3.16 UTILITIES AND SERVICE SYSTEMS

3.16.1 AFFECTED ENVIRONMENT

WASTEWATER COLLECTION AND TREATMENT

The SPA is presently not served by any municipal wastewater collection and treatment systems. Sanitary-sewer service for the SPA would be provided by Sacramento Regional County Sanitation District (SRCSD). The following discussion provides an overview of the SRCSD wastewater collection, conveyance, and treatment facilities that would serve the SPA. Proposed facilities are shown on Exhibit 2-16 in Chapter 2, "Alternatives."

Wastewater Collection

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 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.

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 program level in the *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Draft Program Environmental Impact Report* (State Clearinghouse [SCH] #2001112085). The EIR was certified by Sacramento County and the master plan was approved in March 2003.

The purpose of the *SRCSD Interceptor System Master Plan 2000* (SRCSD 2003a) (SRCSD Interceptor Master Plan 2000) 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 information regarding population growth, wastewater flow generation, and actual system responses to wet weather.

The wastewater flows generated by the Proposed Project Alternative have been planned for in the SRCSD Interceptor Master Plan 2000. The master plan determined that the SPA as well as the Anatolia III residential development, the southern portion of the Ranch at Sunridge, and the northern portion of the Arboretum Specific Plan area would generate an average dry-weather flow of 7.40 mgd and a peak wet-weather flow of 16.54 mgd (SRCSD 2003a:Table 3-1). The master plan assumes buildout of these areas would be beyond the plan's 2020 planning horizon; however, the wastewater flows generated by these areas at buildout were planned for and evaluated in the master plan.

Project-related wastewater flows would be conveyed from the SPA to the SRWTP via the Laguna Creek Interceptor (LCI) Sections 1–5. A proposed LCI alignment was identified in the SRCSD Interceptor Master Plan 2000, and the environmental impacts of the construction of the interceptor were analyzed at a program level in the SRCSD Interceptor Master Plan 2000 EIR. The master plan anticipated that Section 1 of the LCI would be in service by early 2012, and Sections 2–5 would follow with a new section coming online every 4 years. The date that this interceptor would be constructed and in service is currently unknown.

The SunCreek project would construct that portion of LCI Section 5 that is within the SPA, the environmental impacts of which are evaluated throughout this DEIR/DEIS. Until Sections 1–4 of the LCI are constructed, SunCreek-generated wastewater flows would be conveyed from Section 5 of the LCI through existing gravity sewer pipelines and sewer force mains to the Anatolia III and/or Chrysanthy Boulevard sewer pump stations and then to the Northwest, Mather, or Bradshaw Interceptors (see Chapter 2 "Alternatives," Section 2.3.4, "Sewer" for

a detailed description of sewer service options for the SPA). The Anatolia III sewer pump station is located near the intersection of Kiefer Boulevard and Country Garden Drive. An 8-inch sewer force main travels from the Anatolia III sewer pump station east along Kiefer Boulevard to the intersection of Kiefer Boulevard and Rancho Cordova Parkway. The force main then heads north along Rancho Cordova Parkway to the intersection of Rancho Cordova Parkway and Chrysanthy Boulevard. At this point, the force main connects to a 36-inch gravity sewer pipeline located in Chrysanthy Boulevard. The gravity sewer pipeline travels west along Chrysanthy Boulevard to the Chrysanthy Boulevard sewer pump station at the intersection of Chrysanthy Boulevard and Sunrise Boulevard. The pump station currently pumps sewer flows south along Sunrise Boulevard through an 18-inch force main to Kiefer Boulevard where it then heads west along Kiefer Boulevard and connects to the Northeast Interceptor (MacKay & Somps 2009:11 and 12).

Before the Aerojet Interceptor and LCI are constructed and in service, wastewater flows from the Chrysanthy Boulevard sewer pump station would be pumped through the Mather Interceptor to Section 7B of the Bradshaw Interceptor (Sacramento County 2007a:2-2). The Mather Interceptor would have a capacity of 49 mgd and would be sized to serve the Villages of Zinfandel located northeast area of the former Mather Air Force Base and would provide interim sewer service to the SPA and the upstream developments of Anatolia III; Cordova Hills; Arista Del Sol; Arboretum; portions of the Ranch at Sunridge; and the Aerojet area, including the Rio del Oro Specific Plan. It is estimated that the SPA and upstream developments of Anatolia III, Cordova Hills, Arista Del Sol, Arboretum, and portions of the Ranch at Sunridge would generate a total of 10 mgd of wastewater flows and the Aerojet area would generate 10 mgd of wastewater flows by 2015 (Sacramento County 2007a:2-22).

The Mather Interceptor would begin at the Chrysanthy Boulevard sewer pump station and would travel north along Sunrise Boulevard to the intersection of Sunrise Boulevard and Douglas Road. The interceptor would turn west along Douglas Road to Zinfandel Drive. The interceptor would then follow the Zinfandel Drive north and would connect to Section 7B of the Bradshaw Interceptor just south of the intersection of North Mather Boulevard and Zinfandel Drive (Sacramento County 2007a:2-9). After the Aerojet Interceptor and LCI are constructed and in service, wastewater flows from the SPA and the upstream developments of Anatolia III, Cordova Hills, Arista Del Sol, Arboretum, portions of the Ranch at Sunridge, and the Aerojet area would be pumped through these interceptors, while the Mather Interceptor would only serve the Villages of Zinfandel (Sacramento County 2007a:2-1).

The environmental impacts of the construction and operation of Mather Interceptor were analyzed in a Supplemental EIR (SCH #2007052135), which was certified by Sacramento County in November 2007. The supplemental EIR anticipated that the Mather Interceptor would be operational by 2015; however, SRCSD may accelerate construction of the Mather Interceptor to provide interim sewer service to the SPA (MacKay & Somps 2009:8, Sacramento County 2007a:2-1).

Wastewater Treatment

Wastewater flows collected from the SRCSD interceptors are ultimately transported into the SRWTP. Wastewater conveyed to the SRWTP is treated to a secondary level and is ultimately discharged into the Sacramento River. Currently, 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.

The environmental impacts of construction and operation of the SRWTP were evaluated in the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Draft Environmental Impact Report* (SRCSD 2003b) (SCH #2002052004). Sacramento County certified the 2020 Master Plan EIR in June 2004. The adequacy of the EIR was challenged and the challenge was upheld at the trial court level. 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. The date when the court decision is expected is presently unknown (*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).

The *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan* (SRCSD 2001) (2020 Master Plan) 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 providing 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.

The 2020 Master Plan relies on the Sacramento Area Council of Governments'(SACOG's) population projections to determine SRWTP capacity requirements within the SRCSD service area, which includes the SPA, through 2020 (SRCSD 2003b:3-22). The 2020 Master Plan projected that the population in the SRCSD service area would be 1,549,502 persons by 2020 (SRCSD 2003b:5-5). The population projections used in the master plan do not represent a buildout population total for SRCSD; rather, they represents the amount of growth expected within SRCSD.

Table 3.16-1 summarizes the estimated population-based wastewater flow projections from 2000 to 2020. Flows within the SRCSD service areas were approximately 155 mgd in 2000 and were projected to increase and surpass its permitted average dry-weather flow capacity of 181 mgd by 2010 (Table 3.16-1). Therefore, as part of the 2005 permit renewal process, the SRCSD applied to the Central Valley RWQCB for a NPDES permit to increase its permitted capacity from a maximum average dry-weather flow of 181 mgd to a maximum average dry-weather flow of 218 mgd.

Table 3.16-1
SRCSD Estimated Average Dry-Weather Flow and Peak Wet-Weather Flow, 2000-2020

Year	Average Dry-Weather Flow (mgd)	Peak Wet-Weather Flow (mgd)[1]
2000	155	185
2005	174	208
2010	196	235
2015	210	252
2020	218	263

Notes: SRCSD = Sacramento Regional County Sanitation District; mgd = million gallons per day.

