8 tons per employee per year, the Resource Impact Minimization Alternative would generate 17,548 tons of waste per year ($1.8 \times 9,749$) or 48.0 tpd in the SPA. As shown on Table 3A.16-4, combining residential and business solid-waste generation, the total solid-waste generation for the Resource Impact Minimization Alternative would be approximately 24,598 tons per year (67.3 tpd), which would be 7,950 tons per year (21.8 tpd) less than would be generated under the Proposed Project Alternative. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed.

Solid waste collected from the SPA would be hauled to the Kiefer Landfill, which is permitted to accept 10,800 maximum tpd of solid waste. The estimated 67.3 tpd of solid waste generated by the Resource Impact Minimization Alternative would be approximately 0.6% of the 10,800 maximum tpd that could be received at the landfill. Therefore, this landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Resource Impact Minimization Alternative. Development of the Resource Impact Minimization Alternative would also be required to comply with all Federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this **direct** impact is considered **less than significant**. **No indirect** impacts would occur. [*Lesser*]

Mitigation Measure: No mitigation measures are required.

CD

Based on the CIWMB's generation rates for Sacramento County, the estimated total population for the Centralized Development Alternative (20,689) would generate approximately 7,448 tons of solid waste per year ($0.36 \times 20,689$), or 20.4 tpd. The Centralized Development Alternative would generate a maximum of approximately 16,860 jobs over the 19-year buildout period. Based on an average generation rate of 1.8 tons per

employee per year, the Centralized Development Alternative would generate 30,348 tons of waste per year ($1.8 \times 16,860$) or 83.1 tpd in the SPA. As shown on Table 3A.16-4, combining residential and business solid-waste generation, the total solid-waste generation for the Centralized Development Alternative would be approximately 37,796 tons per year (103.5 tpd), which would be 5,257 tons per year (14.4 tpd) more than would be generated under the Proposed Project Alternative. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed.

Solid waste collected from the SPA would be hauled to the Kiefer Landfill, which is permitted to accept 10,800 maximum tpd of solid waste. The estimated 103.5 tpd of solid waste generated by the Centralized Development Alternative would be approximately 1.0% of the 10,800 maximum tpd that could be received at the landfill. Therefore, this landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Centralized Development Alternative. Development of the Centralized Development Alternative would also be required to comply with all Federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this **direct** impact is considered **less than significant**. **No indirect** impacts would occur. *[Greater]*

Mitigation Measure: No mitigation measures are required.

RHD

Based on the CIWMB's generation rates for Sacramento County, the estimated total population for the Reduced Hillside Development Alternative (25,022) would generate approximately 9,008 tons of solid waste per year ($0.36 \times 25,022$), or 24.7 tpd. The Reduced Hillside Development Alternative would generate a maximum of approximately 17,484 jobs over the 19-year buildout period. Based on an average generation rate of 1.8 tons per employee per year, the Reduced Hillside Development Alternative would generate 31,471 tons of waste per year ($1.8 \times 17,484$) or 86.2 tpd in the SPA. As shown on Table 3A.16-4, combining residential and business solid-waste generation, the total solid-waste generation for the Reduced Hillside Development Alternative would be approximately 40,479 tons per year (110.9 tpd), which would be 7,940 tons per year (21.8 tpd) more than would be generated under the Proposed Project Alternative. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed.

Solid waste collected from the SPA would be hauled to the Kiefer Landfill, which is permitted to accept 10,800 maximum tpd of solid waste. The estimated 110.9 tpd of solid waste generated by the Reduced Hillside Development Alternative would be approximately 1.0% of the 10,800 maximum tpd that could be received at the landfill. Therefore, this landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Reduced Hillside Development Alternative. Development of the Reduced Hillside Development Alternative would also be required to comply with all Federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this **direct** impact is considered **less than significant**. **No indirect** impacts would occur. *[Greater]*

Mitigation Measure: No mitigation measures are required.

