3.5 UTILITIES AND SERVICE SYSTEMS

3.5.1 AFFECTED ENVIRONMENT

WATER SUPPLY

The Rio del Oro project site is located in central Sacramento County within the service area of Sacramento County Water Agency's (SCWA's) Zone 40. SCWA is responsible for supplying water to Zone 40, which consists of 86,000 acres of agricultural, residential, and industrial land in central Sacramento County and encompasses portions of the cities of Elk Grove and Rancho Cordova. SCWA Zone 40 is the wholesale water purveyor that provides water to the retail customers, SCWA Zone 41 and the California-American Water Company (Cal-Am), a privately owned retail purveyor regulated by the California Public Utilities Commission.

SCWA's *Zone 40 Water Supply Master Plan* (Zone 40 WSMP) (SCWA 2005) identified a land area for urban development that could be served by firm water supplies negotiated under existing contracts in the Water Forum Agreement. In addition, SCWA has surface-water entitlements, is a groundwater appropriator, and has entered into an agreement to beneficially reuse remediated groundwater from the Aerojet General Corporation (Aerojet), Boeing, and McDonnell Douglas Corporation (MDC) properties.

SCWA has undertaken an extensive planning effort for the facilities and supplies necessary to serve future growth and development within the central portion of Sacramento County known as Zone 40. Zone 40 also includes a subarea within its service area known as the 2030 Study Area. SCWA recently prepared and adopted its Zone 40 WSMP (SCWA 2005). The Zone 40 WSMP focuses on the central portion of the county and describes the facilities and the construction financing mechanism needed to implement a phased water supply program to meet the region's water needs into the foreseeable future, specifically the year 2030. The goal of the master plan is to define a conjunctive use program of groundwater, surface water, and recycled water supplies as well as a financing program for the construction of a new surface-water diversion structure; surface-water treatment plant; water conveyance pipelines; and groundwater extraction, treatment, and distribution facilities. These facilities would be used for the production, conservation, transmission, and distribution of wholesale and retail water supplies in the year 2030. The Zone 40 WSMP was adopted by SCWA in February 2005 and includes the most recent and best information available regarding existing and future water demands, supplies, and facilities within central Sacramento County. Table 3.5-1 below identifies existing and projected 2000 and 2030 land use and water demands within SCWA's Zone 40 and 2030 Study Area.

An element of the Zone 40 WSMP is the construction of SCWA's proposed Eastern County Replacement Water Supply Project (RWSP). The RWSP would construct the necessary infrastructure to deliver water supplies to the Rio del Oro project site. In addition, this project is a key element in facilitating the beneficial reuse of remediated groundwater supplies within Zone 40. Environmental review for this project is anticipated to be completed by summer 2006 with construction of proposed water supply facilities completed by 2011.

The permanent long-term water supply cannot be delivered to the Rio del Oro project site until the facilities described above have been approved and constructed (currently estimated at 2011). If a temporary supply of water from another source could be secured until the completion of these water projects, some initial development of the project could occur. This short-term "gap" water supply is currently conceptual and has not been fully developed in order to evaluate in detail whether it can be determined to be a reliable source of water.

The project applicant(s) have discussed the availability of a gap water supply with Golden State Water Company (GSWC) and have identified potential water supply options for providing gap water to the project. These gap supplies could support a portion of the initial phases of project development (estimated in summer/fall 2007) until SCWA has constructed the facilities necessary to deliver permanent water supplies to the project site.

Table 3.5-1
SCWA Zone 40 Current and Projected Water Demands

Land Use Category	Year 2000 Land Use and Water Demands			Year 2030 Water Demands		
	Unit Water Demand Factors (AF/Ac/Yr)	Land Use (Acres)	Water Demand (AFY)	Unit Water Demand Factors (AF/Ac/Yr)	Land Use (Acres)	Water Demand (AFY)
Rural Estates	1.57	304	477	1.33	718	955
Single-Family	3.40	3,387	11,516	2.89	14,867	42,966
Multifamily—Low Density	4.36	285	1,243	3.70	1,173	4,340
Multifamily—High Density	4.85	0	0	4.12	0	0
Commercial	3.24	254	823	2.75	1,042	2,866
Industrial	3.19	1,257	4,010	2.71	2,395	6,490
Industrial—Unutilized	0.00	0	0	0.00	1,463	0
Public	1.22	692	844	1.04	4,349	4,523
Public Recreation	4.08	400	1,632	3.46	2,865	9,913
Mixed Land Use	2.95	840	2,478	2.51	12,985	32,592
Developed Land Use		7,419	23,023		41,857	104,645
Right-of-Way	0.25	726	182	0.21	2,526	530
Water Use Subtotal			23,205			105,175
Water System Losses (7.5%)			1,740			7,888
Zone 40 Water Production			24,945			113,063
Urban and Rural Areas Not Currently Being Served by Zone 40		5,127	NA		0	NA
Vacant		27,583	NA		2,225	NA
Agriculture		5,766	NA		12	NA
Total Land and Water Use		**46,621**	**24,945**		**46,620**	**113,063**

Notes: AF/Ac/Yr = acre-feet per acre per year; AFY = acre-feet per year; NA = not applicable
SCWA Zone 40 does not supply water to meet agricultural demands within its service area.
Minor discrepancies in acreage totals are a result of rounding errors in land use data.
Source: SCWA 2005

The City of Rancho Cordova (City) also conducted a Water Supply Evaluation for the *City of Rancho Cordova General Plan* (City General Plan) (City of Rancho Cordova 2006). The Water Supply Evaluation addressed water supply issues for the City General Plan and included all of the following:

- the regulatory and planning environment with regard to the regional water supply,
- water purveyors that currently provide water service within Rancho Cordova,
- water demands associated with buildout of the City's corporate limits (which are estimated to build out by 2030) and larger planning area (which is assumed to build out by 2050),
- existing available water supplies that could meet a portion of the City's projected buildout water demands,
- the area within the City for which long-term water supplies have been secured,

- potential future sources of water to meet remaining buildout water demands, and
- a brief summary of the potential environmental impacts associated with delivering future water supplies to the City.

WASTEWATER

According to the City General Plan, all new residential, industrial, and commercial developments must be connected to a public sewer system.

Sanitary-sewer service for the project site would be provided by the Sacramento Regional County Sanitation District (SRCSD) and County Sanitation District No. 1 (CSD-1). 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. CSD-1 is responsible for local collection facilities, including trunk sewers with capacity of 1–10 mgd. The CSD-1 collection system includes more than 2,400 miles of trunk sewer pipelines categorized according to size, function, and hydraulic capacity. These districts own, operate, and are responsible for the public collection, trunk, and interceptor sewer systems throughout Sacramento County as well as the Sacramento Regional Wastewater Treatment Plant (SRWTP) located south of Freeport. Although the project site is located within the sphere of influence of both County public sewer providers, it must be annexed to SRCSD and CSD-1 before service can be provided.

The only existing public sewer facilities in the vicinity of the project site are small 6- to 8-inch sewer laterals adjacent to the western site boundary. The Cordova Industrial Park on the western site boundary is served by public sewer facilities. However, these facilities are not currently sized to support any development at the project site. Existing on- and off-site facilities are shown in Exhibits 2-10a and 2-10b in Chapter 2, "Alternatives."

The project site is almost entirely within CSD-1's AJ (Aerojet) Douglas White Rock Trunk Shed sewer system, which serves flows between 1 and 10 mgd. The northwest corner of the project site is part of the AJ Trunk Shed, which is planned to be lifted to the AJ Interceptor, Section 2. None of the AJ Douglas White Rock Trunk Shed or AJ Trunk Shed facilities has been constructed. Construction of these facilities on the project site is anticipated to begin in 2011, with final completion in 2020. The AJ and Laguna Creek Interceptors, as designated in the 2000 SRCSD Interceptor System Master Plan, would be constructed by SRCSD and would serve the project site beginning in 2020. The AJ Interceptor, Section 2, would run along the western side of the project site, then south along Sunrise Boulevard to a connection point with the AJ Interceptor, Section 4, near the intersection of Sunrise Boulevard and Douglas Road. From this point, flows would be conveyed south to the Laguna Creek Interceptor. Discharge from the entire project site would ultimately flow into the Laguna Creek Interceptor after its completion (2024) (Wood Rodgers 2003).

The County evaluated the environmental impacts of constructing trunk and interceptor sewers that would serve the project, as well as most of the Sacramento region, in the *CSD-1 Sewerage Facilities Expansion Master Plan, Final Environmental Impact Report* (County of Sacramento 2004a) and the *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Final Program Environmental Impact Report* (County of Sacramento 2003). Both EIRs were certified and the master plans were approved.

The overall goal of the *CSD-1 Sewerage Facilities Master Plan* is to estimate the future capital improvement needs of the CSD-1 trunk sewer system, both for capacity-relief projects for the existing system and for expansion projects to serve newly developed areas. The master plan translates existing land use projections into wastewater flow estimates, identifies trunk relief and expansion projects, combines them to create a capital improvement program, and assesses several financial elements of the CSD-1 trunk program. Project-related facilities evaluated include trunk sewers in the AJ and AJ Douglas White Rock trunk sheds (along with other trunk sewers in the southern and southeastern parts of the county).

The purpose of the *SRCSD Interceptor System 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 new information regarding population growth, wastewater flow generation, and actual system responses to wet weather. Project-related facilities evaluated include the Bradshaw, AJ, and Laguna Creek Interceptors.

Collected wastewater flows are ultimately transported into the SRWTP. The SRWTP receives and treats an average of 165 mgd (as of 2005) and has a permitted dry-weather flow design capacity of 181 mgd. Treated effluent charges are conveyed to the SRWTP and ultimately discharged into the Sacramento River. The SRWTP has an NPDES permit issued by the Central Valley RWQCB for discharge of up to 181 mgd of treated effluent into the Sacramento River. SCRSD has prepared the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (County of Sacramento 2004b), which provides for the expansion of the SRWTP to 218 mgd. The master plan for the SRWTP provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth (including the project) and to meet existing and anticipated regulatory requirements through the year 2020. The master plan addresses both public-health and environmental-protection issues while ensuring reliable service at affordable rates for SRCSD customers. The key goals of the master plan are to provide sufficient capacity to meet growth projections and an orderly expansion of SRWTP facilities, comply with applicable water quality standards, and provide for the most cost-effective facilities and programs from a watershed perspective. As part of the expansion, the SRWTP has applied to the Central Valley RWQCB for a NPDES permit to accommodate these additional discharges into the Sacramento River.

SOLID WASTE

Browning Ferris Industries waste services began providing pickup and disposal of solid waste in Rancho Cordova on February 1, 2005. Waste is transported to the Kiefer Landfill, near the intersection of Grant Line Road and Kiefer Boulevard, or to a transfer station near Fruitridge Road. Kiefer Landfill is the primary municipal solid-waste disposal facility in Sacramento County. Waste is accepted from the general public, businesses, and private waste haulers.

At present, the Kiefer Landfill is permitted to accept a maximum of 10,815 tons per day (tpd) of solid waste; however, the average intake is only approximately 6,000 tpd. The landfill has a total capacity of 117 million cubic yards (58 million tons). The Kiefer Landfill is classified as a "major landfill," which is defined as a facility that receives more than 50,000 tons of solid waste per year. Currently, the landfill is operating below permitted capacity and will have capacity for the next 40 years based on current disposal rates (CIWMB 2004a).

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 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.

Sacramento County had a diversion rate of 55% in 2000 (CIWMB 2005). The County continues to make substantial progress in diverting waste from landfills. Licensed solid-waste authorities hauled approximately 292,000 tons of waste materials in the county in 2000. In 2002, approximately 90,000 tons of waste were diverted from local landfills and the waste stream, which equates to a 31% reduction in landfill waste (City of Rancho Cordova 2005).

The California Integrated Waste Management Board (CIWMB) provides an average per-capita solid-waste disposal rate for Sacramento County of 0.36 ton per resident per year (CIWMB 2004b). Business waste–disposal rates calculated by the CIWMB range from 0.3 ton per year for general-merchandise stores to 3.1 tons per year for restaurants (CIWMB 2004c).

ELECTRICITY

Sacramento Municipal Utility District (SMUD) is the electrical service provider for Rancho Cordova. SMUD currently generates approximately 1,197 megawatts (MW) of electricity per day and delivers it to an approximately 900-square-mile area within Sacramento County. Approximately 57% of the electricity is generated by hydroelectric plants and approximately 41% is generated by thermal plants. The remaining electricity is generated by either wind or solar power.

SMUD also 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. SMUD is currently in the process of permitting the first phase of the Cosumnes Power Plant (CPP), which is part of SMUD's long-range plan to meet the growing power needs of Sacramento County. The CPP would be a natural gas–fired electrical generating facility and is anticipated to be constructed in two phases (Phase 1 started in early 2004). The CPP would provide SMUD with a total of 1,000 MW additional capacity. Phase 1 of the CPP (500 MW) is scheduled to begin serving SMUD costumers in 2006 (SMUD 2004, n.d.).

All existing electrical lines on the project site are aboveground. Electrical lines in the northern portion of the project site begin at the intersection of Sunrise Boulevard and White Rock Road and follow White Rock Road east for 1.1 miles. In the southern portion of the project site, electrical lines begin at the intersection of Sunrise Boulevard and Douglas Road and parallel Douglas Road for approximately 0.9 mile. In the eastern portion of the project site, electrical towers intersect Grant Line Road 1 mile north of Douglas Road. These towers continue south on the project site and intersect Douglas Road 0.8 mile west of the Douglas Road/Grant Line Road intersection. Additional electrical lines begin from a point on White Rock Road approximately 2.8 miles from its intersection with Sunrise Boulevard and turn south onto the project site for 1 mile to SMUD substation 69 (12 kilovolts [kV]), then continue approximately 3.5 miles before going underground and continuing to Douglas Road.

NATURAL GAS

Pacific Gas and Electric Company (PG&E) is the natural gas service provider for Rancho Cordova. Gas is delivered to Rancho Cordova through portions of PG&E's 43,000-mile natural-gas pipeline system. The existing facilities in the city consist of 4.5- to 16-inch conveyance pipelines. PG&E's existing conveyance lines at the project site run underground from the Sunrise Boulevard/White Rock Road intersection and follow White Rock Road east for approximately 2.3 miles. All construction and maintenance activities for natural gas facilities are the responsibility of PG&E.

TELECOMMUNICATIONS

AT&T Inc. (AT&T) (formerly SBC Communications [SBC]) has existing underground and overhead telephone lines in the vicinity of the project site. Underground and aboveground communications lines begin from a point on White Rock Road approximately 1.5 miles from its intersection with Sunrise Boulevard in the northern portion of the project site. Underground communications lines continue east on White Rock Road for 2 miles, and aboveground communications lines continue east for 1.3 miles. From here, aboveground lines continue in separate directions; one continues northeast to the intersection of Grant Line Road and the other turns south onto the project site for approximately 1.2 miles. Underground telephone lines in the southern portion of the project site begin at the Douglas Road/Sunrise Boulevard intersection and parallel Douglas Road for approximately 2.9 miles to its intersection with Grant Line Road. These communications lines are shared with other communications service providers.