[1] Flows greater than the permitted average dry-weather flow capacity of 181 mgd are diverted into emergency storage basins or stored within interceptors.

Source: SRCSD 2003b:3-23

As of 2010, the SRWTP receives and treats an average of 150 mgd (SRCSD 2010). In June 2010, 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, 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 Sacramento-San Joaquin Delta (Delta) sustainability. Therefore, SRCSD has determined the SRWTP can provide capacity to future development beyond what was originally anticipated. If substantial population growth or new development occurs before 2020, SRCSD will reevaluate expansion needs and phase treatment plant expansion to provide for sufficient long-term capacity (SRCSD 2010).

SOLID WASTE

In 2008, Rancho Cordova disposed of approximately 61,638 tons of solid waste (California Integrated Waste Management Board [CIWMB] 2010a). Allied Waste Services provides solid waste and recycling collection services to the city. Solid 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 2009:4-2).

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 2009:4-2). 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 (CIWMB 2010b).

The CIWMB provides an average per-capita solid-waste disposal rate for residents and business. In Sacramento County, the CIWMB estimates a solid-waste disposal rate of 0.36 ton per resident per year (CIWMB 2009a). It is assumed by the CIWMB that businesses of a certain type dispose similar wastes at similar rates (per employee) regardless of the location or size of the business. Business waste disposal rates calculated by CIWMB range from 0.3 ton per employee per year for general-merchandise stores to 3.1 tons per employee per year for restaurants (CIWMB 2009b).

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 2009:4-13). 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 the 2006 Regional Waste Management Authority Annual Report, Rancho Cordova showed 48% of the solid waste generated in the City was diverted from landfills through recycling, composting, and other waste diversion methods (CIWMB 2010a).

To comply with the CIWMA, the City adopted the Business and Multi-Family Recycling Ordinance (Title 6, Chapter 6.21) in October 2008. The ordinance requires businesses and multifamily residential properties with 5 or more units that generate four or more cubic yards per week of solid waste to implement an on-site recycling program. The program requires businesses and multifamily residential properties to keep recyclable materials separate from all other solid waste, to provide signs and labeled containers for the storage and collection of recyclable materials, and to either self-haul or enter into a written service agreement with a franchise hauler (i.e., Allied Waste Services, Atlas Disposal Industries, or Waste Management of Sacramento) for the collection and subsequent delivery of recyclable materials to an authorized recycling facility. Businesses and multifamily residential property owners and operators must prepare a recycling plan that provides information on the types of on-site recyclable materials and verifies that labeled containers, signs, and a disposal service are available to ensure compliance with the ordinance (City of Rancho Cordova 2010).

ELECTRICAL SERVICE

Sacramento Municipal Utility District (SMUD) generates, transmits, and distributes electric power to a 900-square-mile territory in Sacramento County, including Rancho Cordova. SMUD serves a population of 589,599 customers (522,228 residential and 67,361 commercial) with 2,113 employees, 473 miles of transmission lines (110 kilovolts [kV] or more), and 9,784 miles of distribution lines (typically 12 kV) (SMUD 2009a, 2008a). In 2009, SMUD generated approximately 10,595 gigawatt hours (GWh) of electricity within its service area (California Energy Commission [CEC] 2009a).

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 assure 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 2009b).

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 3.16-2 shows SMUD's historic electrical consumption and forecasts of future consumption.

Table 3.16-2
SMUD Service Area Electrical Consumption and Forecast

Year	Consumption (GWh)[1]
1990	8,358
2000	9,494
2005	10,523
2009	10,595
2013	11,504
2016	11,875

Note: GWh = gigawatt hours
[1] Gigawatt equals one billion watts.
Sources: CEC 2009a, CEC 2009b:155

In the vicinity of the SPA, an electrical transmission corridor begins south of Kiefer Boulevard and west of Sunrise Boulevard and southeast of the intersection of North Campus Drive and Rancho Cordova Parkway and runs from southwest to northeast to Douglas Road (see Exhibit 2-17, in Chapter 2 "Alternatives"). The corridor contains a 230-kV Pacific Gas and Electric Company (PG&E) transmission line, one 230-kV SMUD transmission line, and one 69-kV SMUD sub-transmission line. This transmission corridor transects the northwestern corner of the SPA near the intersection of Sunrise Boulevard and Kiefer Boulevard. In addition, SMUD has a 69-kV sub-transmission line located along the east side of Sunrise Boulevard and a 69-kV sub-transmission line that extends north along the east side of Grant Line Road from State Route 16 to Kiefer Boulevard (MacKay & Somps 2010:6).

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 prepared 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 2007:2).

SMUD has supported several new renewable energy 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 2007:3).

NATURAL GAS SERVICE

Natural gas service in Rancho Cordova is provided by PG&E through portions of PG&E's 46,000 miles of natural gas distribution pipelines. In 2009, PG&E delivered approximately 4,572 million therms (MM therms) of natural gas throughout its service area (CEC 2009c). Of this total, Sacramento County received 315 MM therms, which accounted for 0.07% of the natural gas deliveries within the PG&E service area. Table 3.16-3 shows PG&E's historic natural gas consumption and forecasts of future consumption. The CEC has determined that the decrease in natural gas consumption between 2005 and 2009 results from both greater energy conservation and the slowdown in construction of new homes and businesses (CEC 2009a:220).

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 2007b:69). As shown on Exhibit 2-18 in Chapter 2, "Alternatives," the following natural gas transmission mains are located in the vicinity of the SPA (MacKay & Somps 2010b:3):

- an 8-inch transmission main that extends east along Kiefer Boulevard from Sunrise Boulevard to Rancho Cordova Boulevard,
- an 8-inch transmission main that extends north along Rancho Cordova Boulevard from Kiefer Boulevard for approximately 3,300 feet, and
- an 8-inch transmission main that extends east along Douglas Boulevard from Sunrise Boulevard for approximately 2.2 miles.

Table 3.16-3 PG&E Service Area Natural Gas Consumption and Forecast	
Year	**Consumption (MM Therms)**
1990	5,275
2000	5,291
2005	4,724
2009	4,572
2018	4,358
Note: PG&E = Pacific Gas and Electric; MM therms = million therms Sources: CEC 2009a:220, CEC 2009c	

COMMUNICATIONS

Currently, there is no existing communications service or infrastructure in the SPA. Frontier Communications and AT&T would provide communications service to the SPA and both service providers have infrastructure in the vicinity of the SPA (see Exhibit 2-19 in Chapter 2, "Alternatives"). Frontier Communications has existing aerial telephone lines on Sunrise Boulevard and existing underground telephone lines that extend east from Sunrise Boulevard along Kiefer Boulevard and north from the intersection of Kiefer Boulevard and Rancho Cordova Boulevard to County Garden Drive (MacKay & Somps 2010b:6).

Approximately 220 acres in the northeastern portion of the SPA is within the AT&T service area. AT&T has existing aerial telephone lines on Grant Line Road (MacKay & Somps 2010b:6).

3.16.2 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 other 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. 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 MM 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 2010 California Green Building Code (Part 11 of Title 24) standards were adopted on January 12, 2010 and will become effective on January 1, 2011. 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%. It also requires separate water meters for indoor and outdoor water use at nonresidential buildings, with a requirement for moisture-sensing irrigation systems for larger landscape projects, and mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity and according to their design efficiencies.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of Rancho Cordova General Plan

Goals and policies from the *City of Rancho Cordova General Plan* (City General Plan 2006) and Housing Element (City of Rancho Cordova 2009) relating to utilities and service systems that are applicable to the Proposed Project and other alternatives under consideration are listed in Appendix K.