Off-Site Elements

Construction of the off-site freeway interchange improvements, the sewer force main, the detention basin in Sacramento County, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses. Therefore, the off-site elements would have **no direct** or **indirect** impact on increased long-term generation of solid waste.

Mitigation Measure: No mitigation measures are required.

IMPACT Increased Demand for Electricity and Infrastructure. *Project implementation would increase the demand*
3A.16-8 *for electricity and electrical infrastructure.*

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. Construction of 44 individual rural residences within a 3,500-acre area would represent a very small increase in demand for electricity. The proposed dwelling units would require an average of 0.1 MVA (megavolt amperes) and a peak demand of 0.2 MVA. The average electrical demands of the No Project Alternative would be 39.6 MVA and peak electrical demands would be 87.1 MVA less than the Proposed Project Alternative.

Individual property owners would be required to coordinate with SMUD to obtain electrical service. Because the 44 individual rural residences that could be built under the No Project Alternative would result in minimal increases in demand for electricity and because individual property owners would coordinate with SMUD regarding service, this **direct** impact is considered **less than significant**. **No indirect** impacts would occur. *[Lesser]*

NCP

Buildout of the No USACE Permit Alternative would increase electrical demand in the SMUD service area by an average of 35.7 MVA with a peak demand of 78.0 MVA (Table 3A.16-5). This alternative would have an average electrical demand of 4.0 MVA and peak electrical demand of 9.3 MVA less than the Proposed Project Alternative.

SMUD currently has existing capacity to serve the project from its electrical distribution system north of U.S. 50. To serve the remainder of the SPA, SMUD has determined that a minimum of three distribution substations would be required to serve project development as described above (Kim, pers. comm., 2009). The on-site service lines would be sized to meet the demands of project development, and public utility easements would be dedicated for all underground facilities. SMUD would extend lines and construct facilities to serve the SPA concurrently with development phases, and the location of this infrastructure would be identified in the final project design. As part of the project approval process, the project applicants of all project phases would coordinate with and meet the requirements of SMUD regarding the extension and locations of on-site infrastructure.

The proposed electrical-utility improvements would be required to comply with all existing City and SMUD requirements, and applicable requirements of the California Building Standards Code. Because SMUD would meet the electrical demands of the No USACE Permit Alternative and provide new electrical infrastructure to the SPA, this **direct** impact is **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. *[Lesser]*

Mitigation Measure: No mitigation measures are required.

PP

Implementation of the Proposed Project Alternative would increase electrical demand in the SPA. Electrical service in Folsom is provided by SMUD through 473 miles of transmission lines (110 kV or more) and 9,784 miles of distribution lines (typically 12 kV). As shown on Table 3A.16-5, buildout of the Proposed Project Alternative would increase in electrical demand in the SMUD service area by an average of 39.7 MVA with and a peak demand of 87.3 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).

SMUD currently has the following electrical infrastructure on and in the vicinity of the SPA: a 69-kV overhead single-circuit transmission line located in the south-central portion of the SPA, a 69-kV single-circuit transmission line that extends south and west along Prairie City Road until it reaches White Rock Road, a 69-kV single-circuit transmission line that extends south from U.S. 50 on the east side of Placerville Road where it terminates just within the SPA, and a 12-kV overhead transmission line that extends north from White Rock Road along the east side of Placerville Road to U.S. 50.

SMUD currently has existing capacity to serve the Proposed Project Alternative from its electrical distribution system north of U.S. 50 (Capitol Utility Specialists 2009:5). To serve the remainder of the SPA, SMUD has determined that a minimum of three distribution substations would be required to serve the proposed development (Kim, pers. comm., 2009). These substations would be located in the vicinity of Easton Valley Parkway and Rowberry Drive, near the intersection of White Rock Road and Scott Road, and along Placerville Road just north of Easton Valley Road. Each substation would have two 25 MVA and eight underground 12-kV mainline circuits. Electrical distribution feeders would extend from these substations to serve the SPA (Capitol Utility Specialists 2009:4).