3.5.2 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

There are no federal plans, policies, regulations, or laws related to utilities and service systems that are applicable to the proposed project or alternatives under consideration.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Senate Bill 610

The State of California has legislation applicable to the consideration of larger projects under CEQA. Senate Bill (SB) 610 (Chapter 643, Statutes of 2001; Section 21151.9 of the Public Resources Code and Section 10910 et seq. of the Water Code) requires the preparation of "water supply assessments" for large developments (i.e., more than 500 dwelling units or nonresidential equivalent), such as the Rio del Oro project. These assessments, prepared by "public water systems" responsible for serving project areas (here, SCWA), address whether existing and projected water supplies are adequate to serve the projects while also meeting existing urban and agricultural demands and the needs of other anticipated development in the service area in which the project is located. If the most recently adopted Urban Water Management Plan (UWMP) accounted for the projected water demand associated with the project, the public water system may incorporate the requested information from the UWMP. If the UWMP did not account for the project's water demand, or if the public water system has no UWMP, the project's water supply assessment shall discuss whether the system's total projected water supplies (available during normal, single dry, and multiple dry water years during a 20-year projection) will meet the project's water demand in addition to the system's existing and planned future uses, including agricultural and manufacturing uses. The absence of an adequate current water supply does not preclude project approval, but it does require a lead agency to address a water supply shortfall in its project approval findings.

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 [Chapter 1095, Statutes of 1989]), 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. Sacramento County had a diversion rate of 55% in 2000. Each city is required to develop a solid-waste plan 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. The City prepared an integrated-waste plan concurrently with its General Plan, which was adopted on June 26, 2006.

Energy Efficiency Standards for Buildings

The project would be required to comply with recently adopted changes to Title 24 of the California Code of Regulations regarding energy efficiency, which 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 energy efficiency of residential and nonresidential buildings, minimize impacts during peak energy-usage periods, and reduce impacts on overall state energy needs.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND LAWS

Rancho Cordova General Plan

Goals and policies from the City General Plan relating to utilities and service systems that the City has found to be applicable to the proposed project and alternatives under consideration are provided in Appendix F.

3.5.3 ENVIRONMENTAL CONSEQUENCES

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines (except where noted below), a utilities and service systems impact is considered significant if implementation of the proposed project or alternatives under consideration would do any of the following:

- create demand for wastewater treatment/disposal beyond available service;
- create demand for electrical or natural-gas service that is substantial in relation to the existing demands;
- exceed wastewater treatment requirements of the Central Valley RWQCB;
- require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- have insufficient water supplies available to serve the project from existing or permitted entitlements and resources, or require new or expanded entitlements;
- 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 (based on Appendix F of the State CEQA Guidelines).

ANALYSIS METHODOLOGY

Impacts on utilities and service systems that would result from project implementation were identified by comparing existing service capacity and facilities against future demand associated with project implementation. Where possible, a quantitative comparison was used to determine impacts of the project on future demands. Evaluation of potential utility and service systems impacts was based on a review of documents pertaining to the project site and surrounding area, including the City General Plan Existing Conditions Report (City of Rancho Cordova 2005), the Water Supply Evaluation prepared for the City General Plan (City of Rancho Cordova 2006), the EIR for the *Zone 40 Water Supply Master Plan* (Sacramento County Water Agency 2004), the *CSD-1 Sewerage Facilities Expansion Master Plan* (CSD-1 2000), the *SRCSD Interceptor Master Plan 2000* (SRCSD 2000), the *EIR for the Sacramento Regional Wastewater Treatment Plant 2020 Master Plan* (County of Sacramento 2004b), the Rio del Oro Conceptual Sewer Study (Wood Rodgers 2003, 2005), and the CIWMB's waste disposal rates for residential and business uses. Additional information was obtained through consultation with appropriate agencies, such as CSD-1, SRCSD, SMUD, PG&E, and SBC (now AT&T), as well as field review of the project site and surroundings.

Various off-site utilities and other infrastructure improvements would be needed to support the project both in the interim and at buildout, as described in Chapter 2, "Alternatives." The following off-site improvements have received CEQA clearance (certified environmental documents). Although these facilities are not evaluated in further in this DEIR/DEIS, a summary of their environmental impacts have been incorporated by reference and are summarized in this section.

- Bradshaw Sewer Interceptor
- AJ Sewer Interceptor
- Laguna Creek Sewer Interceptor

IMPACT ANALYSIS

Effects that would occur under each alternative development scenario are identified as follows: PP (Proposed Project), HD (High Density), IM (Impact Minimization), NF (No Federal Action), and NP (No Project). The impacts for each alternative are compared relative to the PP at the end of each impact conclusion (i.e., similar, greater, lesser).

Program Level Impacts and Mitigation Measures

IMPACT 3.5-1

Increased Demand for Initial Water Supplies and Infrastructure. *Project implementation would result in increased demand for water supply. Because permanent water supply facilities would not be available until 2010, initial transmission facilities and an initial water supply would be required to convey water for implementation of development phases or projects before 2010.*

PP, HD, IM

The permanent long-term water supply cannot be delivered to the Rio del Oro project site until the SCWA facilities have been approved and constructed (currently estimated at 2011).

The project applicant(s) have discussed the availability of a gap water supply with GSWC and have identified potential water supply options for providing gap water to the project site. These gap supplies, listed and qualified below, could support a portion of the initial phases of development of the project until SCWA has constructed the facilities necessary to deliver permanent water supplies to the project site.

- Option A—Existing GSWC water supply capacity that exceeds its current projected maximum-day system demand could be delivered to the project.
- Option B—Existing GSWC wells that have been taken out of service as a result of groundwater contamination could be provided with wellhead treatment to remove contaminants. If these wells are then brought back online, the GSWC system could have excess capacity that could be delivered to the project, as described above under Option A.
- Option C—If water treated at GenCorp's groundwater extraction and treatment plant J (GET J) is piped to the nearby Coloma/Pyrites Water Treatment Plant and blended with other potable surface water supplies, the GSWC system could have excess capacity that could be delivered to the project, as described above under Option A.

Options B and C would require a change in current regulatory agency policy regarding sources of drinking water supply. Furthermore, any delivery of a gap water supply for initial project development would require an agreement with SCWA that must describe capital improvements required to deliver the water, the source of funding for any such improvements, the price of gap water, and a commitment of the gap supply. Other existing agreements that address water supply in this area may need to be amended.

Both on- and off-site water conveyance facilities (e.g., pipelines and pump stations) would need to be constructed to deliver water from GSWC's facilities to the project site. Although the project applicant(s) have provided basic plans showing proposed water supply infrastructure (Exhibits 2-9a through 2-9c), final design plans and specifications have not been submitted or approved and the gap water supply has not been fully developed to evaluate in detail whether it can be determined to be a reliable source of water. Therefore, this **direct** impact would be **potentially significant**. **No indirect** impacts would occur. ***[Similar]***

NF As described above, the permanent long-term water supply cannot be delivered to the Rio del Oro project site until the SCWA facilities have been approved and constructed (currently estimated at 2011). The project applicant(s) have discussed the availability of a gap water supply with GSWC and have identified potential water supply options for providing gap water to the project site. These gap supplies, listed and qualified above as Options A, B, and C, could support a portion of the initial phases of development of the project until SCWA has constructed the facilities necessary to deliver permanent water supplies to the project site. The gap water supply has not been fully developed to evaluate in detail whether it can be determined to be a reliable source of water.

Because the project applicant(s) would not be obtaining a Section 404 of the Clean Water Act permit from USACE, they would not be able to install water supply infrastructure in the southern portion of the project site that is necessary to serve proposed areas of urban development in Rancho Cordova. The 24-inch water supply pipeline along Americanos Boulevard and through the Security Park (not part of the proposed Rio del Oro project) is required to provide connectivity with Cal-Am's storage and pumping facility at the corner of Douglas Road. Furthermore, infrastructure planning for future water supply requires that a water supply pipeline be installed in a north-south direction through the Rio del Oro project site, because in the future, water for the Sunrise Douglas Community Plan, SunCreek Specific Plan, Rio del Oro Specific Plan, and the Easton Specific Plan, and Westborough Specific Plan areas would be provided from the Freeport Water Treatment Plant to be built in south Sacramento County. Therefore, water supply pipelines need to be installed along Jaeger Road south of Douglas Road, along Rancho Cordova Parkway (the extension of Jaeger Road) through the Rio del Oro project site, and continuing north across White Rock Road to provide future water service for planned area development.

It is possible that water supply pipelines could still be installed along what would have been the southern ends of Rancho Cordova Parkway and Americanos Boulevard following the same alignment shown in Exhibits 2-9a through 2-9c.

Other potential water supply pipeline alignments could be designed to travel west from the southern portion of the project site to Sunrise Boulevard and/or travel east to Douglas Road. This alignment would connect to existing infrastructure on Sunrise Boulevard and/or Douglas Road. No plans showing this proposed water supply infrastructure have been developed or analyzed.

Installation of water supply pipelines from the southern portion of the project site to Sunrise Boulevard and/or Douglas Road would eliminate the water supply pipeline that would be installed in a north-south direction through the Rio del Oro project site, potentially affecting off-site infrastructure capacity. Water conveyance facilities for the Sunrise Douglas Community Plan, SunCreek Specific Plan, Easton Specific Plan, and Westborough Specific Plan areas would be provided around the periphery of the project site through Sunrise Boulevard to the corner of Douglas Road. Subsequently, water conveyance facilities planned for and approved in the *Zone 40 Water Supply Master Plan* prepared by SCWA (2005) for these roads would likely not have sufficient capacity to serve these developments and would potentially require upgrades to provide an adequate level of serve. Upgrades to these facilities could be inconsistent with SCWA's water

supply master plan.

Installation of water supply pipelines through the designated Natural Resource areas would be required using HDD techniques to avoid features considered jurisdictional by the USACE in the southern portion of the project site. HDD techniques require large construction areas to accommodate pipes and additional construction equipment need for tunneling or boring. Operation and maintenance of water conveyance facilities through the designated Natural Resources areas would be greater because of a lack of access to the pipeline. Therefore, impacts associated with the No Federal Action Alternative would be greater than those for the other project alternatives. This **direct** impact would be **potentially significant**. No **indirect** impacts would occur. ***[Greater]***

NP Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, initial water supplies and associated infrastructure would not be required; thus, **no direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure 3.5-1a: Submit Proof of Gap Water Availability and Implement On- and Off-Site Infrastructure Delivery System or Assure that Adequate Financing is Secured.

PP, HD, IM, NF Before the approval of any small-lot tentative subdivision map for a proposed residential project of more than 500 dwelling units, the City shall comply with Government Code Section 66473.7. Before the approval of any small-lot tentative subdivision map for a proposed residential project of 500 or fewer units, the City need not comply with Section 66473.7, or formally consult with any public water system that would provide water to the affected area; nevertheless, the City shall make a factual showing or impose conditions similar to those required by Section 66473.7 to ensure an adequate water supply for development authorized by the map.

Before recordation of any final small-lot subdivision map, or before City approval of any similar project-specific discretionary approval or entitlement required for nonresidential uses, the project applicant(s) of that project phase shall demonstrate the availability of a long-term, reliable water supply from a public water system for the amount of development that would be authorized by the final subdivision map or project-specific discretionary nonresidential approval or entitlement. Such a demonstration shall consist of information showing that either existing sources are available or needed supplies and improvements will be in place before occupancy.

Timing: Before approval of final small-lot maps or, for nonresidential projects, before issuance of use permits, building permits, or other entitlements.

Enforcement: City of Rancho Cordova Building Department.

Mitigation Measure 3.5-1b: Identify Alternative Water Supply Pipeline Alignments and Implement Measures to Mitigate Impacts.

NF To implement the No Federal Action Alternative, the project applicant(s) must identify alternative water supply pipeline alignments and their connection to existing infrastructure on Sunrise Boulevard and/or Douglas Road. Implementation of alternative water pipeline alignments would be subject to separate CEQA compliance.

It is possible that water supply pipelines could still be installed along what would have been the southern ends of Rancho Cordova Parkway and Americanos Boulevard following the same alignment shown in Exhibits 2-9a through 2-9c.

Other potential water supply pipeline alignments could be designed to travel west from the southern portion of the project site to Sunrise Boulevard and/or travel east to Douglas Road. This alignment would connect to existing infrastructure on Sunrise Boulevard and/or Douglas Road.

Alternative alignments have not been subject to CEQA compliance, and therefore, the full extent of impacts cannot be estimated. However, it is assumed that implementation of alternative pipeline alignments would result in significant biological resource impacts, as well as significant construction-related impacts (i.e., construction-related traffic, emission, water quality, and noise impacts). Mitigation identified in this DEIR/DEIS to reduce construction-related impacts would need to be implemented, as well as any specific permit conditions.

Timing: Before approval of the Rio del Oro Specific Plan.

Enforcement: City of Rancho Cordova Building Department.

NP No mitigation measures are required.

Implementation of Mitigation Measure 3.5-1a would reduce potentially significant impacts related to initial water supply and infrastructure under the Proposed Project, High Density, and Impact Minimization Alternatives to a **less-than-significant** level. Implementation of Mitigation Measure 3.5-1b would partially reduce impacts under the No Federal Action Alternative, but not to a less-than-significant level. Identification of alternative water supply pipeline alignments would fall under the jurisdiction of the County and SWCA; therefore, neither the City nor the project applicant(s) can guarantee approval of these alternative pipeline alignments. Additionally, it is possible that these alternative alignments would be inconsistent with SWCA's water supply master plan and would be subject to separate CEQA compliance. For these reasons, this impact would remain **significant and unavoidable**. If the County, SWCA, and other potentially affected agencies cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.5-2 Increased Demand for Permanent Water Supplies. *Project implementation would increase demand on the existing water supply available to the City of Rancho Cordova.*

PP, HD, IM, NF The project would be served by SCWA Zone 40 through its conjunctive-use water supply system. SCWA has surface-water entitlements, is a groundwater appropriator, and has entered into an agreement to beneficially reuse remediated groundwater from the Aerojet, Boeing, and MDC properties. Aerojet General Corporation has constructed numerous Groundwater Extraction and Treatment (GET) facilities throughout their Rancho Cordova facility to cleanup contaminated groundwater pursuant to orders from the U.S. Environmental Protection Agency (EPA) and California Department of Toxic Substances Control (DTSC) (see Section 3.13 of this DEIR/DEIS,

"Hazards and Hazardous Materials"). The EIR for the *Zone 40 Water Supply Master Plan*, which was prepared by SCWA (2003, 2004) and has been certified, discussed Aerojet's treatment systems and fully evaluated the potential hazards associated with and future uses of this groundwater after treatment, which include supply of this water to meet various potable water demands in Sacramento County. The Water Supply Evaluation prepared for the City General Plan (City of Rancho Cordova 2006) evaluated the ability of water supplies to meet demand at buildout of the City and its larger planning area. The Eastern County Water Supply Plan (EIR currently in process) describes the water supply facilities that would be constructed by the County to recapture the groundwater (after it has been treated by Aerojet) and the related distribution facilities to end users such as the Rio del Oro Specific Plan project. Assuming the Eastern County Water Supply Plan is approved, Sacramento County would not use the treated Aerojet water unless Aerojet demonstrates that it meets all NPDES permit requirements. Because Aerojet has been treating the groundwater for several years and has consistently demonstrated to EPA and DTSC that its treated groundwater meets all regulatory NPDES permit thresholds, the treated groundwater is considered a reliable source of potable water. Awater supply assessment, in compliance with SB 610 has been prepared to determine whether the projected water supplies available would meet the water demand associated with the project, in addition to the existing and planned future uses (Appendix D). The water supply assessment concluded that water supplies are available to meet the project's demands. The SWCA Board of Directors adopted the Rio del Oro Water Supply Assessment in June 2006.