3.16.3 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 other 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 other 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:

- *City of Rancho Cordova General Plan* (City of Rancho Cordova 2006),
- *Sacramento County General Plan Background to the 1993 General Plan and 2007 General Plan Update* (Sacramento County 2007b),
- *Sacramento County General Plan Update DEIR* (Sacramento County 2009),
- *Sacramento Regional County Sanitation District Interceptor System Master Plan 2000* (SRCSD 2003a),
- *Sacramento Regional County Sanitation District Mather Interceptor Supplemental Environmental Impact Report* (Sacramento County 2007a),
- *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Draft Environmental Impact Report* (SCH #2002052004) (SRCSD 2003b),
- *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan* (SRCSD 2001),
- *Sanitary Sewer Study Level Two for SunCreek Specific Plan* (MacKay & Somps 2009, provided in Appendix I),
- *Updated Sewer Demands for the SunCreek Specific Plan* (MacKay & Somps 2010a, provided in Appendix T), and
- *Dry Utilities Plan Technical Memorandum* (MacKay & Somps 2010b, provided in Appendix J).

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

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), BIM (Biological Impact Minimization), CS (Conceptual

Strategy), and ID (Increased Development). The impacts for each alternative are compared relative to the PP at the end of each impact conclusion (i.e., similar, greater, lesser).

IMPACT 3.16-1 **Increased Demand for Wastewater Collection and Conveyance Facilities.** *Project implementation would result in increased generation of wastewater.*

NP

Under the No Project Alternative, no project-related development would occur and there would be no new urban uses (e.g., residential or commercial land uses) that would increase the demand for wastewater conveyance facilities. Therefore, **no direct** or **indirect** impacts would occur. ***[Lesser]***

NCP, PP, BIM, CS, ID

The SPA is presently not served by municipal wastewater collection and treatment systems, and therefore the project would require construction of wastewater collection and conveyance facilities.

The sewer study prepared for the Proposed Project Alternative (MacKay & Somps 2009) 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. Additionally, on January 11, 2012, the Sacramento Area Sanitation District (SASD) adopted the *Sewer System Capacity Plan 2010 Update* that describes SASD's plan to provide service to the SPA and other land within the East County area (see "SASD's Sewer System Capacity Plan," below). The location of the sewer system facilities to serve the No USACE Permit, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives would vary somewhat from the Proposed Project Alternative due to the difference in street alignments and the spatial distribution of the developable areas. In spite of these differences, the physical impacts of the on-site sewer system to serve the No USACE Permit, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives would be substantially the same as those of the Proposed Project Alternative (MacKay & Somps 2010c).

The sewer study and the sewer system capacity plan present options for the ultimate sewer conveyance facilities. However, detailed, final 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 small-lot maps, including collector and lateral systems, to serve each lot. The following discussion provides an overview of the future facilities identified by the conceptual sewer study (attached as Appendix I) and the sewer system capacity plan. The physical impacts of constructing these on-site facilities at a project level are addressed throughout this DEIR/DEIS in connection with discussions of the impacts of overall site development.

The sizing and design of the sewer pipelines are based on SASD design standards. The 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 minimum depth of 8 feet (see Exhibit 2-16 in Chapter 2, "Alternatives"). The wastewater system would be incrementally expanded to meet the demands of the SPA.

Project-related wastewater flows would be conveyed from the SPA to the SRWTP via the LCI Sections 1–5. A proposed LCI alignment was identified in the SRCSD Interceptor Master Plan 2000, and the environmental impacts of the construction of the interceptor were analyzed at a program level in the SRCSD Interceptor Master Plan 2000 EIR (see "Sacramento Regional Sanitation District Interceptor Master Plan 2000 EIR," below). The date that this interceptor would be constructed and in service is currently unknown.

The project would construct SRCSD's Section 5 of the LCI that is within the SPA, the environmental impacts of which are evaluated throughout this EIR/EIS. Section 5 of the LCI within the SPA would begin at Grant Line

Road at the northeast boundary of the SPA and travel west along the northern boundary of the SPA. The interceptor would then turn and travel south and southwest through the SPA to the intersection of Rancho Cordova Parkway and Kiefer Boulevard. From this intersection, the interceptor would head west on Kiefer Boulevard to the intersection of Kiefer Boulevard and Sunrise Boulevard. The interceptor would then travel south along Sunrise Boulevard to the southwestern corner of the SPA. Initially, on-site wastewater flows would be conveyed through Section 5 of the LCI to either the SunCreek sewer pump station located at the southwestern corner of the SPA east of Sunrise Boulevard or the Arboretum sewer pump station located east of Sunrise Boulevard and south of the SPA on the Arboretum project site (see "SunCreek Specific Plan Sewer Service Options," below) (MacKay & Somps 2009:11).

Section 5 of the LCI would be sized to accommodate project-related wastewater flows as well as the proposed upstream developments of Anatolia III, Cordova Hills, Arista Del Sol, Arboretum, and portions of the Ranch at Sunridge (MacKay & Somps 2009:13). The total sewer flow from the SPA and these proposed upstream developments were determined to be 6.39 mgd peak wet-weather flow and 27.74 mgd peak wet-weather flow, respectively, for a total of 34.85 mgd peak wet-weather flow (MacKay & Somps 2009:8, and MacKay & Somps 2010a:4). Initially, the interceptor would be used on an interim basis by SASD as a sanitary sewer collector. Once upstream development occurs and wastewater flows exceed 10 mgd the pipeline would become an interceptor (MacKay & Somps 2009:8).

Until Sections 1–4 of the LCI are constructed, project-related wastewater flows would be conveyed through existing gravity sewer pipelines and sewer force mains to the Anatolia III and/or Chrysanthy Boulevard sewer pump stations and then to the Northwest Interceptor or the proposed Mather Interceptor. Section 3.16.1, "Affected Environment," above provides a description of these wastewater conveyance facilities.

If the Mather Interceptor is constructed and in service before Sections 1–4 of the LCI, project-related wastewater flows could be conveyed north from the Chrysanthy Boulevard sewer pump station through the Mather Interceptor to Section 7B of the Bradshaw Interceptor. The Mather Interceptor would have a capacity of 49 mgd and would be sized to serve the Villages of Zinfandel located northeast of the former Mather Air Force Base and could provide interim sewer service to the SPA, including the upstream developments of Anatolia III, Cordova Hills, Arista Del Sol, Arboretum, and portions of the Ranch at Sunridge and the Aerojet area, including the Rio del Oro Specific Plan area, until the LCI and Aerojet Interceptor are constructed and in service (Sacramento County 2007a:2-2). The Supplemental EIR estimated that the SPA and upstream developments would generate 10 mgd of wastewater flows and the Aerojet area would generate 10 mgd of wastewater flows by 2015 (Sacramento County 2007a:2-22). The environmental impacts of the construction and operation of Mather Interceptor were analyzed in a Supplemental EIR (see "Mather Interceptor Supplemental EIR," below). The Supplemental EIR evaluated the short-term impacts associated with the potential for the Mather Interceptor to serve the Villages of Zinfandel located northeast area of the former Mather Air Force Base, the SPA, and upstream developments. In the long term, the Supplemental EIR assumed that the Aerojet Interceptor and LCI would serve the SPA and upstream developments, while the Mather Interceptor would only serve the Villages of Zinfandel (Sacramento County 2007a:2-1). The Supplemental EIR anticipated that the Mather Interceptor would be operational by 2015; however, the SRCSD may accelerate construction of the Mather Interceptor to provide interim sewer service to the SPA (MacKay & Somps 2009:8, Sacramento County 2007a:2-1).