A new 69-kV overhead transmission line would be constructed along 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 (Kim, pers. comm., 2009). SMUD would install new electrical mainline facilities and underground the existing 12-kV overhead transmission line concurrently with improvements to White Rock Road (Capitol Utility Specialists 2009:3). SMUD would conduct a separate CEQA analysis to analyze specific impacts and identify any required mitigation measures for construction and operation of new off-site electrical facilities.

The on-site service lines would be sized to meet the demands of project development, and public utility easements would be dedicated for all underground facilities. SMUD would extend lines and construct facilities to serve the SPA concurrently with development phases, and the location of this infrastructure would be identified in the final project design. As part of the project approval process, the project applicant(s) of all project phases would coordinate with and meet the requirements of SMUD regarding the extension and locations of on-site infrastructure (as more fully described in Chapter 2, “Alternatives”).

The proposed electrical-utility improvements would be required to comply with all existing City and SMUD requirements, and applicable requirements of the California Building Standards Code. Because SMUD would meet the electrical demands of the Proposed Project Alternative and provide new electrical infrastructure to the SPA, this **direct** impact is **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development.

Mitigation Measure: No mitigation measures are required.

RIM

Buildout of the Resource Impact Minimization Alternative would increase electrical demand in the SMUD service area by an average of 34.5 MVA with a peak demand of 75.9 MVA (Table 3A.16-5). This alternative would have an average electrical demand of 5.2 MVA and peak electrical demand of 11.4 MVA less than the Proposed Project Alternative.

SMUD currently has existing capacity to serve the project from its electrical distribution system north of U.S. 50. To serve the remainder of the SPA, SMUD has determined that a minimum of three distribution substations would be required to serve the project development, as described above (Kim, pers. comm., 2009). The on-site service lines would be sized to meet the demands of project development, and public utility easements would be

dedicated for all underground facilities. SMUD would extend lines and construct facilities to serve the SPA concurrently with development phases, and the location of this infrastructure would be identified in the final project design. As part of the project approval process, the project applicants of all project phases would coordinate with and meet the requirements of SMUD regarding the extension and locations of on-site infrastructure.

The proposed electrical-utility improvements would be required to comply with all existing City and SMUD requirements, and applicable requirements of the California Building Standards Code. Because SMUD would meet the electrical demands of the Resource Impact Minimization Alternative and provide new electrical infrastructure to the SPA, this **direct** impact is **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. *[Lesser]*

Mitigation Measure: No mitigation measures are required.

CD

Buildout of the Centralized Development Alternative would increase electrical demand in the SMUD service area by an average of 45.1 MVA with a peak demand of 97.1 MVA (Table 3A.16-5). This alternative would have an average electrical demand of 5.4 MVA and peak electrical demand of 9.8 MVA more than the Proposed Project Alternative.

SMUD currently has existing capacity to serve the project from its electrical distribution system north of U.S. 50. To serve the remainder of the SPA, SMUD has determined that a minimum of three distribution substations would be required to serve the project development as described above (Kim, pers. comm., 2009). The on-site service lines would be sized to meet the demands of project development, and public utility easements would be dedicated for all underground facilities. SMUD would extend lines and construct facilities to serve the SPA concurrently with development phases, and the location of this infrastructure would be identified in the final project design. As part of the project approval process, the project applicants of all project phases would coordinate with and meet the requirements of SMUD regarding the extension and locations of on-site infrastructure.

The proposed electrical-utility improvements would be required to comply with all existing City and SMUD requirements, and applicable requirements of the California Building Standards Code. Because SMUD would meet the electrical demands of the Centralized Development Alternative and provide new electrical infrastructure to the SPA, this **direct** impact is **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. *[Greater]*

Mitigation Measure: No mitigation measures are required.

RHD

Buildout of the Reduced Hillside Development Alternative would increase electrical demand in the SMUD service area by an average of 52.0 MVA with a peak demand of 111.5 MVA (Table 3A.16-5). This alternative would have an average electrical demand of 12.3 MVA and peak electrical demand of 24.2 MVA more than the Proposed Project Alternative.