For purposes of this analysis, it can be assumed that the water supply assessment would reflect availability of water supplies to meet water demand associated with the High Density, Impact Minimization, and No Federal Action Alternatives as well because the water demands from those alternatives are similar to or less than that of the Proposed Project Alternative. The following impact analysis summarizes the projected water supplies and demand from the water supply assessment.

Buildout water demands for the project were projected by applying a water demand factor to each proposed land use. The land uses and water demands under the Proposed Project Alternative were identified in the Draft *Rio del Oro Plan Area Water Supply Master Plan* (Wood Rodgers 2004) and are summarized in Table 3.5-2 below.

Table 3.5-2
Summary of Program Level Land Use and Water Demands, Proposed Project Alternative

Land Use	Area (acres)	Unit Water Demand Factor[1] (AF/ac/yr)	Water Demand (AFY)
Single-Family	1,597	2.89	4,615
Multifamily—Low Density	237	3.7	877
Multifamily—High Density	86	4.12	354
Commercial	293	2.75	806
Industrial	282	2.71	764
Public	161.5	1.04	168
Public Recreation	170	3.46	588
Right-of-Way	471	0.21	99
Vacant	531	0	-
Total	**3,828.5**		**8,271**
System Losses 7.5%			620
Total Demand			**8,891**

Note: AF/ac/yr = acre-feet per acre per year; AFY = acre-feet per year.

[1] The unit water demand factors provided in this table are consistent with the unit water demand factors used in the *Zone 40 Water Supply Master Plan* and the 2000 Water Forum Agreement.

Source: Wood Rodgers 2004

The land uses and water demands under the High Density, Impact Minimization, and No Federal Action Alternatives are summarized in Tables 3.5-3, 3.5-4, and 3.5-5 below.

Table 3.5-3
Summary of Program Level Land Use and Water Demands, High Density Alternative

Land Use	Area (acres)	Unit Water Demand Factor[1] (AF/ac/yr)	Water Demand (AFY)
Single-Family	1,567	2.89	4,829
Multifamily—Low Density	249	3.7	921
Multifamily—High Density	104	4.12	428
Commercial	293	2.75	806
Industrial	282	2.71	764
Public	161.5	1.04	168
Public Recreation	170	3.46	588
Right-of-Way	471	0.21	99
Vacant	531	0	-
Total	**3,828.5**		**8,603**
System Losses 7.5%			645
Total Demand			**9,248**

Note: AF/ac/yr = acre-feet per acre per year; AFY = acre-feet per year

[1] The unit water demand factors provided in this table are consistent with the unit water demand factors used in the *Zone 40 Water Supply Master Plan* and the 2000 Water Forum Agreement.

Sources: Wood Rodgers 2004, data compiled by EDAW in 2005

Table 3.5-4
Summary of Program Level Land Use and Water Demands, Impact Minimization Alternative

Land Use	Area (acres)	Unit Water Demand Factor[1] (AF/ac/yr)	Water Demand (AFY)
Single-Family	1,032.5	2.89	2,984
Multifamily—Low Density	241	3.7	892
Multifamily—High Density	173.5	4.12	642
Commercial	286	2.75	787
Industrial	261	2.71	707
Public	152	1.04	158
Public Recreation	167	3.46	578
Right-of-Way	497	0.21	104
Vacant	1,018.5	0	-
Total	**3,828**		**6,852**
System Losses 7.5%			514
Total Demand			**7,366**

Note: AF/ac/yr = acre-feet per acre per year; AFY = acre-feet per year

[1] The unit water demand factors provided in this table are consistent with the unit water demand factors used in the *Zone 40 Water Supply Master Plan* and the 2000 Water Forum Agreement.

Sources: Wood Rodgers 2004, data compiled by EDAW in 2005

Table 3.5-5
Summary of Program Level Land Use and Water Demands, No Federal Action Alternative

Land Use	Area (acres)	Unit Water Demand Factor[1] (AF/ac/yr)	Water Demand (AFY)
Single-Family	1,477	2.89	4,269
Multifamily—Low Density	210	3.7	777
Multifamily—High Density	85	4.12	350
Commercial	238	2.75	655
Industrial	232	2.71	629
Public	152.5	1.04	159
Public Recreation	182	3.46	630
Right-of-Way	393	0.21	83
Vacant	859	0	-
Total	**3,828**		**7,552**
System Losses 7.5%			566
Total Demand			**8,118**

Note: AF/ac/yr = acre-feet per acre per year; AFY = acre-feet per year

[1] The unit water demand factors provided in this table are consistent with the unit water demand factors used in the *Zone 40 Water Supply Master Plan* and the 2000 Water Forum Agreement.

Sources: Wood Rodgers 2004, data compiled by EDAW in 2005

As shown above, the total projected water demands are 8,891 AFY for the Proposed Project Alternative, 9,248 AFY for the High Density Alternative, 7,366 AFY for the Impact Minimization Alternative, and 8,118 AFY for the No Federal Action Alternative. A portion (1,505 acres) of the project site lies within the 2030 Study Area. SCWA has planned for 1,500 AFY of water supplies through the Zone 40 WSMP for these lands. These water supplies would be available when the Vineyard Water Treatment Plant (WTP) is constructed (estimated at 2011). The remaining demands under the Proposed Project Alternative (7,391 AFY), the High Density Alternative (7,748 AFY), the Impact Minimization Alternative (5,866 AFY), and the No Federal Action Alternative (6,618 AFY) would be met with remediated groundwater supplies made available through the RWSP.

Approximately 20,000 AFY of remediated water supplies are available to serve the project based on SCWA's agreement with Aerojet, Boeing, and MDC. Therefore, water supplies are available to meet the project's remaining water demands under all three action alternatives.

The project's water demands under normal and dry-year conditions were compared to available water supplies from 2010 through 2030 to determine whether a reliable water supply is available to serve the project and existing water demands during normal and dry years (Tables 3.5-5 and 3.5-6).

As shown in Tables 3.5-6 and 3.5-7, SCWA has adequate water supplies available to meet projected water demands under the Proposed Project, High Density, Impact Minimization, and No Federal Action Alternatives, even in critically dry years. SCWA would meet dry-year demands by increasing groundwater pumping from the Central Groundwater Basin as outlined in the Zone 40 WSMP. Total groundwater pumping in the Central Groundwater Basin would not exceed the Water Forum Agreement recommended sustainable yield (i.e., 273,000 AFY) of the groundwater basin (SCWA 2005). Based on the estimated water demand for the project, available water supply, and the *Rio del Oro Specific Plan Project Amended Water Supply Assessment* (EDAW 2006), the project's water supply impacts would be **direct** and **less than significant**. **No indirect** impacts would occur. ***[Similar]***

Table 3.5-6
Normal-Year Comparison of Water Supply and Demand (AFY)

Source	2010	2015	2020	2025	2030
Supply					
Zone 40 Surface Water	13,060	44,143	48,772	68,700	69,567
Zone 40 Groundwater	34,125	28,837	40,470	31,324	39,097
Zone 40 Recycled Water	4,400	4,400	4,400	4,400	4,400
Remediated Water for Rio del Oro	7,391	7,391	7,391	7,391	7,391
Total Supplies	**58,976**	**84,771**	**101,033**	**111,815**	**120,455**
Demand					
Zone 40 (Rio del Oro project not included)	50,085	75,880	92,142	102,924	111,564
Rio del Oro	8,891	8,891	8,891	8,891	8,891
Total Demand	**58,976**	**84,771**	**101,033**	**111,815**	**120,455**
Difference (Supply minus Demand)	0	0	0	0	0
Percent Increase in Water Demand from prior years		50	21	12	8

Note: AFY = acre-feet per year
Source: EDAW 2006

Table 3.5-7
Dry-Year Comparison of Water Supply and Demand (AFY)

Source	2010	2015	2020	2025	2030
Supply					
Zone 40 Surface Water	243	26,411	29,441	38,606	34,683
Zone 40 Groundwater	44,362	42,700	55,120	56,197	68,327
Zone 40 Recycled Water	4,400	4,400	4,400	4,400	4,400
Remediated Water for Rio del Oro	7,391	7,391	7,391	7,391	7,391
Total Supply	**56,396**	**80,902**	**96,352**	**106,594**	**114,801**
Demand					
Zone 40 (Rio del Oro project not included)	47,505	72,011	87,461	97,703	105,910
Rio del Oro	8,891	8,891	8,891	8, 891	8,891
Total Demand	**56,396**	**80,902**	**96,352**	**106,594**	**114,801**
Difference (Supply minus Demand)	0	0	0	0	0
Percent Increase in Water Demand from prior years		50	21	12	8

Notes: AFY = acre-feet per year. In dry years, potable drinking water demand is reduced (SCWA 2005).
Source: EDAW 2006

As stated in Chapter 2, "Alternatives," the City recently passed a resolution stating that new development should install a "purple pipe" recycled-water distribution system. Therefore, while it may not occur for many years, it is proposed that the project implement a recycled-water-use program that would require all major irrigated landscaping and open space areas within the project site to install a purple-pipe irrigation system that could be easily converted from potable to reclaimed water supply at some future date. As stated in Chapter 2, because the DEIR/DEIS already addresses the impacts of installing these kinds of pipelines within the project area, the City and USACE believe that, once enough details of the proposed system are available to ascertain its environmental impacts, any **direct** and **indirect** impacts solely attributable to the purple-pipe system would likely be **less than significant**.

NP

Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, permanent water supplies and associated infrastructure would not be required; thus, **no direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure: No mitigation measures are required.

IMPACT 3.5-3

Need for Permanent Water Facilities and Infrastructure. *Project implementation would result in increased demand for water supply. Permanent water facilities would be required to provide water to support project development.*

PP, HD, IM, NF

The EIR for the *Zone 40 Water Supply Master Plan* prepared by SCWA (2003, 2004) (Zone 40 EIR) evaluated the environmental impacts of constructing a proposed 42-inch transmission main along Douglas Road and a 1.5-million-gallon water tank north of White Rock Road, both of which would serve the Rio del Oro project. The EIR was certified and the master plan was approved. Because these facilities would need to be constructed to serve the project and other development in the region, the environmental impacts of these facilities are associated with development of the project. However, these impacts would also occur without development of the project because the 42-inch transmission main and the water tank are required to serve regional development, and would be needed whether or not the project is developed.

Because there is a relationship between the project and the need for these water facilities, approval of the project may hasten the occurrence of the related impacts. As described in the Zone 40 EIR, construction of these water facilities would result in several environmental impacts, most of which would be reduced to a less-than-significant level through implementation of mitigation. Impacts that would remain significant or potentially significant after mitigation implementation (i.e., significant and unavoidable) include:

- direct visual impacts associated with operation of new facilities;
- potential short-term air quality impacts associated with construction of new facilities (because it was unknown whether mitigation measures would be adequate to reduce impacts);
- short-term noise impacts associated with construction of new facilities;
- potential long-term stationary-source noise impacts from operation of new facilities;
- potential short-term construction impacts and long-term operational impacts on special-status plants and wildlife, if any species are identified in the locations where specific facilities are constructed;
- potential short-term construction impacts and long-term operational impacts on sensitive habitats, if any are identified in the locations where specific facilities are constructed; and
- potential loss of habitat from development of facilities that would otherwise be included in the proposed South Sacramento County Habitat Conservation Plan (SSCHCP) if facilities are developed outside the Zone 40 WSMP 2030 Study Area.

Therefore, the Rio del Oro project would contribute to **indirect** and **direct significant** impacts associated with the future construction of water supply facilities that would be needed to serve the project and other regional development. ***[Similar]***

NP

Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, permanent water supplies and associated infrastructure would not be required; thus, **no direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure: No further mitigation measures are required.

Regarding expansion of Zone 40 water supply facilities and infrastructure, implementation of mitigation measures to reduce impacts is the responsibility of Zone 40. Such measures would be implemented in accordance with the certified Zone 40 EIR prepared by SCWA. As described above, impacts on five issue areas would remain **significant and unavoidable** after mitigation implementation.

IMPACT 3.5-4

Increased Demand for Interim Wastewater Conveyance Facilities. *Project implementation would result in increased generation of wastewater. Because permanent interceptor facilities would not be available until 2024, interim interceptor facilities would be required to convey wastewater flows for implementation of development phases or projects before 2024.*

PP, HD, IM

Project implementation would result in increased generation of wastewater. The project site is almost entirely within CSD-1's AJ Douglas White Rock Trunk Shed sewer system, serving flows between 1 and 10 mgd. The northwest corner of the project site is part of the AJ Trunk Shed, which is planned to be lifted to the AJ Interceptor, Section 2. Discharge from the project site would ultimately flow into the AJ Interceptor, Section 2, then flow south and connect to the AJ Interceptor, Section 4, near the intersection of Sunrise Boulevard and Douglas Road. From this point, flows would be conveyed south to the Laguna Creek Interceptor. Different segments of the AJ and Laguna Creek Interceptors are scheduled to be constructed beginning in 2006, with final completion after 2020. A sewer master plan was completed for the project, which includes designs for interim facilities (Wood Rodgers 2005).

Interim facilities for the portion of the project site within the AJ Douglas White Rock Trunk Shed would flow into the Bradshaw Interceptor. The Bradshaw Interceptor is currently scheduled to be completed in 2006/2007 up to the west side of the Folsom South Canal. Development before completion of the AJ and Laguna Creek Interceptors would require construction of on-site facilities to a common point near the intersection of Sunrise Boulevard and Douglas Road, where off-site facilities would then be required to convey flows to existing facilities. The force main would travel south along Sunrise Boulevard, west along Douglas Road, across the Folsom South Canal, then north along the Zinfandel Drive alignment to a connection with the Bradshaw Interceptor or west along White Rock Road to Kilgore Road. Off-site facilities required to connect with existing facilities would be constructed in existing, disturbed rights-of-way. Before construction of the force main across the Folsom South Canal, the contractor would prepare a storm water pollution prevention plan and implement standard best management practices for construction activities.

On June 11, 2003, CSD-1 completed a review of the available capacity within the Bradshaw Interceptor for interim projects, which showed that total interim flows into the Bradshaw Interceptor from all projects could not exceed 39 mgd in the year 2020. Up to 10 mgd of flows generated by the project would need to be served on an interim basis. According to CSD-1, there would be sufficient capacity for the project's interim flows (Wood Rodgers 2005). After completion of the AJ and Laguna Creek Interceptors, the project's interim flows would be transferred to these new interceptors from the Bradshaw Interceptor.

The northwest corner of the project site is part of the AJ Trunk Shed, which is planned to be lifted to the AJ Interceptor, Section 2. This area consists of 168 acres and would have an estimated peak wet-weather flow of approximately 0.87 mgd at buildout of Phase 1 (Wood Rodgers 2005). Possible approaches to providing interim facilities to serve this area include:

- construction of interim gravity facilities to the existing Station S-070, minor upgrades to increase pump capacity, and use of existing downstream force mains and gravity lines to convey flow to the Folsom Interceptor;

- construction of interim gravity facilities to the existing Station S-070, a major upgrade of the lift station to serve the entire existing S-70 shed, and use of existing downstream force mains and gravity lines to convey flow to the Folsom Interceptor (FOI-6 project with increased capacity); and

- installation of a new lift station near the northwest corner of the project site and installation of a force main to the Bradshaw Interceptor (designed to be expandable up to 5.5 mgd, with a future outfall to the AJ Interceptor).