SunCreek Specific Plan Sewer Service Options

Both the SunCreek and Arboretum projects would be receiving sewer service through common sanitary sewer infrastructure. Since it is not known which project would be constructed first, the SunCreek sewer study includes two potential scenarios. Each scenario would consist of three phases of sewer service. Detailed sewer plans and descriptions for each scenario and each phase are described in Section 2.3.4, "Sewer" of Chapter 2, "Alternatives," and are contained in Appendix I. Common sewer facilities that would be constructed on the Arboretum project site would receive CEQA coverage under the Arboretum project's EIR/EIS. To the extent that the proposed scenarios and phases contain more than one option for sewer service in the future, this DEIR/DEIS does not provide CEQA or

NEPA coverage for any off-site facilities associated with those future options. If those options were to be implemented in the future, SRCSD and/or the City of Rancho Cordova would determine what type of CEQA or NEPA coverage, if any, were required prior to construction of the facilities associated with those options. A brief description of the scenarios and phases is provided below.

Scenario One: SunCreek Develops First Followed by Arboretum

Phase 1. The project would construct Section 5 of the LCI that is within the SPA as well as the on-site sewer collectors, sewer trunks, and the 2.26-mgd SunCreek sewer pump station.

Phase 2. The capacity of the SunCreek sewer pump station would be increased to 9.91 mgd and the capacity of the Arboretum sewer pump station would be increased to 4.3 mgd. The Mather Interceptor would be completed and operational.

Phase 3. Sections 1-4 of the LCI would be constructed from the SRWTP and connected to Section 5 of the LCI. The SunCreek and Arboretum projects' gravity sewer systems would be connected to the LCI and the SunCreek and Arboretum projects' sewer pump stations and associated force mains would be decommissioned.

Scenario Two: Arboretum Develops First Followed by SunCreek

Phase 1. The Arboretum project would construct gravity sewer collectors, sewer trunks, and a 1.5-mgd Arboretum sewer pump station. The capacity of the Anatolia III sewer pump station would be increased to 2.26 mgd.

Phase 2. The capacity of the Arboretum sewer pump station would be increased to 9.91 mgd and the Arboretum force main constructed in Phase 1 would be decommissioned. The Mather Interceptor would be completed and operational. Sewer flows from the Arboretum sewer pump station would be pumped through the proposed Sunrise Boulevard force main to the existing Sunrise Boulevard segment of the Chrysanthy Boulevard force main and then to the Mather Interceptor.

Phase 3. Sections 1-4 of the LCI would be constructed from the SRWTP and connected to Section 5 of the LCI. The SunCreek and Arboretum projects' gravity sewer systems would be connected to the LCI and the SunCreek and Arboretum projects' sewer pump stations and associated force mains would be decommissioned.

Sacramento Regional County Sanitation District Interceptor Master Plan 2000 EIR

As discussed above, the SPA would be served by the SRCSD regional wastewater conveyance facilities. The wastewater flows generated by the SPA have been planned for in the SRCSD Interceptor Master Plan 2000. The master plan determined that the SPA as well as the Anatolia III residential development, the southern portion of the Ranch at Sunridge, and the northern portion of the Arboretum Specific Plan project would generate an average dry-weather flow of 7.40 mgd and a peak wet-weather flow of 16.54 mgd (SRCSD 2003a:Table 3-1).

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 program level in the *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Final Program Environmental Impact Report* (SCH #2001112085). That EIR was certified and the master plan approved in March 2003. Environmental impacts identified in that EIR would occur with or without development of the project because the SRCSD wastewater conveyance system is required to serve regional development and therefore will be needed regardless of whether or not the project is implemented.

Mather Interceptor Supplemental EIR

If the Mather Interceptor is constructed and in service before Sections 1–4 of the LCI, project-related wastewater flows could be conveyed north from the Chrysanthy Boulevard sewer pump station through the Mather

Interceptor to Section 7B of the Bradshaw Interceptor. The *Mather Interceptor Supplemental Environmental Impact Report* (SCH #2007052135) was certified by Sacramento County in November 2007.

The environmental impacts identified in that EIR would occur with or without development of the project because the Mather Interceptor is required to provide sewer service to the Villages of Zinfandel located northeast of the former Mather Air Force Base and could provide interim sewer service to Anatolia III, Cordova Hills, Arista Del Sol, Arboretum, portions of the Ranch at Sunridge, and the Aerojet area. In the long-term, the Mather Interceptor would provide sewer service only to the Villages of Zinfandel and therefore would be needed regardless of whether or not the project is implemented.

SASD Sewer System Capacity Plan

On January 11, 2012, the SASD Board of Directors adopted the *Sewer System Capacity Plan 2010 Update* (SASD 2012), which outlines SASD's plan to provide sewer service to the SPA and other portions of the East County area. The SASD Board of Directors' action to approve the sewer system capacity plan was taken in reliance on a Notice of Exemption prepared by Sacramento County Department of Environmental Review and Assessment (DERA) dated November 23, 2011.

The sewer system capacity plan envisions an alternative way to provide service to the SPA that would utilize idle capacity in SASD's existing system in the East County area on an interim basis until SRCSD completes the White Rock, Aerojet-2, and Douglas Interceptors. The sewer system capacity plan envisions that SASD's East County system would convey sewer flows from the East County area to the existing Chrysanthy Boulevard sewer pump station, which would then convey the flows to a new series of interceptors being proposed by SRCSD (i.e., the White Rock, Aerojet-2, and Douglas Interceptors). SRCSD is in the process of completing an update to its sewer master plan to delete the LCI Sections 1–5 and the Mather Interceptor in favor of the White Rock, Aerojet-2, and Douglas Interceptors. SRCSD plans to evaluate the environmental impacts associated with its updated sewer master plan in a CEQA document prior to adopting the sewer master plan in late 2012.

The sewer system capacity plan envisions that LCI Sections 1–5 would be downsized to an SASD trunk sewer (pipes ranging in size from 12 inches to 27 inches in diameter) and the SunCreek pump station would continue to be a SASD facility (i.e., it would not be expanded over time to a SRCSD facility). Additionally, a new force main would be installed from the SunCreek pump station to the Chrysanthy Boulevard pump station in an alignment within the paved portion of the northbound lanes of Sunrise Boulevard. The Chrysanthy Boulevard pump station would eventually connect to the Aerojet-2 Interceptor that would extend northerly along Sunrise Boulevard to a point of connection with the White Rock Interceptor at the intersection of Sunrise Boulevard and White Rock Road. From this location, the White Rock Road Interceptor would extend westerly along White Rock Road to a point of connection with the existing Bradshaw Interceptor at or near its crossing of White Rock Road. SASD intends to construct the Aerojet-2 and White Rock Interceptors within the paved portions of Sunrise Boulevard and White Rock Road, respectively.

Impact Conclusion

The *Sanitary Sewer Study Level Two for the SunCreek Specific Plan* (MacKay & Somps 2009, provided in Appendix I), and the *Sewer System Capacity Plan 2010 Update* (SASD 2012), include plans to provide sewer service to the project under several different development scenarios depending on how construction proceeds in the project vicinity. However, sufficient on-site wastewater collection and conveyance infrastructure necessary to serve the SPA has not been constructed, nor have final design plans and specifications been submitted; therefore, this impact is considered **direct** and **potentially significant**. The **indirect** physical impacts of constructing the on-site facilities are addressed throughout this DEIR/DEIS in each respective topical section in connection with discussions of the impacts of overall site development. The physical environmental impacts from construction of the off-site sewer facilities are the responsibility of SRCSD and SASD. As stated previously, a Notice of Exemption for SASD's sewer system capacity plan was prepared by DERA in November 2011, and SRCSD plans

to evaluate the environmental impacts associated with its updated sewer master plan prior to its adoption in late 2012. ***[Similar]***

Mitigation Measure 3.16-1: Submit Proof of Adequate On- and Off-Site Wastewater Conveyance Facilities and Implement On- and Off-Site Infrastructure Service Systems or Submit Proof That Adequate Financing Is Secured.

Before the approval the final maps for all project phases, the project applicants shall submit written verification that SRCSD has adequate wastewater conveyance capacity for the amount of development identified in the tentative map has been constructed or is assured through the use of bonds or other sureties to the City's satisfaction. Both on- and off-site wastewater conveyance infrastructure sufficient to provide adequate service to the SPA 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 by the City of Rancho Cordova Public Works Department and issuance of building permits by the City of Rancho Cordova Building and Safety Division for all project phases, or their financing shall be secured and proof of such financing be provided to the satisfaction of the City.