SMUD currently has existing capacity to serve the project from its electrical distribution system north of U.S. 50. To serve the remainder of the SPA, SMUD has determined that a minimum of three distribution substations would be required to serve project developed as described above (Kim, pers. comm., 2009). The on-site service lines would be sized to meet the demands of project development, and public utility easements would be

dedicated for all underground facilities. SMUD would extend lines and construct facilities to serve the SPA concurrently with development phases, and the location of this infrastructure would be identified in the final project design. As part of the project approval process, the project applicants of all project phases would coordinate with and meet the requirements of SMUD regarding the extension and locations of on-site infrastructure.

The proposed electrical-utility improvements would be required to comply with all existing City and SMUD requirements, and applicable requirements of the California Building Standards Code. Because SMUD would meet the electrical demands of the Reduced Hillside Development Alternative and provide new electrical infrastructure to the SPA, this **direct** impact is **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. *[Greater]*

Mitigation Measure: No mitigation measures are required.

Off-Site Elements

Construction of the off-site freeway interchange improvements, the sewer force main, the detention basin in Sacramento County, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses. Therefore, there would be no increased demand for electricity and infrastructure, and **no direct** or **indirect** impacts would occur.

Mitigation Measure: No mitigation measures are required.

IMPACT **Increased Demand for Natural Gas and Infrastructure.** *Project implementation would increase the demand*
3A.16-9 *for natural gas and infrastructure and would include the extension of existing natural gas pipelines.*

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. Construction of 44 individual rural residences within a 3,500-acre area would represent a very small increase in demand for natural gas. The proposed dwelling units would require 2.2 thousand cubic feet per hour (MCFH) of natural gas, which is approximately 816.1 MCFH less than the Proposed Project Alternative.

Individual property owners would be required to coordinate with PG&E to obtain natural gas service. Because the 44 individual rural residences that could be built under the No Project Alternative would result in minimal increases in demand for natural gas and because individual property owners would coordinate with PG&E regarding service, this **direct** impact is considered **less than significant**. **No indirect** impacts would occur. *[Lesser]*

NCP

Buildout of the No USACE Permit Alternative would increase natural gas demands by 655.9 MCFH in the PG&E service area (Table 3A.16-5). This would be approximately 162.4 MCFH less than the Proposed Project Alternative.

Project implementation would require connection to the existing service lines with the ultimate configuration to be approved by PG&E. Two additional transmission mains and two natural gas regulator stations would also be

installed by PG&E to provide service to the project at full build-out. PG&E currently has capacity in its system to serve the SPA (Capitol Utilities Specialists 2009:6).

It is anticipated that 4-inch, 6-inch, and 8-inch transmission mains would be installed in major roadways throughout the SPA and 2-inch transmission mains would be installed in residential areas (Capitol Utilities Specialists 2009:7). The on-site service lines would be sized to meet the project demands, and public utility easements would be dedicated for all underground facilities. PG&E would extend lines and construct facilities to serve the SPA concurrently with development phases, and the location of this infrastructure would be identified in the final project design. As part of the project approval process, the project applicant(s) of all project phases would coordinate with and meet the requirements of PG&E regarding the extension and locations of on-site infrastructure.

Because PG&E is able to provide natural gas and associated infrastructure to the SPA under the No USACE Permit Alternative, and because the increase in demand for natural gas would not be substantial in relation to existing natural-gas consumption in PG&E's service area, this impact would be considered **direct** and **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. [*Lesser*]

Mitigation Measure: No mitigation measures are required.

PP

Implementation of the Proposed Project Alternative would increase natural gas demand in the SPA. Natural gas service in Folsom is provided by PG&E through portions of PG&E's 46,000 miles of natural gas distribution pipelines. Buildout of the Proposed Project Alternative would increase natural gas demands by 818.3 MCFH in the PG&E service area (Table 3A.16-5).