As part of the review process of the *Sewer Master Plan for Rio del Oro*, CSD-1 would identify a preferred alternative, which would be analyzed as part of detailed sewer master plans for interim wastewater conveyance facilities. It may also be determined by CSD-1 in the future that the interim facilities would become the permanent conveyance facilities for this area of the project site.

Because the infrastructure required for interim wastewater conveyance facilities necessary to serve the Rio del Oro project has not been constructed, nor have final design plans and specifications been submitted, this is considered a **direct** and **potentially significant** impact. **No indirect** impacts would occur. ***[Similar]***

NF Project implementation would result in increased generation of wastewater. The project site is almost entirely within CSD-1's AJ Douglas White Rock Trunk Shed sewer system, serving flows between 1 and 10 mgd. Because the project applicant(s) would not be obtaining a Section 404 Clean Water Act permit from USACE, they would not be able to install the necessary on-site wastewater infrastructure to serve proposed areas of urban development in the southern portion of the project site. However, it is possible that wastewater conveyance infrastructure could still be installed following the same alignment shown in Exhibits 2-11a and 2-11c and by using HDD techniques. Therefore, the sewer master plan prepared for the project (Wood Rodgers 2005) would be applicable to the No Federal Action Alternative. A sewer master plan was completed for the project, which includes designs for interim facilities (Wood Rodgers 2005).

Interim facilities for the portion of the project site within the AJ Douglas White Rock Trunk Shed would flow into the Bradshaw Interceptor. The Bradshaw Interceptor is currently scheduled to be completed in 2006/2007 up to the west side of the Folsom South Canal. Development before completion of the AJ and Laguna Creek Interceptors would require construction of on-site

facilities to a common point near the intersection of Sunrise Boulevard and Douglas Road, where off-site facilities would then be required to convey flows to existing facilities.

On June 11, 2003, CSD-1 completed a review of the available capacity within the Bradshaw Interceptor for interim projects, which showed that total interim flows into the Bradshaw Interceptor from all projects could not exceed 39 mgd in the year 2020. Up to 10 mgd of flows generated by the project would need to be served on an interim basis. According to CSD-1, there would be sufficient capacity for the project's interim flows (Wood Rodgers 2005). After completion of the AJ and Laguna Creek Interceptors, the project's interim flows would be transferred to these new interceptors from the Bradshaw Interceptor.

As part of the review process of the *Sewer Master Plan for Rio del Oro*, CSD-1 would identify a preferred alternative, which would be analyzed as part of detailed sewer master plans for interim wastewater conveyance facilities. It may also be determined by CSD-1 in the future that the interim facilities would become the permanent conveyance facilities for this area of the project site.

Installation of wastewater conveyance pipeline through the designated Natural Resource areas would require using HDD techniques to avoid features considered jurisdictional by the USACE in the southern portion of the project site. HDD techniques require large construction areas to accommodate pipes and additional construction equipment need for tunneling or boring. Operation and maintenance of the wastewater conveyance pipeline through the designated Natural Resources areas would be greater because of a lack of access to the pipeline. Therefore, impacts associated with the No Federal Action Alternative would be greater than those for the other project alternatives. In addition, the infrastructure required for interim wastewater conveyance facilities necessary to serve the Rio del Oro project has not been constructed, and final design plans and specifications have not been submitted. This is considered a **direct** and **potentially significant** impact. **No indirect** impacts would occur. ***[Greater]***

NP Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems. Because no development would occur under the No Project Alternative, construction of interim wastewater conveyance facilities would not be required; thus, **no direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure 3.5-4: Submit Proof of Adequate Wastewater and Implement On- and Off-Site Infrastructure Service System or Assure that Adequate Financing is Secured.

PP, HD, IM, NF Before the approval of building permits for all project phases, the project applicant(s) shall submit proof to the City that an adequate wastewater conveyance system either 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 Rio del Oro subdivisions shall be in place before approval of the final map for all project phases, or their financing shall be assured to the satisfaction of the City.

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

Enforcement: City of Rancho Cordova Building Department.

NP No mitigation measures are required.

Implementation of Mitigation Measure 3.5-4 would reduce potentially significant impacts related to the lack of an initial wastewater infrastructure service system under the Proposed Project, High Density, Impact Minimization, and No Federal Action Alternatives to a **less-than-significant** level.

IMPACT 3.5-5

Increased Demand for Permanent Wastewater Conveyance Facilities. *Project implementation would result in increased generation of wastewater. Permanent trunk and interceptor facilities would be required to convey wastewater flows to support project development.*

PP, HD, IM

The sewer master plan prepared for the project (Wood Rodgers 2005) addressed the viability of providing sewer service to the project site, identified on- and off-site facility needs and design, and evaluated designs for consistency with existing interceptor and trunk sewer master plans. The study presents the ultimate sewer conveyance facilities and shed areas for the project site as well as off-site contributing areas. However, detailed sewer master plans have not been completed. It is anticipated that additional work would be performed to define the interceptor, trunk, and major collectors; identify phased construction of facilities; and design tentative maps, including collector and lateral systems, to serve each lot. The following discussion provides an overview of the future facilities identified by the conceptual sewer study.

As noted above, the AJ and Laguna Creek Interceptors, as designated in the *SRCSD Interceptor System Master Plan 2000,* would be constructed by SRCSD and would serve the project site.

Project implementation would increase generation of wastewater. The ultimate system for the entire project site, with the exception of the northwest corner, would be gravity fed. An on-site interceptor and trunk system would be split between the northern and southern portions of the site, consistent with the CSD-1 Master Plan. A southeast lateral would be extended to provide public service to the adjacent Security Park (not part of the project), which is currently served by private septic systems. The conceptual plans (Exhibit 2-10a) show the locations of gravity sewer lines (primarily 8- to 12-inch diameter pipes buried within each street) and trunk facilities (Wood Rodgers 2005). Based on land uses, the project would generate 6.6 mgd of average dry-weather flow, and the peak wet-weather flow for the project is estimated to be 12.95 mgd (Crush, pers. comm., 2005).

Before approval of subdivision maps for all project phases, detailed sanitary-sewer master plans would be required. These sanitary-sewer master plans would be prepared by a qualified engineer retained by the project applicant(s); they would be submitted to the City for review and approval concurrently with development of tentative subdivision maps for all project phases occurring before 2024, when the Laguna Creek Interceptor is available as a permanent facility. These sewer master plans would verify the design of both major and minor facilities described in the conceptual master plan and would comply with CSD-1 and SRCSD requirements for placement of sewers. The sewer master plans would determine identify exact locations, sizes, and depths of pipes; identify any required reservations, rights-of-way, and permanent or temporary easements; define major sewer sheds; establish a schematic backbone system; divide major sheds into subsheds to define the areas that would contribute flows to certain points on the collection system; and estimate sewage flows based on methodology described in County design criteria for subarea sewer-service plans.

The AJ and Laguna Creek Interceptors, as designated in the *SRCSD Interceptor System Master Plan 2000* (SRCSD 2003), would be constructed by SRCSD and would serve the project site. Discharge from the project site would ultimately flow into the AJ Interceptor, Section 2. The Aerojet Interceptor, Section 2, would run along the western side of the project site, then south along Sunrise Boulevard to a connection point with AJ Interceptor, Section 4, near the

intersection of Sunrise Boulevard and Douglas Road. From this point, flows would be conveyed south to the Laguna Creek Interceptor. Discharge from the entire project site would ultimately flow into the Laguna Creek Interceptor after its completion (2024).

The sewer master plan addressed the viability of providing sewer service to the project site. It identified on- and off-site facility needs and designs, and evaluated designs for consistency with existing interceptor and trunk sewer master plans. The project would develop the majority of the interceptor system that runs through the site (in particular the AJ Interceptor, Section 2). The SRSCD master plan identifies the combined right-of-way plus an additional temporary construction easement needed for the AJ Interceptor, Section 2, as 72 feet, based on a depth of 32 feet. Reservations for the interceptor, with varying widths of up to 200 feet, have been included in the land use plan for construction of future interceptors. CSD-1 has approved the preliminary designs presented in the conceptual sewer study and determined that capacity requirements of the project were addressed adequately (Atteberry, pers. comm., 2004).

As described above under "Affected Environment," the County evaluated the environmental impacts of constructing trunk and interceptor sewers that would serve the project, as well as most of the Sacramento region, in the *CSD-1 Sewerage Facilities Expansion Master Plan Final Environmental Impact Report* (County of Sacramento 2004a) and the *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Final Program Environmental Impact Report* (County of Sacramento 2003). Both EIRs were certified and the master plans were approved. Because these facilities would be constructed to serve the project and other development in the region, the environmental impacts of these facilities are associated with development of the project. These impacts would also occur without development of the project; because the trunk and interceptor lines are required to serve regional development, they would be required whether or not the project is developed.

Because there is a relationship between the project and the need for these sewer lines, approval of the project may hasten the occurrence of the related impacts. Therefore, this DEIR/DEIS incorporates by reference the discussion of environmental impacts of the trunk and interceptor line impacts from the EIRs listed above.

As described in the EIRs, construction of the sewer lines would result in several significant environmental impacts, most of which would be reduced to a less-than-significant level through implementation of mitigation. Impacts that would remain significant or potentially significant after implementation of mitigation (i.e., significant and unavoidable) include:

- temporary direct disruption of property access (interceptor construction);
- permanent direct loss of agricultural productivity (interceptor construction and operation) and potential indirect conversion of agricultural land by expansion of urban services through agricultural lands within the Urban Services Boundary (trunk sewers);
- short-term direct visual impacts associated with construction activities (trunk sewers);
- potential direct impacts on a variety of biological resources, including wetlands and riparian resources (interceptor); loss of trees and other sensitive habitats (interceptor and trunk sewers); and loss or disturbance of special-status plant and animal species, including valley elderberry longhorn beetle, freshwater invertebrates, tiger salamanders, western spadefoot toads, giant garter snakes, and Swainson's hawk nests (interceptor);

- air quality emissions (direct) of oxides of nitrogen (NO_X) during construction (trunk and interceptors);
- noise (direct) during construction (trunk and interceptors); and
- cultural resources (direct) (interceptor).

Because the project would contribute to the need for this infrastructure, the construction of which would have a significant impact on the environment, the project would result in **indirect**, **significant** impacts associated with the future construction of trunk sewers and interceptors. **No direct** impacts would occur. ***[Similar]***

NF

Because the project applicant(s) would not be obtaining a Section 404 Department of the Army permit from USACE, they would not be able to install the necessary on-site wastewater infrastructure to serve proposed areas of urban development in the southern portion of the project site. However, it is possible that wastewater conveyance infrastructure could still be installed following the same alignment shown in Exhibits 2-10a and 2-10c and by using HDD techniques. Therefore, the sewer master plan prepared for the project (Wood Rodgers 2005) would be applicable to the No Federal Action Alternative. The sewer master plan addressed the viability of providing sewer service to the project site, identified on- and off-site facility needs and design, and evaluated designs for consistency with existing interceptor and trunk sewer master plans. The study presents the ultimate sewer conveyance facilities and shed areas for the project site as well as off-site contributing areas. However, detailed sewer master plans have not been completed or submitted. It is anticipated that additional work would be performed to define the interceptor, trunk, and major collectors; identify phased construction of facilities; and design tentative maps, including collector and lateral systems, to serve each lot. The following discussion provides an overview of the future facilities identified by the conceptual sewer study.

As noted above, the AJ and Laguna Creek Interceptors, as designated in the *SRCSD Interceptor System Master Plan 2000*, would be constructed by SRCSD and would serve the project site.

Project implementation would increase generation of wastewater. The ultimate system for the entire project site, with the exception of the northwest corner, would be gravity fed. An on-site interceptor and trunk system would be split between the northern and southern portions of the site, consistent with the CSD-1 Master Plan. A southeast lateral would be extended to provide public service to the adjacent Security Park (not part of the proposed Rio del Oro project), which is currently served by private septic systems. The conceptual plans (Exhibit 2-10a) show the locations of gravity sewer lines (primarily 8- to 12-inch diameter pipes buried within each street) and trunk facilities (Wood Rodgers 2005). Based on land uses, the project would generate 6.6 mgd of average dry-weather flow, and the peak wet-weather flow for the project is estimated to be 12.95 mgd (Crush, pers. comm., 2005).

Before approval of subdivision maps for all project phases, detailed sanitary-sewer master plans would be required. These sanitary-sewer master plans would be prepared by a qualified engineer retained by the project applicant(s); they would be submitted to the City for review and approval concurrently with development of tentative subdivision maps for all project phases occurring before 2024, when the Laguna Creek Interceptor is available as a permanent facility. These sewer master plans would verify the design of both major and minor facilities described in the conceptual master plan and would comply with CSD-1 and SRCSD requirements for placement of sewers. The sewer master plans would determine identify exact locations, sizes, and depths of pipes; identify any required reservations, rights-of-way, and permanent or temporary easements; define major sewer sheds; establish a schematic backbone system; divide major sheds into

subsheds to define the areas that would contribute flows to certain points on the collection system; and estimate sewage flows based on methodology described in County design criteria for subarea sewer-service plans. The AJ and Laguna Creek Interceptors, as designated in the *SRCSD Interceptor System Master Plan 2000* (SRCSD 2003), would be constructed by SRCSD and would serve the project site. Discharge from the project site would ultimately flow into the AJ Interceptor, Section 2. The Aerojet Interceptor, Section 2, would run along the western side of the project site, then south along Sunrise Boulevard to a connection point with AJ Interceptor, Section 4, near the intersection of Sunrise Boulevard and Douglas Road. From this point, flows would be conveyed south to the Laguna Creek Interceptor. Discharge from the entire project site would ultimately flow into the Laguna Creek Interceptor after its completion (2024).

The sewer master plan addressed the viability of providing sewer service to the project site. It identified preliminary on- and off-site facility needs and designs, and evaluated preliminary designs for consistency with existing interceptor and trunk sewer master plans. The project would develop the majority of the interceptor system that runs through the site (in particular the AJ Interceptor, Section 2). The SRSCD master plan identifies the combined right-of-way plus an additional temporary construction easement needed for the AJ Interceptor, Section 2, as 72 feet, based on a depth of 32 feet. Reservations for the interceptor, with varying widths of up to 200 feet, have been included in the land use plan for construction of future interceptors. CSD-1 has approved the preliminary designs presented in the conceptual sewer study and determined that capacity requirements of the project were addressed adequately (Atteberry, pers. comm., 2004).

As described above under the "Affected Environment," the County evaluated the environmental impacts of constructing trunk and interceptor sewers that would serve the project, as well as most of the Sacramento region, in the *CSD-1 Sewerage Facilities Expansion Master Plan Final Environmental Impact Report* (County of Sacramento 2004a) and the *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Final Program Environmental Impact Report* (County of Sacramento 2003). Both EIRs were certified and the master plans were approved. Because these facilities would be constructed to serve the Rio del Oro project and other development in the region, the environmental impacts of these facilities are associated with development of the project. These impacts would also occur without development of the project; because the trunk and interceptor lines are required to serve regional development, they would be required whether or not the project is developed.