Implementation: The project applicants for any particular discretionary development application.

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

Enforcement: City of Rancho Cordova Building and Safety Division and City of Rancho Cordova Public Works Department.

Implementation of Mitigation Measure 3.16-1 would reduce the direct, potentially significant impacts associated with increased demand for on- and off-site wastewater collection facilities under the No USACE Permit, Proposed Project, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives to a **less-than-significant** level because adequate wastewater conveyance facilities would be documented or adequate financing would be secured to the satisfaction of the City before approval final maps and issuance of building permits.

IMPACT 3.16-2 **Increased Demand for Sacramento Regional Wastewater Treatment Plant (SRWTP) Facilities.** *Project implementation would result in increased generation of wastewater, thereby increasing the demand for wastewater treatment facilities to support the project.*

NP

Under the No Project Alternative, no project-related development would occur and there would be no new urban uses (e.g., residential or commercial land uses) that would increase the demand for wastewater treatment facilities. Therefore, **no direct** or **indirect** impacts would occur. ***[Lesser]***

NCP, PP, BIM, CS, ID

Table 3.16-4 shows the average dry-weather and peak wet-weather flows generated by the No USACE Permit, Proposed Project, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives. The SASD and SRCSD calculate wastewater flows for residential land uses using the density of dwelling units per gross acre and commercial, school, park, and open space land uses as well as roadways, storm drain channels, and detention basins are calculated using an equivalent of 6.0 dwelling units per gross acre. Therefore, slight variations in wastewater flows generated by the No USACE Permit, Proposed Project,

Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives are a result of differences in acreages of land uses for each alternative.

Table 3.16-4
SunCreek Specific Plan Wastewater Generation Rates

Alternative	Average Dry-Weather Flow (mgd)	Peak Wet-Weather Flow (mgd)
No USACE Permit	3.21	6.89
Proposed Project	2.88	6.39
Biological Impact Minimization	2.84	6.32
Conceptual Strategy	2.91	6.43
Increased Development	2.60	5.96

Notes: mgd = million gallons per day
Source: MacKay & Somps 2011

Collected wastewater flows from the SPA would ultimately be transported to the SRWTP for treatment and disposal. The SRWTP receives and treats an average of 150 mgd (as of 2010) and has a permitted dry-weather flow design capacity of 181 mgd (SRCSD 2010). 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.

The wastewater flows generated by the project have been planned for in the SRWTP 2020 Master Plan. The 2020 Master Plan relies on SACOG's population projections to determine SRWTP capacity requirements within the SRCSD service area through 2020 (SRCSD 2003b:3-22). 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 population projections within its service area. Because the SPA is within the SRCSD service area, the projected SRWTP capacity specifically includes the wastewater flows generated on the SPA through 2020. 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 (SRCSD 2010). In light of this reduced growth, the SCRSD has withdrawn its application to expand the treatment plant. 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 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 as necessary to meet demand for wastewater treatment. The SRWTP site has sufficient land area to accommodate a substantially higher flow than 218 mgd; however, given the SRCSD withdrawal of its expansion application beyond 181 mgd, future SRCSD plans beyond the next 10 years are too speculative for meaningful consideration.

The SPA is within the SRCSD service area and the projected SRWTP capacity specifically includes the wastewater flows generated on the SPA through 2020. Therefore, there is expected to be sufficient SRWTP capacity to accommodate project flows under the No USACE Permit, Proposed Project, Biological Impact Minimization, Conceptual Strategy, and Increased Development 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. ***[Similar]***

Mitigation Measure 3.16-2: Demonstrate Adequate SRWTP Wastewater Treatment Capacity.

The project applicants for any particular discretionary development application shall demonstrate adequate capacity at the SRWTP for new wastewater flows generated by the project. This shall involve preparing a report prior to construction of each phase of development that identifies the amount of wastewater flows generated by the increment of proposed development, the available SRWTP wastewater treatment plant capacity, and confirming payment of connection and capacity fees as identified by SRCSD. Approval of the final map or improvement plan 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 proposed development identified in the report.

Implementation: The project applicants for any particular discretionary development application.

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

Enforcement: City of Rancho Cordova Building and Safety Division and City of Rancho Cordova Public Works Department.

Implementation of Mitigation Measure 3.16-2 would reduce direct significant impacts associated with increased demand for wastewater treatment plant facilities under the No USACE Permit, Proposed Project, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives to a **less-than-significant** level because adequate wastewater treatment facilities sufficient to serve the project would be documented before approval final maps/improvement plans and issuance of building permits.

IMPACT 3.16-3 **Temporary and Short-Term Generation of Solid Waste during Project Construction.** *Project construction would generate temporary and short-term construction-related debris and waste.*

NP

Under the No Project Alternative, no project-related development would occur and there would be no construction or demolition activities that would generate temporary and short-term construction-related solid waste. Therefore, **no direct** or **indirect** impacts would occur. ***[Lesser]***

NCP, PP, BIM, CS, ID

In 2008, construction activities in Rancho Cordova generated approximately 10,010 tons of solid waste (CIWMB 2010b). It is estimated that project-related construction would generate an average of 780 construction jobs at intervals over the 20-year buildout period (URBEMIS 2007 Version 9.2.4). CIWMB estimates that construction activities generate 3.0 tons per employee of solid waste; therefore, a total of 2,340 tons of waste (3.0 x 780) would be generated by construction (and demolition) activities over the 20-year buildout period, which result in an average of 117 tons per year (0.3 tpd) of solid waste. Solid waste generated by construction and demolition activities in the SPA would be disposed of at the Kiefer Landfill. The estimated range of solid waste generated by construction activities (0.3 tpd) would be less than 1% 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. At project buildout (2032), the total amount of solid waste generated by construction of the project would be approximately 0.004 million cubic yards. Therefore, the total amount of solid waste generated by construction activities over the 20-year buildout period would also be less than 1% of the remaining and total capacity(113 and 117 million cubic yards, respectively) of the landfill. Currently, the landfill has a closure date of 2064.

Because the Kiefer Landfill has sufficient permitted capacity to accommodate construction-related (including demolition) disposal needs for the project within the timeframe for project buildout (i.e., through 2032), this **direct** impact is **less than significant**. **No indirect** impacts would occur. ***[Similar]***

Mitigation Measure: No mitigation measures are required.

IMPACT 3.16-4 **Increased Long-Term Generation of Solid Waste.** *Project implementation would increase long-term solid-waste generation.*

NP

Under the No Project Alternative, no project-related development would occur and there would be no new urban uses (e.g., residential or commercial land uses) that would increase the long-term solid waste generation. Therefore, **no direct** or **indirect** impacts would occur. ***[Lesser]***

NCP, BIM, CS, ID

Based on the CIWMB's generation rates for Sacramento County and the estimated total project population at buildout, Table 3.16-5 shows the amount of solid waste in tons per day and per year that would be generated under the No USACE Permit, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives. All four of these alternatives would generate substantially less solid waste than would be generated under the Proposed Project Alternative. Much lower solid waste generation rates would occur at project initiation, with gradual increases in the rate as development progressed.

Table 3.16-5
SunCreek Specific Plan Solid Waste Generation Rates

Alternative	Residential Waste (tpd)[1]	Business Waste (tpd)[2]	Total (tpd)	Total (tons/year)
No USACE Permit	11.5	1.5	13.0	4,745
Proposed Project	12.4	14.1	26.5	9,670
Biological Impact Minimization	11.2	0.9	12.1	4,440
Conceptual Strategy	12.1	2.4	14.5	5,278
Increased Development	14.3	3.0	17.3	6,305

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

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 12.1 to 17.3 tpd of solid waste generated by the No USACE Permit, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives would be less than 1% of the 10,800 maximum tpd that could be received at the landfill. In addition, compliance with all Federal, state, and local statutes and regulations, including the City's Business and Multi-Family Recycling Ordinance, related to solid-waste reduction and recycling would reduce the volume of solid waste entering Kiefer Landfill. Therefore, this landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the No USACE Permit, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives and 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 (12,589 persons) would generate approximately 4,532 tons of solid waste per year (0.36 × 12,589), or 12.4 tpd.