PG&E currently has capacity in its system to serve the SPA (Capitol Utilities Specialists 2009:6). Existing natural gas transmission mains in the vicinity of the SPA include: a 6-inch transmission main on the west side of Prairie City Road north of U.S. 50, a 4-inch transmission main on Oak Avenue north of U.S. 50, a 6-inch transmission main at the intersection of East Bidwell Street and Iron Point Road, an 8-inch transmission main on Placerville Road north of U.S. 50, and a 6-inch transmission main at Stonebriar Road and White Rock Road. As described in detail in Chapter 2, "Alternatives," project implementation would require extensions of these existing service lines with the ultimate configuration to be approved by PG&E. Two additional transmission mains and two natural gas regulator stations would also be installed by PG&E to provide service to the project at full build-out.

It is anticipated that 4-inch, 6-inch, and 8-inch transmission mains would be installed in major roadways throughout the SPA and 2-inch transmission mains would be installed in residential areas (Capitol Utilities Specialists 2009:7). Public utility easements would be dedicated for all underground facilities. PG&E would extend lines and construct facilities to serve the SPA concurrently with development phases, and the location of this infrastructure would be identified in the final project design. As part of the project approval process, the project applicant(s) of all project phases would coordinate with and meet the requirements of PG&E regarding the extension and locations of on-site infrastructure.

Because PG&E is able to provide natural gas and associated infrastructure to the SPA under the Proposed Project Alternative, and because the increase in demand for natural gas would not be substantial in relation to existing natural-gas consumption in PG&E's service area, this impact would be considered **direct** and **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development.

Mitigation Measure: No mitigation measures are required.

RIM

Buildout of the Resource Impact Minimization Alternative would increase natural gas demands by 694.2 MCFH in the PG&E service area (Table 3A.16-5). This would be approximately 124.1 MCFH less than the Proposed Project Alternative.

Project implementation would require connections to the existing service lines with the ultimate configuration to be approved by PG&E. Two additional transmission mains and two natural gas regulator stations would also be installed by PG&E to provide service to the project at full build-out. PG&E currently has capacity in its system to serve the SPA (Capitol Utilities Specialists 2009:6).

It is anticipated that 4-inch, 6-inch, and 8-inch transmission mains would be installed in major roadways throughout the SPA and 2-inch transmission mains would be installed in residential areas (Capitol Utilities Specialists 2009:7). The on-site service lines would be sized to meet the project demands, and public utility easements would be dedicated for all underground facilities. PG&E would extend lines and construct facilities to serve the SPA concurrently with development phases, and the location of this infrastructure would be identified in the final project design. As part of the project approval process, the project applicant(s) of all project phases would coordinate with and meet the requirements of PG&E regarding the extension and locations of on-site infrastructure.

Because PG&E is able to provide natural gas and associated infrastructure to the SPA under the Resource Impact Minimization Alternative, and because the increase in demand for natural gas would not be substantial in relation to existing natural-gas consumption in PG&E's service area, this impact would be considered **direct** and **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. [*Lesser*]

Mitigation Measure: No mitigation measures are required.

CD

Buildout of the Centralized Development Alternative would increase natural gas demands by 837.7 MCFH in the PG&E service area (Table 3A.16-5). This would be approximately 19.4 MCFH more than the Proposed Project Alternative.

Project implementation would require connections to the existing service lines with the ultimate configuration to be approved by PG&E. Two additional transmission mains and two natural gas regulator stations would also be installed by PG&E to provide service to the project at full build-out. PG&E currently has capacity in its system to serve the SPA (Capitol Utilities Specialists 2009:6).

It is anticipated that 4-inch, 6-inch, and 8-inch transmission mains would be installed in major roadways throughout the SPA and 2-inch transmission mains would be installed in residential areas (Capitol Utilities Specialists 2009:7). The on-site service lines would be sized to meet the project demands, and public utility easements would be dedicated for all underground facilities. PG&E would extend lines and construct facilities to serve the SPA concurrently with development phases, and the location of this infrastructure would be identified in the final project design. As part of the project approval process, the project applicant(s) of all project phases would coordinate with and meet the requirements of PG&E regarding the extension and locations of on-site infrastructure.