Because there is a relationship between the project and the need for these sewer lines, approval of the project may hasten the occurrence of the related impacts. Therefore, this DEIR/DEIS incorporates by reference the discussion of environmental impacts of the trunk and interceptor line impacts from the EIRs listed above.

As described in the EIRs, construction of the sewer lines would result in several significant environmental impacts above, most of which would be reduced to a less-than-significant level through implementation of mitigation. However, impacts were identified that would remain significant or potentially significant after implementation of mitigation (i.e., significant and unavoidable).

Installation of wastewater conveyance pipeline through the designated Natural Resource areas would require using HDD techniques to avoid features considered jurisdictional by the USACE in the southern portion of the project site. HDD techniques require large construction areas to accommodate pipes and additional construction equipment need for tunneling or boring. Operation and maintenance of the wastewater conveyance pipeline through the designated Natural Resources areas would be greater because of a lack of access to the pipeline. Therefore, impacts associated with the No Federal Action Alternative would be greater than those for the other

project alternatives. In addition, the project would contribute to **indirect significant** impacts associated with the future construction of trunk sewers and interceptors that would be needed to serve the project and other regional development. **No direct** impacts would occur. ***[Greater]***

NP Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, no wastewater would be generated and additional permanent wastewater conveyance facilities would not be required. There would be no relationship between the project and the regional sewerage facilities. **No direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure: No further mitigation measures are required.

Regarding expansion of SRCSD wastewater conveyance facilities, implementation of mitigation measures to reduce impacts is the responsibility of SRCSD. Such measures would be implemented in accordance with the certified *CSD-1 Sewerage Facilities Expansion Master Plan Final Environmental Impact Report* (County of Sacramento 2004a) and the *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Final Program Environmental Impact Report* (County of Sacramento 2003). As described above, indirect impacts on six issue areas would remain **significant and unavoidable** after mitigation implementation.

IMPACT 3.5-6 Increased Demand for Wastewater Treatment Plant Facilities. *Project implementation would generate additional wastewater, increasing the demand for wastewater treatment facilities.*

PP, HD, IM, NF Collected wastewater flows from the project site would ultimately be transported to the SRWTP for treatment and disposal. The SRWTP receives and treats an average of 165 mgd (as of 2005) and has a permitted dry-weather flow design capacity of 181 mgd. Project buildout would generate 6.6 mgd of average dry-weather flow and 12.95 mgd peak wet-weather flow.

Flows to the SRWTP would increase over time as the population in the SRCSD service area increases. According to the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (County of Sacramento 2004b), the permitted capacity (181 mgd) of the SRWTP is expected to be reached before 2010. The 2020 Master Plan, which was approved in 2004, provides for the expansion of the SRWTP to 218 mgd. This projected capacity is based on growth rates expected to be achieved in the county by 2020. This projected capacity includes buildout of the project. Note that this does not represent a buildout population total for SRCSD; rather, it represents the amount of growth expected within SRCSD based on projections. Thus, if new development is approved before 2020, it is assumed that it would not change the rate of growth in the district; rather, it would change the potential location within SRCSD where the growth would occur. Expansion is planned to be phased to provide for sufficient long-term capacity.

As described in the Master Plan EIR, construction and operation of the expanded SRWTP would result in several significant environmental impacts, most of which would be reduced to a less-than-significant level through implementation of mitigation (including impacts on water quality, hydrology, and fisheries). The only significant and unavoidable impact after mitigation implementation related to the treatment plant that was identified would be from short-term increases in NO_X during construction of SRWTP facilities.

Because the SRWTP is planned to accommodate growth in the county by 2020, development on the project site that occurs by 2020 would be accommodated by planned SRWTP capacity. Over time, additional planning at the SRWTP would occur, and overall capacity would be assessed and additional capacity planned for and added. The SRWTP site has sufficient land area to accommodate a substantially higher flow than 218 mgd; however, future plans beyond the next 15 years are speculative.

There is expected to be sufficient SRWTP capacity to accommodate project flows through 2020. There would be no assurances that the SRWTP would have adequate capacity for new wastewater flows for project development occurring after 2020. Therefore, this **direct** impact would be **potentially significant**. However, the project would contribute to the need to expand the facility and therefore would contribute to the **indirect, significant** short-term impact related to air quality from expansion of the SRWTP. ***[Similar]***

NP Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, wastewater treatment services would not be required because no wastewater would be generated; thus, **no direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure 3.5-6: Demonstrate Adequate Wastewater Treatment Capacity.

PP, HD, IM, NF The project applicant(s) for all project phases shall demonstrate adequate capacity at the SRWTP for new wastewater flows generated by the project. This shall involve preparing a tentative map–level study and paying connection and capacity fees as identified by SRCSD and CSD-1. Approval of the final project map shall not be granted until the City verifies adequate SRWTP capacity.

Timing: Before the approval of building permits for all project phases.

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

NP No mitigation measures are required.

Implementation of Mitigation Measure 3.5-6 would ensure that sufficient wastewater treatment capacity would be available to all project phases, because capacity would be documented before approval of improvement plans. This mitigation measure would reduce significant impacts under the Proposed Project, High Density, Impact Minimization, and No Federal Action Alternatives associated with the increased demand for wastewater treatment plant facilities to a **less-than-significant** level.

Regarding expansion of the SRWTP, implementation of mitigation measures to reduce air quality impacts is the responsibility of SRCSD. Such measures would be implemented in accordance with the certified SRWTP 2020 Master Plan Final EIR. Impacts on air quality would remain **significant and unavoidable** after mitigation implementation.

IMPACT 3.5-7

Increased Generation of Solid Waste. *Project implementation would increase solid-waste generation.*

PP

Based on the CIWMB's generation rates, the estimated total population for the Proposed Project Alternative at buildout would be 31,671; therefore, solid-waste generation from project residents would be approximately 11,401 tons per year. Commercial and industrial development at the project site would generate approximately 18,318 new employees. The majority of employees at the project site are likely to be working in jobs within waste categories such as finance/insurance/real estate/legal (0.3 ton of waste per employee per year), other professional services (1.2 tons of waste per employee per year), communications (1.5 tons of waste per employee per year), and business services (1.7 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 1.7 tons per employee per year) were averaged, resulting in a generation rate of 1.0 ton per employee per year. Using the average business waste–disposal rate of 1.0 ton per employee per year results in generation of 18,318 tons of waste annually by employees at the project site.

Combining residential and business solid-waste generation, total solid-waste generation for the Proposed Project Alternative would be approximately 29,720 tons per year. This rate would not be reached until full buildout of the Proposed Project Alternative. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed. The Kiefer Landfill has approximately 117 million cubic yards of available capacity, which is estimated to last for 40 years. This landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Proposed Project Alternative. Development of the Proposed Project Alternative would also comply with all federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur.

HD

Based on the CIWMB's generation rates, the estimated total population for the High Density Alternative at buildout would be 42,282; therefore, solid-waste generation from project residents would be approximately 15,221 tons per year. Commercial and industrial development at the project site would generate approximately 18,318 new employees. The majority of employees at the project site are likely to be working in jobs within waste categories such as finance/insurance/real estate/legal (0.3 ton of waste per employee per year), other professional services (1.2 tons of waste per employee per year), communications (1.5 tons of waste per employee per year), and business services (1.7 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 1.7 tons per employee per year) were averaged, resulting in a generation rate of 1.0 ton per employee per year. Using the average business waste–disposal rate of 1.0 ton per employee per year results in generation of 18,318 tons of waste annually by employees at the project site.

Combining residential and business solid-waste generation, the total solid-waste generation for the High Density Alternative would be approximately 33,540 tons per year, which would be 3,820 tons per year more than would be generated under the Proposed Project Alternative. This rate would not be reached until full buildout of the High Density Alternative. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed. The Kiefer Landfill has approximately 117 million cubic yards of available capacity, which is estimated to last for 40 years. This landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the High Density Alternative. Development of the High Density Alternative would also comply with all federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this impact

would be considered **direct** and **less than significant**. **No indirect** impacts would occur. ***[Greater]***

IM Based on the CIWMB's generation rates, the estimated total population for the Impact Minimization Alternative at buildout would be 28,828; therefore, solid-waste generation from project residents would be approximately 10,378 tons per year. Commercial and industrial development at the project site would generate approximately 17,517 new employees. The majority of employees at the project site are likely to be working in jobs within waste categories such as finance/insurance/real estate/legal (0.3 ton of waste per employee per year), other professional services (1.2 tons of waste per employee per year), communications (1.5 tons of waste per employee per year), and business services (1.7 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 1.7 tons per employee per year) were averaged, resulting in a generation rate of 1.0 ton per employee per year. Using the average business waste–disposal rate of 1.0 ton per employee per year results in generation of 17,517 tons of waste annually by employees at the project site.

Combining residential and business solid-waste generation, the total solid-waste generation for the Impact Minimization Alternative would be approximately 27,895 tons per year, which would be 1,825 tons per year less than would be generated under the Proposed Project Alternative. This rate would not be reached until full buildout of the Impact Minimization Alternative. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed. The Kiefer Landfill has approximately 117 million cubic yards of available capacity, which is estimated to last for 40 years. This landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Impact Minimization Alternative. Development of the Impact Minimization Alternative would also comply with all federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur. ***[Lesser]***

NF Based on the CIWMB's generation rates, the estimated total population for the No Federal Action Alternative at buildout would be 29,388; therefore, solid-waste generation from project residents would be approximately 10,286 tons per year. Commercial and industrial development at the project site would generate approximately 14,648 new employees. The majority of employees at the project site are likely to be working in jobs within waste categories such as finance/insurance/real estate/legal (0.3 ton of waste per employee per year), other professional services (1.2 tons of waste per employee per year), communications (1.5 tons of waste per employee per year), and business services (1.7 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 1.7 tons per employee per year) were averaged, resulting in a generation rate of 1.0 ton per employee per year. Using the average business waste–disposal rate of 1.0 ton per employee per year results in generation of 14,648 tons of waste annually by employees at the project site.

Combining residential and business solid-waste generation, the total solid-waste generation for the No Federal Action Alternative would be approximately 24,934 tons per year, which would be 4,786 tons per year less than would be generated under the Proposed Project Alternative. This rate would not be reached until full buildout of the No Federal Action Alternative. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed. The Kiefer Landfill has approximately 117 million cubic yards of available capacity, which is estimated to last for 40 years. This landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the No Federal Action Alternative. Development of the No Federal Action Alternative would also comply with all federal, state, and local statutes and regulations related to

solid-waste reduction and recycling. Therefore, this impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur. ***[Lesser]***

NP Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, solid waste would not be generated and disposal services would not be required; thus, **no direct** or **indirect impacts** would occur. ***[Lesser]***

Mitigation Measure: No mitigation measures are required.

IMPACT 3.5-8

Increased Demand for Electricity and Infrastructure. *Project implementation would increase the demand for electricity and associated infrastructure and would include the extension of existing electrical lines.*

PP SMUD currently generates approximately 1,197 MW of electricity per day and delivers it to an approximately 900-square-mile area within Sacramento County. Buildout of the Proposed Project Alternative would increase electrical demand in Rancho Cordova by approximately 76 megavolt amperes (Teays, pers. comm., 2004). The energy demands created by the Proposed Project Alternative are not considered substantial in relation to the total amount of energy supplied by SMUD in its service area, and SMUD has stated that it has adequate electrical supplies to support the project without adversely affecting service to current users (Teays, pers. comm., 2004).

SMUD would extend existing service lines on-site to provide service to new development. As discussed above in "Affected Environment," electrical lines and one substation are present on-site. The new on-site electrical service lines would connect to these existing lines and would be sized to meet the demands of the project. Public-utility easements would be dedicated for all underground facilities. SMUD would extend existing lines and construct facilities to serve the project site concurrently with all future project development phases. All new electrical lines less than 69 kV would be routed underground within the rights-of-way of project site streets. Existing aboveground electrical lines would be placed underground during construction of new facilities. The project would use existing SMUD substation 69, and two additional substations would be constructed on the project site. The project applicant(s) are currently working with SMUD to develop detailed electrical-service design plans for the project site, with the ultimate configuration to be approved by SMUD. Draft plans for electrical facilities are shown in Exhibit 2-11. Future tentative subdivision maps and improvement plans would identify the locations of these utility easements.

The proposed electrical-utility improvements would be required to comply with all existing City and SMUD requirements, Building Energy Efficiency Standards (Title 24 of the California Code of Regulations), and applicable Uniform Building Code requirements. Because SMUD has indicated that it has available capacity to provide electrical service and associated infrastructure to the project site, and because the increase in demand for electricity and associated infrastructure would not be substantial in relation to the existing electricity consumption in SMUD's service area, this impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur.

HD Because approximately 4,000 additional residential dwelling units would be generated under the High Density Alternative, demand for electricity would be greater than under the Proposed Project Alternative. However, SMUD has the capacity to meet the additional electricity demands. The proposed electrical-utility improvements would be required to comply with all existing City and SMUD requirements, Building Energy Efficiency Standards (Title 24 of the California Code of Regulations), and applicable Uniform Building Code requirements. This impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur. ***[Greater]***

IM Because approximately 1,000 fewer residential dwelling units and approximately 30 fewer acres of commercial and industrial space would be developed under the Impact Minimization Alternative, demand for electricity would be less than under the Proposed Project Alternative. SMUD has the capacity to meet the electricity demands of this alternative. The proposed electrical-utility improvements would be required to comply with all existing City and SMUD requirements, Building Energy Efficiency Standards (Title 24 of the California Code of Regulations), and applicable Uniform Building Code requirements. This impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur. ***[Lesser]***

NF Because approximately 800 fewer residential dwelling units and approximately 90 fewer acres of commercial and industrial space would be developed under the No Federal Action Alternative, demand for electricity would be less than under the Proposed Project Alternative. SMUD has the capacity to meet the electricity demands of this alternative. The proposed electrical-utility improvements would be required to comply with all existing City and SMUD requirements, Building Energy Efficiency Standards (Title 24 of the California Code of Regulations), and applicable Uniform Building Code requirements. This impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur. ***[Lesser]***

NP Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems. Because no development would occur under the No Project Alternative, increased demand for electricity would not be generated; thus, **no direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure: No mitigation measures are required.

IMPACT 3.5-9

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.*

PP Implementation of the Proposed Project Alternative would increase the demand for natural gas in Rancho Cordova. PG&E has indicated that it has adequate natural-gas supplies to support the project without adversely affecting service to current users. The energy demands created by the project are not considered substantial in relation to the total amount of energy supplied by PG&E in its northern and central California service area (estimated in 2000 to be 887 million cubic feet per day of natural gas) and available energy expected in the future.

PG&E would extend existing pipelines on-site to provide service to new development. As discussed above in "Affected Environment," existing conveyance lines currently run underground along White Rock Road. Project development would connect to extensions of these existing service lines, with the ultimate configuration to be approved by PG&E. Additional on-site service

lines would be sized to meet the demands of the project, and public-utility easements would be dedicated for all underground facilities. All natural-gas lines would be routed within the rights-of-way of project site streets. The project applicant(s) are currently working with PG&E to develop detailed natural-gas service design plans for the project site. Tentative subdivision maps and improvement plans would identify the location of these utility easements.