It is assumed by the CIWMB that businesses of a certain type dispose similar wastes at similar rates (per employee) regardless of the location or size of the business. The Proposed Project Alternative would generate a maximum of approximately 2,854 jobs over the 20-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 5,138 tons of waste per year (1.8 × 2,854) or 14.1 tpd in the SPA.

As shown on Table 3.16-5, combining residential and business solid-waste generation, total solid-waste generation for the Proposed Project Alternative would be approximately 9,670 tons per year (26.5 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 26.5 tpd of solid waste generated by the Proposed Project Alternative would be less than 1% of the 10,800 maximum tpd that could be received at the landfill. In addition, compliance with all Federal, state, and local statutes, regulations, and ordinances, including the City's Business and Multi-Family Recycling Ordinance, related to solid-waste reduction and recycling would reduce the volume of solid waste entering Kiefer Landfill. Therefore, this landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Proposed Project Alternative and this **direct** impact is considered **less than significant**. **No indirect** impacts would occur.

Mitigation Measure: No mitigation measures are required.

IMPACT 3.16-5 **Increased Demand for Electricity and Infrastructure.** *Project implementation would increase the demand for electricity and electrical infrastructure.*

NP

Under the No Project Alternative, no project-related development would occur and there would be no new urban uses (e.g., residential or commercial land uses) that would increase the demand for electricity and infrastructure. Therefore, **no direct** or **indirect** impacts would occur. ***[Lesser]***

NCP, BIM, CS

Implementation of the No USACE Permit, Biological Impact Minimization, and Conceptual Strategy Alternatives would increase electrical demand in the SPA. Electrical service in Rancho Cordova is provided by SMUD through 473 miles of transmission lines (110 kV or more) and 9,784 miles of distribution lines (typically 12 kV). In 2009, SMUD generated approximately 10,595 GWh of electricity within its service area (CEC 2009a). The increased electrical demand in the SMUD service area under buildout of all five action alternatives is shown in Table 3.16-6.

Table 3.16-6 SunCreek Specific Plan Electrical Demands	
Alternative	**Electrical Demand (GWh/yr)**
No USACE Permit	46.9
Proposed Project	65.3
Biological Impact Minimization	42.3
Conceptual Strategy	49.1
Increased Development	59.3

Notes: GWh/yr = gigawatt hours per year, MM therms = million therms.
Source: CEC 2004

The estimated increased electrical demand under the No USACE Permit, Biological Impact Minimization, and Conceptual Strategy Alternatives would range from 42.3 to 49.1 GHz/yr. This would be approximately 16.2 GWh per year less than the Proposed Project Alternative. The increase in electrical demand under these three alternatives would account for less than 1% of the total electrical demand in the SMUD service area (10,595 GWh). Therefore, the increase in demand for electricity would not be substantial in relation to existing electrical consumption in SMUD's service area.

In the vicinity of the SPA, SMUD has a 69-kV sub-transmission line located along the east side of Sunrise Boulevard and a 69-kV sub-transmission line that extends north along the east side of Grant Line Road from SR 16 to Kiefer Boulevard (MacKay & Somps 2010b:6). SMUD has determined that the following electrical facilities, shown on Exhibit 2-17, are required to serve the proposed development (see Section 2.3.4, "Electricity" and Exhibit 2-17 in Chapter 2, "Alternatives" for additional details):

- Use of a substation that SMUD already plans to build at the northwest intersection of Village Way and Rancho Cordova Parkway (within the Anatolia III Specific Plan).
- Construction of a new substation south of the SPA, but immediately adjacent to the southeast corner of the SPA. This substation site could range from 0.5 to 0.75 acre. SMUD has indicated that a typical substation is approximately 150 x 150 feet.
- Installation of a 69-kV electrical line along Grant Line Road from Kiefer Boulevard to Douglas Road.
- Installation of a 69-kV electrical line along Kiefer Boulevard that would connect the existing 69-kV electrical line at Grant Line Road to the substation that would be constructed at the southeast corner of the SPA.

Additional details regarding electrical service are contained in Appendix J (MacKay & Somps 2010b). SMUD would conduct a separate CEQA or NEPA analysis, if necessary, to analyze specific impacts and identify any required mitigation measures for construction and operation of its new off-site electrical facilities.

The on-site service lines would be sized to meet the project demands, and public utility easements would be dedicated for all underground facilities. Electrical facilities would be designed and constructed in accordance with SMUD's Standards and Rules and Regulations 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 (MacKay & Somps 2010b:7).

The proposed electrical-utility improvements would be required to comply with all existing City and SMUD SMUD's Standard and Rules and Regulations, and applicable requirements of the California Building Standards

Code. Because SMUD would meet the electrical demands of the No USACE Permit, Biological Impact Minimization, and Conceptual Strategy Alternatives 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, ID

As shown on Table 3.16-6, buildout of the Proposed Project and Increased Development Alternatives would increase in electrical demand in the SMUD service area by 65.3 and 59.3 GWh per year, respectively, which would account for less than 1% of the total electrical demand in the SMUD service area. Therefore, the increase in demand for electricity would not be substantial in relation to existing electrical consumption in SMUD's service area.

The sizes and locations of facilities necessary to serve the project under the Proposed Project and Increased Development Alternatives would be the same as described above.

The proposed electrical-utility improvements would be required to comply with all existing City and SMUD SMUD's Standards and Rules and Regulations, and applicable requirements of the California Building Standard Code. Because SMUD would meet the electrical demands of the Proposed Project and Increased Development Alternatives 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.

IMPACT 3.16-6 **Increased Demand for Natural Gas and Infrastructure.** *Project implementation would increase the demand for natural gas and infrastructure and would include the extension of existing natural gas pipelines.*

NP

Under the No Project Alternative, no project-related development would occur and there would be no new urban uses (e.g., residential or commercial land uses) that would increase the demand for natural gas and infrastructure. Therefore, **no direct** or **indirect** impacts would occur. ***[Lesser]***

NCP, PP, BIM, CS, ID

Implementation of the project would increase natural gas demand in the SPA. Natural gas service in Rancho Cordova is provided by PG&E through portions of PG&E's 46,000 miles of natural gas distribution pipelines. In 2009, Sacramento County received 315 MM therms of the natural gas from PG&E (CEC 2009c). The estimated increase in natural gas demands in the PG&E service area under each land use alternative are shown in Table 3.16-7. The increase in natural gas deliveries under all five action alternatives (1.7 - 2.2 MM therms) would account for less than 1% of the total natural gas deliveries in Sacramento County (315 MM therms). Therefore, the increase in demand for natural gas would not be substantial in relation to existing natural-gas consumption in PG&E's service area.

PG&E does not currently have gas service infrastructure on the SPA. Existing natural gas transmission mains in the vicinity of the SPA include: an 8-inch transmission main that extends east along Kiefer Boulevard from Sunrise Boulevard to Rancho Cordova Parkway, an 8-inch transmission main that extends north from Kiefer Boulevard along Rancho Cordova Parkway, and an 8-inch transmission main that extends north along Sunrise

Table 3.16-7
SunCreek Specific Plan Natural Gas Demands

Alternative	Natural Gas Demand (MM Therms)
No USACE Permit	1.8
Proposed Project	1.9
Biological Impact Minimization	1.7
Conceptual Strategy	1.8
Increased Development	2.2

Notes: MM therms = million therms.
Source: CEC 2004

Boulevard from Kiefer Boulevard to Douglas Road (see Section 2.3.4, "Natural Gas" and Exhibit 2-18 in Chapter 2, "Alternatives" for additional details). Following consultation between the project applicants and PG&E, PG&E has provided the following information regarding future natural gas facilities in the vicinity of the SPA:

- PG&E has tentative plans to upgrade its existing 8-inch steel distribution line that runs along Sunrise Boulevard between Kiefer Boulevard and Douglas Road, to a larger transmission main that would operate at a higher pressure.
- PG&E plans to install a new distribution regulator station at the intersection of Kiefer Boulevard and Sunrise Boulevard.