Because PG&E is able to provide natural gas and associated infrastructure to the SPA under the Centralized Development Alternative, and because the increase in demand for natural gas would not be substantial in relation to existing natural-gas consumption in PG&E's service area, this impact would be considered **direct** and **less than**

significant. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. *[Greater]*

Mitigation Measure: No mitigation measures are required.

RHD

Buildout of the Reduced Hillside Development Alternative would increase natural gas demands by 978.6 MCFH in the PG&E service area (Table 3A.16-5). This would be approximately 160.3 MCFH more than the Proposed Project Alternative.

Project implementation would require connections to the existing service lines with the ultimate configuration to be approved by PG&E. Two additional transmission mains and two natural gas regulator stations would also be installed by PG&E to provide service to the project at full build-out. PG&E currently has capacity in its system to serve the SPA (Capitol Utilities Specialists 2009:6).

It is anticipated that 4-inch, 6-inch, and 8-inch transmission mains would be installed in major roadways throughout the SPA and 2-inch transmission mains would be installed in residential areas (Capitol Utilities Specialists 2009:7). The on-site service lines would be sized to meet the project demands, and public utility easements would be dedicated for all underground facilities. PG&E would extend lines and construct facilities to serve the SPA concurrently with development phases, and the location of this infrastructure would be identified in the final project design. As part of the project approval process, the project applicant(s) of all project phases would coordinate with and meet the requirements of PG&E regarding the extension and locations of on-site infrastructure.

Because PG&E is able to provide natural gas and associated infrastructure to the SPA under the Reduced Hillside Development Alternative, and because the increase in demand for natural gas would not be substantial in relation to existing natural-gas consumption in PG&E's service area, this impact would be considered **direct** and **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. *[Greater]*

Mitigation Measure: No mitigation measures are required.

Off-Site Elements

Construction of the off-site freeway interchange improvements, the sewer force main, the drainage basin in Sacramento County, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses. Therefore, there would be no increased demand for natural gas and infrastructure, and **no direct** or **indirect** impacts would occur.

Mitigation Measure: No mitigation measures are required.

IMPACT **Increased Demand for Telecommunications Service and Infrastructure.** *Project implementation would increase the demand for telecommunications service and infrastructure and would include the extension of existing telecommunication lines.*
3A.16-10

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be

constructed. Construction of 44 individual rural residences within a 3,500-acre area would represent a very small increase in demand for telecommunications service in the SPA. Individual property owners would be required to coordinate with AT&T or other service provider to obtain telecommunications service. Because the 44 individual rural residences that could be built under the No Project Alternative would result in minimal increases in communications service and because individual property owners would coordinate with the service provider(s) regarding service, this **direct** impact is considered **less than significant**. **No indirect** impacts would occur. *[Lesser]*

NCP, PP, RIM, CD, RHD

AT&T would provide telecommunications service and associated infrastructure to the SPA. Currently, there are no existing telephone lines in the SPA. AT&T has existing underground telephone lines extending east from Prairie City Road along both side of White Rock Road. In addition, AT&T has existing overhead fiber optic cable that extends west from the El Dorado County line and parallels U.S. 50 on the south side, where it connects to SMUD's 12kV overhead transmission line.

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 (Capitol Utility Specialists 2009:7). New infrastructure would generally be placed within the rights-of-way of on-site streets. Extension of lines to serve the SPA would occur concurrently with development phases, and the location of this infrastructure would be identified in the final project design as part of the project approval process.

Because AT&T has capacity to provide service and because the project applicant(s) of all project phases would coordinate with AT&T regarding the extension and locations of on-site infrastructure, this **direct** impact is **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. *[Similar]*

Mitigation Measure: No mitigation measures are required.

Off-Site Elements

Construction of the off-site freeway interchange improvements, the sewer force main, the detention basin in Sacramento County, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses. Therefore, there would be no increased demand for telecommunications service and infrastructure, and **no direct** or **indirect** impacts would occur.

Mitigation Measure: No mitigation measures are required.