Because PG&E is able to provide natural gas and associated infrastructure to the project site, and because the increase in demand for natural gas would not be substantial in relation to existing natural-gas consumption in PG&E's service area, this impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur.

HD Because approximately 4,000 additional residential dwelling units would be generated under the High Density Alternative, demand for natural gas would be greater than under the Proposed Project Alternative. However, PG&E has the capacity to meet the natural-gas demands of this alternative. The proposed natural-gas utility improvements would be required to comply with all existing City and PG&E requirements, as well as applicable Uniform Building Code requirements. The impact would be **direct** and **less than significant**. **No indirect** impacts would occur. ***[Greater]***

IM Because approximately 1,000 fewer residential dwelling units and approximately 30 fewer acres of commercial and industrial space would be developed under the Impact Minimization Alternative, demand for natural gas would be less than under the Proposed Project Alternative. PG&E has the capacity to meet the natural-gas demands of this alternative. The proposed natural-gas utility improvements would be required to comply with all existing City and PG&E requirements, as well as applicable Uniform Building Code requirements. The impact would be **direct** and **less than significant**. **No indirect** impacts would occur. ***[Lesser]***

NF Because approximately 800 fewer residential dwelling units and approximately 90 fewer acres of commercial and industrial space would be developed under the No Federal Action Alternative, demand for natural gas would be less than under the Proposed Project Alternative. PG&E has the capacity to meet the natural-gas demands of this alternative. The proposed natural-gas utility improvements would be required to comply with all existing City and PG&E requirements, as well as applicable Uniform Building Code requirements. The impact would be **direct** and **less than significant**. **No indirect** impacts would occur. ***[Lesser]***

NP Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, increased demand for natural gas would not be generated; thus, **no direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure: No mitigation measures are required.

IMPACT 3.5-10

Increased Demand for Communications Service and Infrastructure. *Project implementation would increase the demand for communications service and infrastructure and would include the extension of communication lines.*

PP, HD, IM, NF

AT&T is able to provide telecommunications service and related infrastructure to the project site. As discussed above in "Affected Environment," telecommunications infrastructure is currently located throughout the city and in the vicinity of the project site, and no off-site improvements would be necessary. AT&T would augment its existing facilities on-site to serve new development, extending lines and constructing facilities to serve the project site concurrently with all project development phases. All new infrastructure would be installed underground, and existing aboveground lines would be placed underground during construction of new facilities. New and existing infrastructure would generally be placed within the rights-of-way of project site streets. The project applicant(s) are currently working with AT&T to develop detailed telecommunications design plans for the project site. Because AT&T would be able to provide the necessary telecommunications services and infrastructure, this would be considered a **direct**, **less-than-significant** impact. **No indirect** impacts would occur. ***[Similar]***

NP

Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, increased demand for communications services would not be generated; thus, **no direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure: No mitigation measures are required.

Project Level (Phase 1) Impacts and Mitigation Measures

IMPACT 3.5-11

Increased Demand for Initial Water Supplies. *Implementation of development Phase 1 would result in increased demand for water supply. Because permanent water supply facilities would not be available until 2010, initial transmission facilities would be required to convey water supply for implementation of development phases or projects before 2010.*

Impacts would be the same under Phase 1 as under the program (entire project site) level analysis for all alternatives. Refer to Impact 3.5-1 for further discussion of this impact.

Implementation of Mitigation Measure 3.5-1s would reduce potentially significant impacts related to initial water supplies and infrastructure under the Proposed Project, High Density, and Impact Minimization Alternatives to a **less-than-significant** level. Implementation of Mitigation Measure 3.5-1b would partially reduce impacts under the No Federal Action Alternative, but not to a less-than-significant level. Identification of alternative water supply pipeline alignments would fall under the jurisdiction of the County and SWCA; therefore, neither the City nor the project applicant(s) can guarantee approval of these alternative pipeline alignments. Additionally, it is possible that these alternative alignments would be inconsistent with SWCA's water supply master plan and would be subject to separate CEQA compliance. For these reasons, this impact would remain **significant and unavoidable**. If the County, SWCA, and other potentially affected agencies cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.5-12

Increased Demand for Permanent Water Supplies. *Implementation of development Phase 1 would increase demand on the existing water supply available to the City of Rancho Cordova.*

Impacts would be the same under Phase 1 as under the program (entire project site) level analysis for all alternatives. Refer to Impact 3.5-2 for further discussion of this impact.

IMPACT 3.5-13

Need for Permanent Water Facilities and Infrastructure. *Implementation of development Phase 1 would result in increased demand for water supply. Permanent water facilities would be required to provide water to support the Phase 1 development area.*

Impacts would be the same under Phase 1 as under the program (entire project site) level analysis for all alternatives. Refer to Impact 3.5-3 for further discussion of this impact.

IMPACT 3.5-14

Increased Demand for Interim Wastewater Conveyance Facilities. *Implementation of development Phase 1 would result in increased generation of wastewater. Because permanent interceptor facilities would not be available until 2024, interim interceptor facilities would be required to convey wastewater flows from the Phase 1 development area.*

Impacts would be the same under Phase 1 as under the program (entire project site) level analysis for all alternatives. Refer to Impact 3.5-4 for further discussion of this impact.

Implementation of Mitigation Measure 3.5-4 would reduce potentially significant impacts associated with the increased demand for interim wastewater conveyance facilities under the Proposed Project, High Density, Impact Minimization, and No Federal Action Alternatives to a **less-than-significant** level.

IMPACT 3.5-15

Increased Demand for Permanent Wastewater Conveyance Facilities. *Implementation of development Phase 1 would result in the need for permanent wastewater conveyance facilities to convey wastewater flows after 2024, when the Laguna Creek Interceptor is complete.*

PP, HD, IM

Implementation of any of the three action alternatives would result in increased generation of wastewater. The sewer system for the entire project site, with the exception of the northwest corner, would be gravity fed. An on-site interceptor and trunk system would be split between the northern and southern areas, consistent with the CSD-1 Master Plan. The sewer master plan shows the locations of gravity sewer lines (primarily 8- to 12-inch diameter pipes buried within each street) and trunk facilities (Wood Rodgers 2005). Based on land uses, the project would generate 1.1 mgd of average dry-weather flow, and the peak wet-weather flow for Phase 1 of the project would be 4.54 mgd (Crush, pers. comm., 2005).

Before approval of subdivision maps for all project phases, detailed sanitary-sewer master plans would be required. These sanitary-sewer master plans would be prepared by a qualified engineer retained by the project applicant(s); they would be submitted to the City for review and approval concurrently with development of tentative subdivision maps for all project phases, including development Phase 1 occurring before 2024, when the Laguna Creek Interceptor is available as a permanent facility. These sewer master plans would verify the design of both major and minor facilities described in the conceptual master plan and would comply with CSD-1 and SRCSD requirements for placement of sewers. The sewer master plans would determine identify exact locations, sizes, and depths of pipes; identify any required reservations, rights-of-way, and permanent or temporary easements; define major sewer sheds; establish a schematic backbone

system; divide major sheds into subsheds to define the areas that would contribute flows to certain points on the collection system; and estimate sewage flows based on methodology described in County design criteria for subarea sewer-service plans. The AJ and Laguna Creek Interceptors, as designated in the *SRCSD Interceptor System Master Plan 2000*, would be constructed by SRCSD and would serve the project site. Discharge from the project site would ultimately flow into the AJ Interceptor, Section 2. The AJ Interceptor, Section 2, would run along the western side of the project site, then south along Sunrise Boulevard to a connection point with the AJ Interceptor, Section 4, near the intersection of Sunrise Boulevard and Douglas Road. From this point, flows would be conveyed south to the Laguna Creek Interceptor. Discharge from the entire project site, including the Phase 1 development area, would ultimately flow into the Laguna Creek Interceptor after its completion (2024).

The sewer master plan addressed the viability of providing sewer service to the project site, including the Phase 1 development area; identified on- and off-site facility needs and designs; and evaluated designs for consistency with existing interceptor and trunk sewer master plans. The project would develop the majority of the interceptor system that runs through the site (in particular the AJ Interceptor, Section 2). The SRSCD master plan identifies the combined right-of-way plus an additional temporary construction easement needed for the AJ Interceptor, Section 2, as 72 feet, based on a depth of 32 feet. Reservations for the interceptor, with varying widths of up to 200 feet, have been included in the land use plan for construction of future interceptors. CSD-1 has approved these preliminary designs and determined that capacity requirements of the project were addressed adequately (Atteberry, pers. comm., 2004).

As described above in "Affected Environment," the County evaluated the environmental impacts of constructing trunk and interceptor sewers that would serve the project, as well as most of the Sacramento region, in the *CSD-1 Sewerage Facilities Expansion Master Plan Final Environmental Impact Report* (County of Sacramento 2004a) and the *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Final Program Environmental Impact Report* (County of Sacramento 2003). Both EIRs were certified and the master plans were approved. Because these facilities would be constructed to serve the project and other development in the region, the environmental impacts of these facilities are associated with development of the project. These impacts would also occur without development of the project; because the trunk and interceptor lines are required to serve regional development, they would be required whether or not the project is developed.

Because there is a relationship between the project and the need for these sewer lines, approval of the project may hasten the occurrence of the related impacts. Therefore, this DEIR/DEIS incorporates by reference the discussion of environmental impacts of the trunk and interceptor line impacts from the EIRs listed above.

As described in the EIRs, construction of the sewer lines would result in several significant environmental impacts (refer to Impact 3.5-5 for a discussion of impacts), most of which would be reduced to a less-than-significant level through implementation of mitigation. However, impacts were identified that would remain significant or potentially significant after implementation of mitigation (i.e., significant and unavoidable) (refer to Impact 3.5-5 for a discussion of impacts).

The project would contribute to **indirect significant and unavoidable** impacts associated with the future construction of trunk sewers and interceptors that would be needed to serve the project and other regional development. **No direct** impacts would occur. ***[Similar]***

NF

Implementation of any of the No Federal Action Alternative would result in increased generation of wastewater. The sewer system for the entire project site, with the exception of the northwest corner, would be gravity fed. An on-site interceptor and trunk system would be split between the northern and southern areas, consistent with the CSD-1 Master Plan. The sewer master plan shows the locations of gravity sewer lines (primarily 8- to 12-inch diameter pipes buried within each street) and trunk facilities (Wood Rodgers 2005). Based on land uses, the project would generate 1.1 mgd of average dry-weather flow, and the peak wet-weather flow for Phase 1 of the project would be 4.54 mgd (Crush, pers. comm., 2005).

Before approval of subdivision maps for all project phases, detailed sanitary-sewer master plans would be required. These sanitary-sewer master plans would be prepared by a qualified engineer retained by the project applicant(s); they would be submitted to the City for review and approval concurrently with development of tentative subdivision maps for all project phases, including development Phase 1 occurring before 2024, when the Laguna Creek Interceptor is available as a permanent facility. These sewer master plans would verify the design of both major and minor facilities described in the conceptual master plan and would comply with CSD-1 and SRCSD requirements for placement of sewers. The sewer master plans would determine identify exact locations, sizes, and depths of pipes; identify any required reservations, rights-of-way, and permanent or temporary easements; define major sewer sheds; establish a schematic backbone system; divide major sheds into subsheds to define the areas that would contribute flows to certain points on the collection system; and estimate sewage flows based on methodology described in County design criteria for subarea sewer-service plans. The AJ and Laguna Creek Interceptors, as designated in the *SRCSD Interceptor System Master Plan 2000*, would be constructed by SRCSD and would serve the project site. Discharge from the project site would ultimately flow into the AJ Interceptor, Section 2. The AJ Interceptor, Section 2, would run along the western side of the project site, then south along Sunrise Boulevard to a connection point with the AJ Interceptor, Section 4, near the intersection of Sunrise Boulevard and Douglas Road. From this point, flows would be conveyed south to the Laguna Creek Interceptor. Discharge from the entire project site, including the Phase 1 development area, would ultimately flow into the Laguna Creek Interceptor after its completion (2024).

The Rio del Oro sewer master plan addressed the viability of providing sewer service to the project site, including the Phase 1 development area; identified on- and off-site facility needs and designs; and evaluated designs for consistency with existing interceptor and trunk sewer master plans. The project would develop the majority of the interceptor system that runs through the site (in particular the AJ Interceptor, Section 2). The SRSCD master plan identifies the combined right-of-way plus an additional temporary construction easement needed for the AJ Interceptor, Section 2, as 72 feet, based on a depth of 32 feet. Reservations for the interceptor, with varying widths of up to 200 feet, have been included in the land use plan for construction of future interceptors. CSD-1 has approved these preliminary designs and determined that capacity requirements of the project were addressed adequately (Atteberry, pers. comm., 2004).

As described above under the "Affected Environment," the County evaluated the environmental impacts of constructing trunk and interceptor sewers that would serve the project, as well as most of the Sacramento region, in the *CSD-1 Sewerage Facilities Expansion Master Plan Final Environmental Impact Report* (County of Sacramento 2004a) and the *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Final Program Environmental Impact Report* (County of Sacramento 2003). Both EIRs were certified and the master plans were approved. Because these facilities would be constructed to serve the project and other development in the region, the environmental impacts of these facilities are associated with development of the project. These impacts would also occur without development of the project;

because the trunk and interceptor lines are required to serve regional development, they would be required whether or not the project is developed.

Because there is a relationship between the project and the need for these sewer lines, approval of the project may hasten the occurrence of the related impacts. Therefore, this DEIR/DEIS incorporates by reference the discussion of environmental impacts of the trunk and interceptor line impacts from the EIRs listed above.

As described in the EIRs, construction of the sewer lines would result in several significant environmental impacts (refer to Impact 3.5-5 for a discussion of impacts), most of which would be reduced to a less-than-significant level through implementation of mitigation. However, impacts were identified that would remain significant or potentially significant after implementation of mitigation (i.e., significant and unavoidable) (refer to Impact 3.5-5 for a discussion of impacts).

Installation of wastewater conveyance pipeline through the Natural Resource areas would require using HDD techniques to avoid features considered jurisdictional by the USACE in the southern portion of the project site. HDD techniques require large construction areas to accommodate pipes and additional construction equipment need for tunneling or boring. Operation and maintenance of the wastewater conveyance pipeline through the Natural Resources areas would be greater because of a lack of access to the pipeline. Therefore, impacts associated with the No Federal Action Alternative would be greater than those for the other project alternatives. In addition, the project would contribute to **indirect significant** impacts associated with the future construction of trunk sewers and interceptors that would be needed to serve the project and other regional development. **No indirect** impacts would occur. ***[Greater]***

NP Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, construction of new permanent wastewater conveyance facilities would not be required and no wastewater would be generated. There would be no relationship between the project and the regional sewerage facilities. **No direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure: No further mitigation measures are required.

Regarding expansion of SRCSD wastewater conveyance facilities, implementation of mitigation measures to reduce impacts is the responsibility of SRCSD. Such measures would be implemented in accordance with the certified *CSD-1 Sewerage Facilities Expansion Master Plan Final Environmental Impact Report* (County of Sacramento 2004a) and the *Sacramento Regional County Sanitation District Interceptor Master Plan 2000, Final Program Environmental Impact Report* (County of Sacramento 2003). As described in the discussion of Impact 3.5-5, indirect impacts on six issue areas would remain **significant and unavoidable** after mitigation implementation.