The timing, size, and exact location of these future facilities has not been determined by PG&E at this time. PG&E has indicated that it may provide service to the SPA by extending service from one or more of its existing distribution lines along Kiefer Boulevard or Rancho Cordova Parkway. Service extensions from all three locations would occur within existing or planned roadways. PG&E would conduct a separate CEQA or NEPA analysis, if necessary, to analyze specific impacts and identify any required mitigation measures for construction and operation of its new off-site electrical facilities. Additional details regarding natural gas service are contained in Appendix J (MacKay & Somps 2010b).

It is anticipated that 8-inch transmission mains would be installed on-site in major roadways throughout the SPA. 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 applicants of all project phases would coordinate with and meet the requirements of PG&E regarding the extension and locations of on-site infrastructure (MacKay & Somps 2010b:7).

Because PG&E is able to provide natural gas and associated infrastructure to the SPA under the No USACE Permit, Proposed Project, Biological Impact Minimization, Conceptual Strategy, and Increased Development Alternatives, 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. ***[Similar]***

Mitigation Measure: No mitigation measures are required.

IMPACT 3.16-7 **Increased Demand for Communications Service and Infrastructure.** *Project implementation would increase the demand for communications service and infrastructure.*

NP

Under the No Project Alternative, no project-related development would occur and there would be no new urban uses (e.g., residential or commercial land uses) that would increase demand for communications service and infrastructure. Therefore, **no direct** or **indirect** impacts would occur. ***[Lesser]***

NCP, PP, BIM, CS, ID

Currently, there is no existing communications infrastructure in the SPA. Frontier Communications and AT&T would provide communications service and associated infrastructure to the SPA and both service providers have infrastructure in the vicinity of the SPA. Frontier Communications has existing aerial telephone lines on Sunrise Boulevard and existing underground telephone lines that extend east from Sunrise Boulevard along Kiefer Boulevard and north from the intersection of Kiefer Boulevard and Rancho Cordova Boulevard to County Garden Drive. AT&T maintains overhead lines along Grant Line Road. To provide service to the SPA, it is anticipated that Frontier Communications would extend existing underground infrastructure within Kiefer Boulevard (MacKay & Somps 2010b:7).

Approximately 220 acres in the northeastern portion of the SPA is within the AT&T service area. AT&T has existing aerial telephone lines on Grant Line Road and it is anticipated these lines would be extended to serve the SPA (MacKay & Somps 2010b:7).

On the SPA, new infrastructure would generally be placed within the rights-of-way of on-site streets (see Section 2.3.4, "Communications" and Exhibit 2-19 in Chapter 2, "Alternatives" for additional details). Extension of infrastructure 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, the project applicants of all project phases would coordinate with Frontier Communications and AT&T regarding the extension and locations of on-site infrastructure (MacKay & Somps 2010b:7).

Because Frontier Communications and AT&T would provide the necessary communications and associated 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.

IMPACT 3.16-8 **Increased Energy Demand.** *Project implementation would increase energy consumption during construction and operation.*

NP

Under the No Project Alternative, no project-related development would occur and there would be no new urban uses (e.g., residential or commercial land uses) that would increase in energy consumption. Therefore, **no direct** or **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 20-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 inefficient, wasteful, or unnecessary. Furthermore, other features of project construction, such as erosion and noise control through limitations on equipment use as described elsewhere in this EIR/EIS may further reduce energy use.

Energy would also be used for project operation related to heating and cooling systems, lighting, appliances, and other miscellaneous energy requirements. The project would comply with Building Energy Efficiency Standards included in Title 24 of the California Code of Regulations, including the 2010 California Green Building Code (Part 11 of Title 24). 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.

Development in the SPA would include energy conserving design and materials where feasible. The following design guidelines incorporated into the project identify energy conservation measures that would minimize inefficient energy usage and promote conservation of energy resources:

- incorporating design measures such as natural heating and/or cooling, sun and wind exposure and orientation, and other solar energy opportunities that improve energy efficiency; and

- using energy-efficient outdoor lighting fixtures and lamps, such as high-pressure sodium, metal halide, low-pressure sodium, hard-wired compact fluorescent, or other lighting technology that is of equal or greater efficiency.

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 a compact mixed-use development that facilitates walking or cycling to work, stores, restaurants, and parks, reducing the need to travel outside the SPA, especially for day-to-day needs and services. An Air Quality Mitigation Plan has been prepared that identifies measures that are intended to minimize air quality impacts associated with the project's vehicle trip generation (see Section 3.2, "Air Quality" and Appendix M). 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 Mitigation 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) are **uncertain and too speculative for meaningful consideration** 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.

3.16.4 RESIDUAL SIGNIFICANT IMPACTS

Impacts associated with 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 residually significant impacts with respect to these issue areas.

Implementation of Mitigation Measures 3.16-1 and 3.16-2 contained in this section would reduce direct impacts associated with increased demand for on-site wastewater collection and conveyance facilities to a less-than-significant level. However, because there is a relationship between the project and the need for expansion of the SRCSD regional wastewater conveyance system and the SRWTP, implementation of the project would contribute indirectly and incrementally to significant and unavoidable impacts related to air quality, agricultural resources, biological resources, cultural resources, land use, and noise that were identified in the Interceptor Master Plan 2000 EIR and significant and unavoidable impacts related to air quality that were identified in the SRCSD 2020 Master Plan EIR. In addition, interim sewer service to the SPA could be provided by the Mather Interceptor and project implementation could contribute indirectly and incrementally to significant and unavoidable impacts on noise and hazards that were identified in the Mather Interceptor Supplemental EIR.

3.16.5 CUMULATIVE IMPACTS

Future development in Sacramento County would increase the demand for utilities in the region. In terms of cumulative impacts, the appropriate service providers are responsible for ensuring adequate provision of public utilities within their jurisdictional boundaries. The necessary public utilities would be provided to the SPA by SRCSD, SMUD, PG&E, Frontier Communications, and AT&T. The related projects within Rancho Cordova would rely on similar service providers. Related projects outside Rancho Cordova would rely on a variety of service providers, within Sacramento County, some of which could include SRCSD, PG&E, Frontier Communications, and AT&T.

WASTEWATER CONVEYANCE FACILITIES

The SPA is presently not served by municipal wastewater collection and treatment systems. The sewer study prepared for the project (MacKay & Somps 2009) 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 project would construct SRCSD's Section 5 of LCI that is within the SPA. Section 5 of the LCI would be sized to accommodate project-related wastewater flows as well as the upstream developments of the related projects, including Anatolia III, Cordova Hills, Arista Del Sol, Arboretum, and portions of the Ranch at Sunridge (MacKay & Somps 2009:13). The total sewer flow from the SPA and these upstream developments was determined to be 6.39 mgd peak wet-weather flow and 27.74 mgd peak wet-weather flow, respectively, for a total of 34.85 mgd peak wet-weather flow (MacKay & Somps 2009:8, and MacKay & Somps 2010a:4).