IMPACT Increased Demand for Cable Television and Communications Service and Infrastructure. *Project*
3A.16-11 *implementation would increase the demand for cable television service and infrastructure and would include the extension of existing cable television lines.*

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. Construction of 44 individual rural residences within a 3,500-acre area would represent a very small increase in demand for cable television service in the SPA. Individual property owners would be required to coordinate with the cable television and communications service provider to obtain cable television service.

Because the 44 individual rural residences that could be built under the No Project Alternative would result in minimal increases in cable television service and because individual property owners would coordinate with the cable television/communications service provider regarding service, this **direct** impact is considered **less than significant**. No **indirect** impacts would occur. *[Lesser]*

NCP, PP, RIM, CD, RHD

Cable television, communications, and infrastructure would be provided by Comcast. Currently, there are no existing cable television facilities in the SPA. In the vicinity of the SPA, Comcast has existing facilities on Prairie City Road and along Iron Point Road north of U.S. 50. These facilities could be extended to serve the SPA. Another service option could include extending overhead on SMUD's existing 12kV overhead transmission line near U.S. 50 and Empire Ranch Road (Capitol Utility Specialists 2009:8).

Comcast would install a fiber-optic/coaxial cable hybrid system in the SPA. New infrastructure would generally be placed within the rights-of-way of on-site streets. Extension of lines to serve the SPA would occur concurrently with development phases, and the location of this infrastructure would be identified in the final project design as part of the project approval process. Because Comcast has the capacity to serve project development, and because the project applicant(s) of all project phases would coordinate with Comcast regarding the extension and locations of on-site infrastructure, this **direct** impact is considered **less than significant**. The **indirect** physical impacts of constructing these facilities are addressed throughout this EIR/EIS in connection with discussions of the impacts of overall site development. *[Similar]*

Mitigation Measure: No mitigation measures are required.

Off-Site Elements

Construction of the off-site freeway interchange improvements, the sewer force main, the detention basin in Sacramento County, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses. Therefore, there would be no increased demand for cable television and communications service and infrastructure, and **no direct** or **indirect** impacts would occur.

Mitigation Measure: No mitigation measures are required.

IMPACT Increased Energy Demand. *Project implementation would increase energy consumption during construction and operation.*
3A.16-12

On-Site Elements

NP

Under the No Project Alternative, development of up to 44 rural residences could occur under the existing Sacramento County agricultural zoning classification AG-80, and no off-site water facilities would be constructed. Construction of 44 individual rural residences within a 3,500-acre area would increase the consumption of energy during project-related construction activities. Energy in the form of fuel and electricity would be consumed during this period by construction vehicles and equipment, trucks delivering equipment and supplies, and construction worker commute trips. No unusual characteristics are expected that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the Sacramento region. The 44 individual rural residences that could be built under the No Project Alternative would result in minimal increases in demand for energy related to heating and cooling systems, lighting, appliances, and other miscellaneous energy requirements. Therefore, this **direct** impact is considered **less than significant**. No **indirect** impacts would occur. *[Lesser]*

Project implementation would increase the consumption of energy for the duration of the project's construction and operation in the form of electricity, natural gas, and petroleum products. The primary energy demands during construction would be associated with construction vehicle fueling over the 19-year construction period. Energy in the form of fuel and electricity would be consumed during this period by construction vehicles and equipment operating on the site, trucks delivering equipment and supplies to the site, and construction workers driving to and from the site. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the Sacramento region. Therefore, it is expected that construction fuel consumption associated with the project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Energy would also be used for project operation related to heating and cooling systems, lighting, appliances, and other miscellaneous energy requirements. Design guidelines incorporated into the project identify energy conservation measures that would minimize inefficient energy usage and promote conservation of energy resources. These measures include:

- ▶ Incorporating site design measures that reduce heating and cooling needs by effectively orienting buildings toward southern exposures;
- ▶ Incorporating high-quality, energy efficient glazing to reduce heat loss and gain;
- ▶ Installing energy efficient appliances, windows, insulation; solar technology such as rooftop photovoltaic cell arrays; automatic lighting and thermostat features; and other available technologies to reduce energy demands; and
- ▶ Designing commercial and civic building and residential dwelling unit to allow for the possible installation of alternative energy technologies including active solar, wind, or other emerging technologies.