IMPACT 3.5-16

Increased Demand for Wastewater Treatment Facilities. *Implementation of development Phase 1 would generate additional wastewater, increasing the demand for wastewater treatment facilities.*

PP, HD, IM, NF

Wastewater flows collected from the Phase 1 development area would ultimately be transported to the SRWTP. The SRWTP treats an average of 165 mgd (as of 2005) and has a permitted dry-weather flow design capacity of 181 mgd. Phase 1 buildout would generate 1.1 mgd of average dry-weather flow and 4.54 mgd of peak wet-weather flow.

Flows to the SRWTP would increase over time as the population in the SRCSD service area increases. According to the *Sacramento Regional Wastewater Treatment Plant 2020 Master Plan Final Environmental Impact Report* (County of Sacramento 2004b), the permitted capacity of the SRWTP is expected to be reached before 2010. The 2020 Master Plan, which was approved in 2004, provides for the expansion of the SRWTP to 218 mgd. This capacity is projected based on growth rates expected to be achieved in the county by 2020. Note that this does not represent a buildout population total for SRCSD; it represents the amount of growth expected within the district based on projections. Thus, if new development is approved before 2020, it is assumed that it would not change the rate of growth in the district; rather, it would change the potential location within SRCSD where the growth would occur. Expansion is planned to be phased to provide for sufficient long-term capacity.

As described in the EIR, the construction of expansions to and operation of the expanded SRWTP would result in several significant environmental impacts (refer to Impact 3.5-6 for impacts), most of which would be reduced to a less-than-significant level through implementation of mitigation. The only significant and unavoidable impact would be from short-term increases in NO_X during construction of SRWTP facilities.

Because the SRWTP is planned to accommodate growth in the county by 2020, development on the project site that occurs by 2020 would be accommodated by planned SRWTP capacity. Over time, additional planning at SRWTP would occur, and overall capacity would be assessed and additional capacity planned for and added. The SRWTP site has sufficient land area to accommodate a substantially higher flow than 218 mgd; however, future plans beyond the next 15 years are speculative.

There is expected to be sufficient SRWTP capacity to accommodate project flows through 2020. There would be no assurances that adequate capacity at the SRWTP for new wastewater flows would be available for project development that occurs after 2020. Therefore, this **direct** impact would be **potentially significant**. However, the project would contribute to the need to expand the facility and contribute to the **indirect, significant** short-term impact related to air quality from expansion of the SRWTP. **No** other **indirect** impacts would occur. ***[Similar]***

NP

Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, wastewater treatment facilities would not be required because no wastewater would be generated; thus, **no direct** or **indirect** impacts would occur. ***[Lesser]***

Implementation of Mitigation Measure 3.5-6 would ensure that sufficient wastewater treatment capacity would be available to all project phases by requiring the project applicant(s) to document adequate capacity before approval of improvement plans for development Phase 1. This mitigation measure would reduce significant impacts under the Proposed Project, High Density, Impact Minimization, and No Federal Action Alternatives associated with the increased demand for wastewater treatment plant facilities to a **less-than-significant** level.

Regarding expansion of the SRWTP, implementation of mitigation measures to reduce air quality impacts is the responsibility of SRCSD. Such measures would be implemented in accordance with the certified SRWTP 2020 Master Plan Final EIR. Additional mitigation for expansion of the SRWTP would not be feasible. Thus, the impact would remain **significant and unavoidable**.

IMPACT 3.5-17

Increased Generation of Solid Waste. *Implementation of development Phase 1 would increase solid-waste generation.*

PP

Based on the CIWMB's generation rates, the estimated total population for the Proposed Project Alternative at buildout of Phase 1 would be 8,174; therefore, solid-waste generation from project residents would be approximately 2,943 tons per year. Commercial and industrial development at the project site would generate approximately 11,507 new employees. The majority of employees at the project site are likely to be working in jobs within waste categories such as finance/ insurance/real estate/legal (0.3 ton of waste per employee per year), other professional services (1.2 tons of waste per employee per year), communications (1.5 tons of waste per employee per year), and business services (1.7 tons of waste per employee per year). To estimate a single business waste–disposal rate for the Phase 1 development area, the two anticipated extremes among the categories (0.3 ton and 1.7 tons per employee per year) were averaged, resulting in a generation rate of 1.0 ton per employee per year. Using the average business waste–disposal rate of 1.0 ton per employee per year results in generation of 11,507 tons of waste annually by employees in the Phase 1 development area.

Combining residential and business solid-waste generation, the total solid-waste generation for Phase 1 of the project would be approximately 14,450 tons per year. This rate would not be reached until full buildout of Phase 1. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed. The Kiefer Landfill has approximately 117 million cubic yards of available capacity, which is estimated to last for 40 years. This landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Phase 1 development area. Phase 1 development would also comply with all federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur.

HD

Based on the CIWMB's generation rates, the estimated total population for the High Density Alternative at buildout of Phase 1 would be 10,686; therefore, solid-waste generation from project residents would be approximately 3,912 tons per year. Commercial and industrial development at the project site would generate approximately 10,977 new employees. The majority of employees at the project site are likely to be working in jobs within waste categories such as finance/insurance/real estate/legal (0.3 ton of waste per employee per year), other professional services (1.2 tons of waste per employee per year), communications (1.5 tons of waste per employee per year), and business services (1.7 tons of waste per employee per year). To estimate a single business waste-disposal rate for the Phase 1 development area, the two anticipated extremes among the categories (0.3 ton and 1.7 tons per employee per year) were averaged, resulting in a generation rate of 1.0 ton per employee per year. Using the average business-waste disposal rate of 1.0 ton per employee per year results in generation of 10,977 tons of waste annually by employees in the Phase 1 development area.

Combining residential and business solid-waste generation, the total solid-waste generation for Phase 1 under the High Density Alternative would be approximately 14,889 tons per year, which would be 439 tons per year more than would be generated under the Proposed Project Alternative.

This rate would not be reached until full buildout of Phase 1. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed. The Kiefer Landfill has approximately 117 million cubic yards of available capacity, which is estimated to last for 40 years. This landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Phase 1 development area. Phase 1 development would also comply with all federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur. ***[Greater]***

IM Based on the CIWMB's generation rates, the estimated total population for the Impact Minimization Alternative at buildout of Phase 1 would be 10,386; therefore, solid-waste generation from project residents would be approximately 3,739 tons per year. Commercial and industrial development at the project site would generate approximately 10,781 new employees. The majority of employees at the project site are likely to be working in jobs within waste categories such as finance/insurance/real estate/legal (0.3 ton of waste per employee per year), other professional services (1.2 tons of waste per employee per year), communications (1.5 tons of waste per employee per year), and business services (1.7 tons of waste per employee per year). To estimate a single business waste-disposal rate for the Phase 1 development area, the two anticipated extremes among the categories (0.3 ton and 1.7 tons per employee per year) were averaged, resulting in a generation rate of 1.0 ton per employee per year. Using the average business-waste disposal rate of 1.0 ton per employee per year results in generation of 10,781 tons of waste annually by employees in the Phase 1 development area.

Combining residential and business solid-waste generation, the total solid-waste generation for Phase 1 under the Impact Minimization Alternative would be approximately 14,520 tons per year, which would be 70 tons per year more than would be generated under the Proposed Project Alternative. This rate would not be reached until full buildout of Phase 1. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed. The Kiefer Landfill has approximately 117 million cubic yards of available capacity, which is estimated to last for 40 years. This landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Phase 1 development area. Phase 1 development would also comply with all federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur. ***[Similar]***

NF Based on the CIWMB's generation rates, the estimated total population for the No Federal Action Alternative at buildout of Phase 1 would be 7,414; therefore, solid-waste generation from project residents would be approximately 2,669 tons per year. Commercial and industrial development at the project site would generate approximately 8,762 new employees. The majority of employees at the project site are likely to be working in jobs within waste categories such as finance/insurance/real estate/legal (0.3 ton of waste per employee per year), other professional services (1.2 tons of waste per employee per year), communications (1.5 tons of waste per employee per year), and business services (1.7 tons of waste per employee per year). To estimate a single business waste-disposal rate for the Phase 1 development area, the two anticipated extremes among the categories (0.3 ton and 1.7 tons per employee per year) were averaged, resulting in a generation rate of 1.0 ton per employee per year. Using the average business-waste disposal rate of 1.0 ton per employee per year results in generation of 8,762 tons of waste annually by employees in the Phase 1 development area.

Combining residential and business solid-waste generation, the total solid-waste generation for Phase 1 under No Federal Action Alternative would be approximately 11,431 tons per year, which would be 76 tons per year more than would be generated under the Proposed Project

Alternative. This rate would not be reached until full buildout of Phase 1. Much lower generation rates would occur at project initiation, with gradual increases in the rate as development progressed. The Kiefer Landfill has approximately 117 million cubic yards of available capacity, which is estimated to last for 40 years. This landfill has sufficient permitted capacity to accommodate solid-waste disposal needs for the Phase 1 development area. Phase 1 development would also comply with all federal, state, and local statutes and regulations related to solid-waste reduction and recycling. Therefore, this impact would be considered **direct** and **less than significant**. **No indirect** impacts would occur. ***[Similar]***

NP Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would not require the provision of new utilities or service systems.

Because no development would occur under the No Project Alternative, solid waste would not be generated and disposal services would not be required; thus, **no direct** or **indirect** impacts would occur. ***[Lesser]***

Mitigation Measure: No mitigation measures are required.

IMPACT 3.5-18

Increased Demand for Electricity and Infrastructure. *Implementation of development Phase 1 would increase the demand for electricity and associated electrical infrastructure and would include the extension of existing electrical lines.*

Impacts would be the same under Phase 1 as under the program (entire project site) level analysis for all alternatives. Refer to Impact 3.5-8 for further discussion of this impact.

IMPACT 3.5-19

Increased Demand for Natural Gas and Infrastructure. *Implementation of development Phase 1 would increase the demand for natural gas and associated infrastructure and would include the extension of existing natural-gas pipelines.*

Impacts would be the same under Phase 1 as under the program (entire project site) level analysis for all alternatives. Refer to Impact 3.5-9 for further discussion of this impact.

IMPACT 3.5-20

Increased Demand for Communications Service and Infrastructure. *Implementation of development Phase 1 would increase the demand for communications service and infrastructure and would include the extension of existing communication lines.*

Impacts would be the same under Phase 1 as under the program (entire project site) level analysis for all alternatives. Refer to Impact 3.5-10 for further discussion of this impact.

CUMULATIVE IMPACTS

Future development in Rancho Cordova and Sacramento County would increase demand for utilities in the city and the region. In particular, the cumulative development scenario would increase demand for water supply and infrastructure, increase wastewater flow, require additional conveyance facilities and treatment, increase solid-waste generation, and increase demand for electricity and natural gas. For this cumulative analysis, the public

utilities provided to the project site by CSD-1, SRCSD, the Kiefer Landfill, SMUD, and PG&E are compared to past, present, and future planned growth in these service providers' districts.

Water

Initial Water Supply and Conveyance Facilities

Water supply infrastructure that would deliver water to the project site is not currently in place and is not anticipated to be constructed until 2010, when the proposed Eastern County Replacement Water Supply Project is anticipated to be constructed. GSWC has indicated that it would provide water to serve the initial development phase of the project (i.e., development Phase 1). This water supply would serve approximately 600 single-family residential dwelling units on approximately 120 acres. The estimated volume of water that would be provided by GSWC would be approximately 350 AFY. On- and off-site water conveyance facilities (e.g., pipelines and pump stations) would need to be constructed to deliver water from GSWC's facilities to the Rio del Oro project site based on approved designs for initial water conveyance facilities. The water supply and conveyance facilities would be short term and would be used until the Eastern County Replacement Water Supply Project is completed. These initial facilities would be constructed to serve only the project. GSWC would have sufficient water supplies to meet the temporary demands of the project. Therefore, the project would not result in a cumulatively considerable incremental contribution to this cumulatively significant impact from the Rio del Oro project and related projects.

Permanent Water Supply

The project would be served by SCWA Zone 40 through its conjunctive-use water supply system. As discussed in Impact 3.5-2 above, as required by SB 610, a water supply assessment has been prepared and adopted by the SWCA Board of Directors for the project (Appendix D of this DEIR/DEIS). The water supply assessment evaluates the adequacy of existing and future water supplies to meet the water demand created by the project in conjunction with existing development in Rancho Cordova and future related reasonably foreseeable projects. As shown in Table 3.5-2 of this DEIR/DEIS, the total water demand for the project is estimated to be 8,891 AFY. As shown in Table 3.5-3, SCWA has adequate supplies available to meet projected demands with the project, even in critically dry years.

The water demands associated with the project and the remainder of Zone 40's service area were included and addressed in the comprehensive water supply and infrastructure planning for Zone 40 and the development of the Zone 40 "conjunctive use" program as described in the Zone 40 WSMP. As previously indicated, the Water Forum Agreement established a long-term average annual limit (sustainable yield) for each of three geographic subareas of the groundwater basin within the county: 131,000 AFY for the North Area (north of the American River); 273,000 AFY for the Central Area (between the American and Cosumnes Rivers); and 115,000 AFY for the Galt Area (south of the Cosumnes River). Any proposed water supply project must satisfy the groundwater conditions specified in the Water Forum Agreement for the 2030 projected levels of development. The Zone 40 WSMP identifies an estimated long-term average use of surface water supply of 68,637 AFY through 2030. The long-term supply will consist of 45,000 AFY of U.S. Bureau of Reclamation Central Valley Project (CVP) contract water (known as "Fazio" and "SMUD" water), plus additional water supplies from various surface water sources, including up to 9,300 AFY from the City of Sacramento's existing entitlement areas where the Zone 40 boundaries lie within the City of Rancho Cordova's American River Place of Use. SCWA has determined that it has sufficient water supplies to meet the demands of Zone 40 through its conjunctive use program, which is a sustainable water supply program providing 100% reliable water supplies through 2030.

SCWA is a signatory to the Water Forum Agreement; thus, its cumulative water supplies are subject to the provisions of that agreement. In January 1999, the joint Sacramento City-County Office of Metropolitan Water Planning published the DEIR for the Water Forum Agreement. The Final EIR (FEIR) for the Water Forum Agreement was certified on November 23, 1999, and has not been challenged. The certified FEIR constitutes a

legally satisfactory analysis of all the issues addressed therein, including cumulative water supply impacts (see Public Resources Code Section 21167.2). The findings of the FEIR and the accompanying Water Forum Action Plan outlined a program whereby water delivery could be supplied to Water Forum Agreement stakeholders through 2030, provided that the permanent pumping diversion facilities on the Sacramento River and at Auburn are constructed. Potential impacts on water supplies resulting from implementation of the Water Forum Agreement were identified and evaluated relative to the base condition (i.e., current levels of demand). Impacts focused on changes to annual water deliveries to contractors with the CVP and State Water Project (SWP).

American River deliveries would be increased by the Water Forum Agreement. In this instance, American River deliveries include all deliveries to purveyors receiving water from the American River and water delivered from the Sacramento River in lieu of the American River. Table 3.5-8 shows the projected American River surface-water deliveries.