Impacts resulting from construction of the SRCSD regional wastewater conveyance system were addressed in the EIR for the SRCSD Interceptor Master Plan 2000. Construction of the SRCSD regional wastewater conveyance system would result in several significant environmental impacts, most of which would be reduced to a less-than-significant level through implementation of mitigation identified in the EIR for the Interceptor Master Plan 2000. Impacts related to air quality, agricultural resources, biological resources, cultural resources, land use, and noise would remain significant and unavoidable after implementation of all feasible mitigation measures, because there are no feasible mitigation measures to fully reduce the impacts to a less-than-significant level. These impacts would also occur without development of the project and the related projects because the SRCSD wastewater conveyance system is required to serve regional development and would be needed whether or not the project is implemented.

Because the Mather Interceptor could provide interim sewer service to the SPA, including the related projects (upstream developments) of Anatolia III, Cordova Hills, Arista Del Sol, Arboretum, and portions of the Ranch at Sunridge, as well as providing interim sewer service to the Aerojet area, including the Rio del Oro Specific Plan area, and long-term sewer service to the Villages at Zinfandel located northeast of the former Mather Air Force Base, development of the SPA could contribute to the environmental impacts of the construction and operation of the Mather Interceptor. Construction of the SRCSD Mather Interceptor would result in several environmental impacts, most of which would be reduced to a less-than-significant level through implementation of mitigation identified in the Supplemental EIR for the Mather Interceptor. Impacts related to noise and hazards would remain significant and unavoidable after implementation of all feasible mitigation measures, because there are no feasible mitigation measures to fully reduce the impacts to a less-than-significant level. These impacts would also occur without development of the project because the Mather Interceptor is required to provide sewer service to the Aerojet and Mather Air Force Base areas and would be needed whether or not the project is implemented. Therefore, the project and related projects would contribute to the direct and indirect significant impacts identified by SRCSD in its Interceptor Master Plan 2000 EIR that would be associated with the future construction of the regional wastewater conveyance system to serve the project and other regional development. The project would result in a cumulatively considerable incremental contribution to the cumulatively significant impact associated with increased demand for the SRCSD regional wastewater conveyance system.

In addition, the project and the related projects that would rely on the Mather Interceptor for sewer service would contribute to the indirect significant impacts identified by SRCSD in its Mather Interceptor Supplemental EIR that would be associated with the Mather Interceptor. Therefore, the project could result in a cumulatively considerable incremental contribution to the cumulatively significant impact associated with the construction of the Mather Interceptor.

WASTEWATER TREATMENT FACILITIES

Depending on the project alternative chosen for development, approximately 2.84 to 3.21 mgd of average dry-weather flow and 5.96 to 6.89 mgd peak wet-weather flow would be generated within the SRCSD service area (MacKay & Somps 2011). The wastewater flows generated by the project have been planned for in the SRCSD Master Plan 2000. The master plan determined that the SPA as wells as several of the related projects (the Anatolia III subdivision, the southern portion of the Ranch at Sunridge, and the northern portion of the Arboretum Specific Plan) would generate an average dry-weather flow of 7.40 mgd and a peak wet-weather flow of 16.54 mgd (SRCSD 2003a:Table 3-1).

Impacts resulting from expansion of the SRWTP were addressed in the EIR for the SRCSD 2020 Master Plan. Expansion of the SRWTP would result in several significant environmental impacts, most of which would be reduced to a less-than-significant level through implementation of mitigation identified in the EIR for the SRCSD 2020 Master Plan. 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. This impact would also occur without development of the project because the expansion of the SRWTP is required to serve regional development and would be needed whether or not the project is implemented. The adequacy of the EIR for the 2020 Master Plan is being litigated (see Section 3.16.1, "Affected Environment," above for additional information) and there is a potential that new significant impacts to water quality or other resources could be identified if the EIR for the SRWTP is found inadequate and impacts are re-analyzed. However, it is too speculative for meaningful consideration to draw any such conclusion at this point.

Therefore, the project and related projects would contribute to the direct and indirect significant impacts identified by SRCSD in its 2020 Master Plan that would be associated with the future expansion of the SRWTP to serve the project and other regional development. The project would result in a cumulatively considerable incremental contribution to the cumulatively significant impact associated with increased demand for SRWTP wastewater treatment facilities.

SOLID WASTE

Operation of the project would incrementally increase generation of solid waste throughout buildout in the year 2032. Depending on the project alternative chosen for development, approximately 13.0 to 26.5 tpd of solid waste would be generated for disposal at Kiefer Landfill. The landfill is permitted to accept 10,800 maximum tpd of solid waste and the project would contribute less than 1% of the maximum tpd that could be received at the landfill. The related projects vary in size and have different amounts of residential and commercial development (which have different solid waste generation rates), and therefore also would be expected to increase the generation of solid waste within the Kiefer Landfill service area. The total increase is unknown, but is anticipated to be several hundred tons per day. Currently, the landfill is operating below permitted capacity, and the closure date of the Kiefer Landfill is anticipated to be approximately 2064 (CIWMB 2010b). Because the Kiefer Landfill has adequate capacity to serve the project and the related projects in its service area, the project-related impact from increased generation of solid waste is less than significant and the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to solid waste.

ELECTRICITY

The project and cumulative development of the related projects would increase the demand for electricity and infrastructure. Electrical service in Rancho Cordova is provided by SMUD and would provide electrical service for the project and related projects within its service area. In 2009, SMUD generated approximately 10,595 GWh of electricity within its service area (CEC 2009a). Depending on the land use alternative chosen for development, the project-specific electrical demand in the SMUD service area would increase by 42.3 to 65.3 GWh per year, which is less than 1% of the total electrical demand in the SMUD service area (10,595 GWh). The related projects vary in size and have different amounts of residential and commercial development, and therefore also would be expected to increase the demand for electricity and infrastructure within SMUD's service area. The total increase is unknown; however, SMUD has stated that is has capacity to serve the project. Based on the percentage of total regional demand, it is anticipated that SMUD would have the capacity to provide service to the related projects as well. Therefore, the project-related impact from increased demand for electrical service is less than significant and the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to increased demand for electrical service.

NATURAL GAS

The project and cumulative development of the related projects would increase the demand for natural gas and infrastructure. PG&E is the natural gas supplier for Rancho Cordova and would provide natural gas service for the project and related projects within its service area. In 2009, PG&E delivered approximately 4,572 MM therms of natural gas throughout its service area (CEC 2009c). Of this total, Sacramento County received 315 MM therms, which accounted for 0.07% of the natural gas deliveries within the PG&E service area. CEC predicts that natural gas consumption between 2009 and 2018 will decrease with the continued implementation of energy conservation measures (Table 3.16-3).

Depending on the land use alternative chosen, the project-specific natural gas demand would increase by 1.7 to 2.2 MM therms within the PG&E service area, which would account for less than 1% of the total natural gas deliveries in Sacramento County (315 MM therms) and PG&E's service area (4,572 MM therms) as a whole. The related projects vary in size and have different amounts of residential and commercial development, and therefore also would be expected to increase the demand for natural gas and infrastructure within PG&Es service area. The total increase is unknown; however, PG&E has stated that is has capacity to serve the project. Based on the percentage of total regional demand, it is anticipated that PG&E would have the capacity to provide service to the related projects as well. Therefore, the project-related impact from increased demand for natural gas is less than significant and the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact related to increased demand for natural gas.

COMMUNICATIONS

Frontier Communications and AT&T would provide communications service and associated infrastructure (i.e., pole-mounted telephone lines or underground telephone lines) to the SPA and the related projects and both service providers have existing infrastructure in the vicinity of the SPA and the related projects (MacKay & Somps 2010b:6). Frontier Communications and AT&T would extend this infrastructure to the SPA and the related projects to provide the necessary communications services without affecting service to its existing customers. The project-related impact from increased demand for communications and cable television services is less than significant, and it is anticipated that impacts from the related projects would also be less than significant, because both companies have the capacity to install lines that would carry their communication signals. Therefore, related projects and other development in the region are not considered to result in a cumulatively considerable impact related to communications, and the project would not result in a cumulatively considerable incremental contribution to a significant cumulative impact.

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