The project would comply with Building Energy Efficiency Standards included in Title 24 of the California Code of Regulations. Title 24 identifies specific energy efficiency requirements for building construction and systems operations that are intended to provide for efficient energy usage over the long-term.

Energy consumption would also be associated with vehicle trips resulting from residents and workers commuting on and off the SPA to jobs and commercial services. The project would provide residential land uses and a wide range of commercial services and employment opportunities for future residents in the SPA, reducing the need to travel outside the SPA. The design and placement of commercial and industrial land uses would result in the ability of employees to walk to convenience services and would provide nearby access to a system of walking trails and public transportation. An Air Quality Management Plan is currently being prepared that identifies measures that are intended to minimize air quality impacts associated with the project's vehicle trip generation. In addition to reducing the project's air quality impacts, these measures would also reduce the project's overall energy consumption.

Because the project would incorporate the design measures described above, comply with Building Energy Efficiency Standards (Title 24 of the California Code of Regulations), and implement an Air Quality Management Plan, the project would not be expected to cause the inefficient, wasteful or unnecessary consumption of energy, and this **direct** impact is considered **less than significant**. The **indirect** impacts associated with consumption of energy (e.g., construction of additional power generation plants and impacts associated therewith such as increased consumption of water at the plants, loss of biological habitat or cultural resources as result of power plant construction, etc.) are **uncertain** and are too far removed in place and time from the project to allow for a meaningful evaluation of impacts. Therefore, it would be too speculative to reach an impact conclusion regarding these indirect impacts. *[Similar]*

Mitigation Measure: No mitigation measures are required.

Off-Site Elements

Construction of the off-site freeway interchange improvements, the sewer force main, the detention basin, and the two roadway connections into El Dorado Hills would increase the consumption of energy during project-related construction activities. Energy in the form of fuel and electricity would be consumed during this period by construction vehicles and equipment, trucks delivering equipment and supplies, and construction worker commute trips. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the Sacramento region. Therefore, it is expected that construction fuel consumption associated with the project-related off-site elements would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

The off-site freeway interchange improvements, the sewer force main, the detention basin, and the two roadway connections into El Dorado Hills would not involve construction of new housing or development of new businesses that would lead to an increase in residents or employees in the area and thus result in an increase in energy consumption. Therefore, there would be minimal amounts of increased energy demand during construction, and this **direct** impact is considered **less than significant**. **No indirect** impacts would occur.

Mitigation Measure: No mitigation measures are required.

3A.16.4 RESIDUAL SIGNIFICANT IMPACTS

Impacts associated with increased demand for SRCSD off-site wastewater collection and conveyance facilities; increased temporary and short-term and long-term generation of solid waste; and increased demands for electrical, natural gas, and communications service and infrastructure are considered less than significant. Therefore, there would be no residual significant impacts with respect to these issue areas. Implementation of mitigation measures contained in this section would reduce impacts associated with increased demand for on-site wastewater collection and conveyance facilities and the off-site force main to a less-than-significant level.

The project would increase demand for EID wastewater collection and conveyance facilities and the El Dorado Hills WWTP facilities. It is unknown if existing EID wastewater collection and conveyance facilities and El Dorado Hills WWTP facilities have the capacity to accommodate wastewater flows generated by project development, and project development could directly and indirectly contribute to the need for wastewater collection and conveyance facilities and treatment plant improvements. Therefore, the project could contribute to currently unknown but potentially significant environmental impacts associated with improvements to treatment plant facilities for which feasible mitigation may not be available to reduce impacts to a less-than-significant level, resulting in potentially significant and unavoidable residual impacts.

In addition, project implementation would increase demand for SRWTP facilities and would contribute to the need to expand the SRWTP; therefore, the project would contribute indirectly to one significant and unavoidable impact (related to air quality) identified in the 2020 Master Plan EIR. Therefore, a residual significant and unavoidable impact would occur.

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