Table 3.5-8
American River Deliveries

Contract Year (March–February)	Base Conditions (TAF[1])	1998 with Water Forum Agreement (TAF[1])
Maximum	230.8	469.9
Minimum	222.4	350.2
69-Year Average	229.1	462.7

[1] TAF = thousand acre-feet
Source: Sacramento City-County Office of Metropolitan Water Planning 1999

The American River deliveries include a component of water that is delivered to CVP customers. Table 3.5-9 shows the American River deliveries to CVP customers.

Table 3.5-9
American River Deliveries to CVP Customers

Contract Year (March–February)	Base Conditions (TAF[1])	1998 with Water Forum Agreement (TAF[1])
Maximum	16.2	178.0
Minimum	8.1	59.7
69-Year Average	14.5	145.4

[1] TAF = thousand acre-feet
Source: Sacramento City-County Office of Metropolitan Water Planning 1999

As indicated in Table 3.5-8 and Table 3.5-9, the water deliveries made under the Water Forum Agreement could increase substantially if all agreements are negotiated as planned, all of the water districts seeking diversions obtain all of the necessary federal and state approvals, and all of the necessary facilities are constructed. Notably, the water demand created by the project, which is estimated to be approximately 8,891 AFY, would represent less than 1% of the total Water Forum Agreement delivery agreements, and thus would cause only a very small fraction of the cumulative impacts assessed in the Water Forum Agreement EIR.

As described in that EIR, implementation of the Water Forum Agreement would result in several significant environmental impacts, most of which would be reduced to a less-than-significant level through implementation of mitigation. These include impacts on groundwater, water quality, fisheries resources and aquatic habitat, flood control, hydropower supply, vegetation and wildlife, recreation, land use and growth inducement, aesthetics, cultural resources, and soils and geology.

Impacts that would remain significant or potentially significant after implementation of mitigation (i.e., significant and unavoidable) include:

- impacts on water quality in the Sacramento River and the Sacramento–San Joaquin Delta;
- impacts on Folsom Reservoir's warmwater fisheries;
- impacts on fall-run Chinook salmon, and flow and temperature impacts on splittail (February–May);
- a decrease in deliveries to SWP customers;
- a decrease in deliveries to CVP customers;
- reduced rafting and boating opportunities on the lower American River;
- reduced Folsom Reservoir boating opportunities;
- reduced availability of Folsom Reservoir swimming beaches;
- land use and growth-inducing impacts in the water service study area; and
- effects of varying water levels on cultural resources in Folsom Reservoir.

The mitigation measures applied to these resource areas would partially reduce the impacts, but would not reduce them to a less-than-significant level. The Water Forum Agreement EIR determined that even after mitigation is applied to these resource areas, the level of significance after mitigation would remain significant and unavoidable. Therefore, the Rio del Oro project and related projects would contribute to the indirect and direct significant impacts associated with future water supplies that would be needed to serve the project and other regional development. Therefore, cumulative impacts associated with increased demand for water supply would result in a cumulatively considerable incremental contribution to this cumulatively significant impact from the Rio del Oro project and related projects.

Permanent Water Conveyance Facilities

SCWA recently prepared and adopted its Zone 40 WSMP (SCWA 2005), which describes the facilities and the construction financing mechanism needed to implement a phased water supply program to meet the region's water needs into the foreseeable future, specifically the year 2030. The goal of the master plan is to define a conjunctive use program of groundwater, surface water, and recycled water supplies as well as a financing program for the construction of a new surface-water diversion structure; surface-water treatment plant; water conveyance pipelines; and groundwater extraction, treatment, and distribution facilities. These facilities would be used for the production, conservation, transmission, and distribution of wholesale and retail water supplies in the year 2030.

A proposed water transmission main along Douglas Road and water tank north of White Rock Road, as identified in the *Zone 40 Water Supply Infrastructure Plan for the Sunrise Corridor/Mather/Sunrise Douglas Service Area* (MWH 2004), would be required to serve the project site, and SCWA would construct these facilities. Because these facilities would be constructed to serve the project and other development in the region, the environmental impacts of these facilities are associated with development of the project. The 42-inch transmission main and the water tank are required to serve regional development and would also occur without development of the project; because these facilities are required to serve regional development, they would be required whether or not the project is developed. Because there is a relationship between the project and the need for these water facilities, approval of the project may hasten the occurrence of the related impacts. Impacts resulting from construction of these water facilities were addressed in the previously certified Zone 40 EIR (2004) prepared by SCWA. As discussed under Impact 3.5-3, construction of these water facilities 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 SCWA Zone 40 EIR. Impacts that would remain significant or potentially significant after implementation of mitigation include direct visual impacts, potential direct impacts on a variety of biological resources, potential loss of habitat from development of facilities that would otherwise be included in the proposed SSCHCP, air quality emissions of NO_X during construction, noise during construction, and potential long-term stationary-source noise impacts.

Therefore, the Rio del Oro project and related projects would contribute to the indirect and direct significant impacts associated with the future construction of water facilities that would be needed to serve the project and other regional development. Cumulative impacts associated with increased demand for permanent water conveyance facilities would result in a cumulatively considerable incremental contribution to this cumulatively significant impact from the Rio del Oro project and related projects.

Wastewater

Interim Wastewater Conveyance Facilities

Project implementation would result in the need for additional wastewater conveyance facilities to be used on an interim basis. Use of interim facilities in the northwest corner of the project site could include using Station S-070 to convey flows to the Folsom Interceptor. The estimated flow for the northwest corner is 0.87 mgd, and the estimated buildout flow for the area served by Station S070 is 2.65 mgd. Station S-070 has an existing rated pumping capacity of 0.80 mgd, which is equal to the current peak flow of 0.80 mgd. The capacity of Station S-070 could be expanded to accommodate project flows if this facility is chosen to convey interim flows (see Impact 3.5-4).

CSD-1 has reviewed the available capacity within the Bradshaw Interceptor for interim projects. Based on current calculations, the Rio del Oro Specific Plan and Sunrise Douglas Community Plan areas could use about 25 mgd of the available interim capacity within the Bradshaw Interceptor. The degree to which this available interim capacity is used would be dependent on the development rate of all areas within the Sacramento County Urban Services Boundary. Based on information from CSD-1, the Anatolia development expects to use 5.75 mgd and the Sunrise Douglas 2 development expects to use 5.7 mgd. Analysis of the Bradshaw Interceptor showed that interim flows into the interceptor could not exceed 39 mgd in the year 2020. Up to 10 mgd of the project's wastewater generation would need to be served on an interim basis. According to CSD-1, there is sufficient capacity for the project's interim flow (Wood Rodgers 2003). Full buildout of the project is not expected to occur before the completion of the Laguna Creek Interceptor, at which time the project's interim flows would be transferred from the Bradshaw Interceptor. The project would not result in a cumulatively considerable incremental contribution to this cumulatively significant impact from the Rio del Oro project and related projects.

Permanent Wastewater Conveyance Facilities

Approximately 10,305 off-site acres are upstream of the Rio del Oro project site and would contribute a peak wet-weather flow of 37.17 mgd. The northwest corner of the project site was included in the overall flows leaving the property at Sunrise Boulevard and Douglas Road, although an interim option is to connect this sewerage shed to the Folsom Interceptor. This area would include a peak wet-weather flow of 0.87 mgd. The accumulation of flows from the Rio del Oro project site and off-site contributing areas and flows that exit the site would total 48.93 mgd of peak wet-weather flow. The conceptual sewer study is consistent with the SRCSD master plan in the identification of the project area and combined flow point at Sunrise Boulevard and Douglas Road, and it is also consistent with the CSD-1 master plan as to the size and elevation of connection points to the upstream system. To accommodate cumulative flows, trunks and interceptors would be placed as necessary to serve the service areas defined in the SRCSD and CSD-1 master plans. As individual improvement plans are proposed, they must be able to demonstrate that a permanent sewer system either is available or would be available to adequately serve new project flows. (Wood Rodgers 2005.)

The AJ and Laguna Creek Interceptors, as designated in the *2000 SRCSD Interceptor System Master Plan*, would be constructed by SRCSD and would serve the project site. Because these facilities would be constructed to serve the project and other development in the region, the environmental impacts of these facilities are associated with development of the project. These impacts would also occur without development of the project; because the trunk and interceptor lines are required to serve regional development, they would be required whether or not the project is developed.

Because there is a relationship between the project and the need for these sewer lines, approval of the project may hasten the occurrence of the related impacts. Impacts resulting from construction of these off-site facilities were addressed in two previously certified EIRs: the *CSD-1 Sewerage Facilities Expansion Master Plan Environmental Impact Report* and the *SCRSD Interceptor Master Plan 2000 Program Environmental Impact Report*. As discussed under Impact 3.5-4, construction of the sewer lines would result in several significant environmental impacts associated with the construction of off-site sewer lines, most of which would be reduced to a less-than-significant level through implementation of mitigation identified in the *SRCSD Interceptor Master Plan 2000 Program Environmental Impact Report*. Impacts that would remain significant or potentially significant after implementation of mitigation include temporary direct disruption of property access, permanent direct loss of agricultural productivity and potential indirect conversion of agricultural land, short-term direct visual impacts, potential direct impacts on a variety of biological resources, air quality emissions of NO_X during construction, noise during construction, and disturbance of cultural resources.

Therefore, the project and related projects would contribute to the indirect and direct significant impacts associated with the future capacity and construction of trunk sewers and interceptors that would be needed to serve the project and other regional development. Cumulative impacts associated with increased demand for permanent wastewater conveyance facilities would result in a cumulatively considerable incremental contribution to this cumulatively significant impact from the Rio del Oro project and related projects.

Wastewater Treatment Facilities

As described above, the project is estimated to generate a 6.6-mgd average dry-weather flow and 12.95-mgd peak wet-weather flow. The expansion analyzed in the SRWTP Master Plan EIR would provide 37 mgd of additional capacity to the plant's existing capacity of 181 mgd for a total capacity of 218 mgd. Project flows would constitute 16.5% and 35% of the expanded SRWTP capacity during average dry-weather flows and peak wet-weather flows, respectively. It can be argued that generating this level of flows to the expanded SRWTP could be considered a substantial contribution to a significant cumulative impact.

In addition, cumulative development, including related projects and projects in the regional planning area assessed in this cumulative analysis, would contribute to the need for expansion of the SRWTP. Because the need to expand the SRWTP is the result of cumulative development, this significant unavoidable SRWTP impact is also considered a significant and unavoidable cumulative impact. The construction of expansion to and operation of the expanded SRWTP, as described in the SRWTP 2020 Master Plan Final EIR, would result in several significant environmental impacts (including impacts on water quality, hydrology, and fisheries), most of which would be reduced to a less-than-significant level through implementation of mitigation. The only significant and unavoidable impact would be from short-term increases in NO_x during construction of SRWTP facilities. The Rio del Oro project and related projects would contribute to the need to expand wastewater treatment capacity at the SRWTP facility; therefore, cumulative impacts associated with increased demand for wastewater treatment facilities would result in a cumulatively considerable incremental contribution to this cumulatively significant impact from the Rio del Oro project and related projects.

Flow to the SRWTP would increase over time as development increases in the SRCSD service area. According to the SRWTP 2020 Master Plan, the permitted capacity (181 mgd) of the SRWTP is expected to be reached before 2010. The 2020 Master Plan provides for the expansion of the SRWTP to 218 mgd based on growth rates expected to be achieved in the county by 2020. This flow rate does not represent a buildout population total for SRCSD; rather, it represents the amount of growth expected within the district based on projections. Thus, if new development is approved before 2020, it is assumed that it would not change the rate of growth in the district; rather, it would change the potential location within SRCSD where the growth would occur. Expansion is planned to be phased to provide for sufficient long-term capacity for future related projects. Because the SRWTP is planned to accommodate growth in Sacramento County by 2020, development on the project site would be accommodated by planned SRWTP capacity. Over time, additional planning at SRWTP would occur, and overall capacity would be

assessed and additional capacity planned for and added. The SRWTP site has sufficient land area to accommodate a substantially higher flow than 218 mgd; however, future plans beyond the next 15 years are speculative.

Solid Waste

Project impacts related to increased generation of solid waste would be considered less than significant. The Kiefer Landfill, which would receive project waste, has approximately 117 million tons of capacity remaining and is expected to remain open over the next 40 years. Because this landfill would have adequate capacity to serve the project and other development in its service area, the project would not have a significant cumulative impact on solid-waste disposal. The project would not result in a cumulatively considerable incremental contribution to this cumulatively significant impact from the Rio del Oro project and related projects.

Electricity

SMUD is the electrical service provider for Rancho Cordova. The energy demands that would be created by the project would not be considered substantial in relation to the total amount of energy supplied. Cumulative development would increase the amount of demand for electrical supply. SMUD has stated that it has adequate electricity supplies to support the project without affecting service to existing customers. SMUD also 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. SMUD is currently in the process of permitting the first phase of the CPP, which is part of SMUD's long-range plan to meet the growing power needs of Sacramento County. The CPP is anticipated to be constructed in two phases (Phase 1 started in early 2004) and would provide SMUD with a total of 1,000 MW. Phase 1 of the CPP is scheduled to begin serving SMUD costumers in 2006 (SMUD 2004, n.d.).

In addition, because future development would be required to comply with all existing City and SMUD requirements as well as applicable Building Code requirements, it is anticipated that electricity supplies would be available. Therefore, cumulative electricity impacts are expected to be less than significant. The project would not result in a cumulatively considerable incremental contribution to this cumulatively significant impact from the Rio del Oro project and related projects.

Natural Gas

PG&E is the natural gas supplier for Rancho Cordova. The energy demands that would be created by the project would not be considered substantial in relation to the total amount of energy supplied. Cumulative development would increase the amount of demand for natural-gas supply. PG&E has stated that it has adequate natural-gas supplies to support the project without affecting service to existing customers. The total amount of natural gas supplied by PG&E in its northern and central California service area was estimated to be 887 million cubic feet per day in 2000. Additional energy is expected to be available in the future. In addition, because future development would be required to comply with all existing City and PG&E requirements as well as applicable Building Code requirements, it is anticipated that natural-gas supplies would be available. Therefore, cumulative natural-gas impacts are expected to be less than significant. The project would not result in a cumulatively considerable incremental contribution to this cumulatively significant impact from the Rio del Oro project and related projects.

3.5.4 RESIDUAL SIGNIFICANT IMPACTS

With implementation of the mitigation measures listed above, project implementation would not result in any residual significant impacts related to interim water supply and conveyance facilities; permanent water supply; interim wastewater conveyance facilities; increased generation of solid waste; or increased demands for electricity, natural gas, and telecommunications systems. Cumulative impacts associated with construction of permanent water conveyance facilities, increased demand for permanent wastewater conveyance facilities, and expanded wastewater treatment capacity would be significant. Construction of permanent water conveyance

facilities would result in direct and indirect impacts as discussed above. Increased demand for permanent wastewater conveyance facilities and expanded wastewater treatment capacity would include discharge of treated effluent to the Sacramento River by the SRWTP, which could result in impacts on the river, and the Rio del Oro project would make a minute indirect contribution to such impacts. No feasible mitigation measures are available to reduce these impacts to less-than-significant levels. Therefore, project implementation would result in residual significant impacts related to permanent water conveyance facilities, permanent wastewater conveyance facilities, and expanded wastewater treatment capacity.