
3.16 - Utilities and Service Systems

3.16.1 - Introduction

This section describes the existing utilities and service systems potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information provided by the City of Elk Grove Sphere of Influence Amendment Area Draft Municipal Service Review, the Sacramento County General Plan of 2005-2030, Sacramento County General Plan Update Draft Environmental Impact Report (2011), and applicable state laws.

Potable Water

Sacramento County Water Agency

The Sacramento County Water Agency (SCWA), Zone 41¹ is responsible for operating and maintaining its public water system. SCWA Zone 41 currently provides potable water to the northern and western portions of the City of Elk Grove and unincorporated portions of the County of Sacramento. SCWA's Zone 41's service area currently includes a very small portion of the Sphere of Influence Amendment (SOIA) Area, which is bounded by Franklin Boulevard, Bilby Road, Bruceville Road, and Kammerer Road. The remaining SOIA Area does not currently receive potable water. Exhibit 3.16-1 shows the municipal water service providers in the SOIA Area.

SCWA provides municipal water to approximately 49,000 households. Approximately 85 percent of SCWA's water supply comes from groundwater wells. SCWA pumps groundwater from the South American Sub-basin of the Sacramento Valley Groundwater Basin. This groundwater basin is not adjudicated or considered to be in overdraft, according to the Department of Water Resources Bulletin 118 (DWR 2004). However, intensive groundwater extraction from the Central Basin in the past has resulted in a general lowering of groundwater elevations near the center of the basin away from the sources of recharge. These depressions have grown and coalesced into a single cone of depression centered near Elk Grove.

The remaining water demand is met by surface water supplies. Customers in certain parts of the Laguna service area receive a portion of their drinking water from surface water (American River) from the City of Sacramento via the Franklin Intertie.

Major Infrastructure

Sacramento County Water Agency's Zone 40² provides for the construction of major water supply facilities in the urban and urbanizing areas of the Elk Grove, Vineyard, and Rancho Cordova communities, generally located in the central part of the County. Portions of Zone 40's boundaries also extend into the SOIA Area. Major facilities are funded by development and utility charges. In

¹ Zone 41 provides potable water to 28,000 customer connections located in 7 separate service areas.

² Zone 40 is a capital construction fund that provides for wholesale water supply in the southern portion of the County.

Utilities and Service Systems

addition, the Water Agency owns and operates 61 wells and 11 water treatment plants. Major services include water supply development review, planning, and water supply capital facilities design.

Infrastructure Planning

Sacramento County Water Agency’s Zone 40 efforts are guided by four primary documents for the planning of future infrastructure and services:

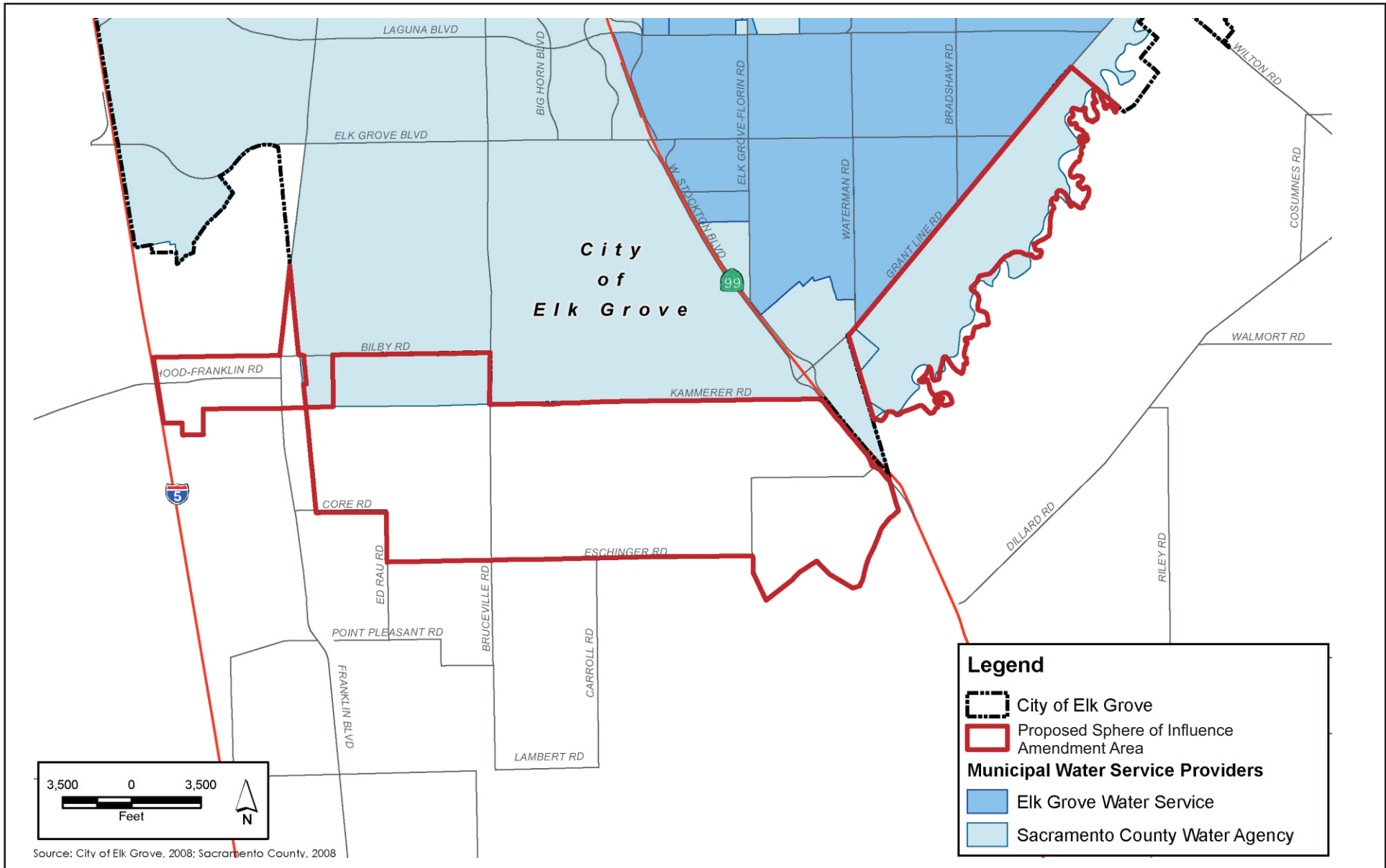
- Draft Environmental Impact Report (EIR) for the Draft 2002 Zone 40 Water Supply Master Plan
- Zone 40 Water Supply Master Plan
- Central Sacramento County Groundwater Management Plan (Central Basin GMP)
- Zone 40 Water System Infrastructure Plan (SCWA/MWH, November 2006)

The planning documents describe and quantify the facilities needed to provide adequate municipal water service to the anticipated service area in the year 2030, which projects new areas of future growth. The SOIA Area is outside of the Zone 40 Water Supply Master Plan’s 2030 Study Area.

SCWA’s Water Supply Master Plan provides an analysis, based on a 2030 planning horizon, of the water supply needs throughout the service area. SCWA has planned for and anticipated increased water demand within the City, including buildout of several large areas within the City. The analysis included within the Water Supply Master Plan indicates that SCWA will have a high level of control to implement the Plan and is expected to meet water demand within its planning area. Table 3.16-1: provides the current and projected water demand for the Zone 40 service area. Table 3.16-2 provides the estimated water supply for the Zone 40 service area.

Table 3.16-1: Zone 40 Current and Projected Water Demand (acre-feet annually)

Water Demand	2010	2015	2020	2025	2030	2035
Total Water Use	34,511	44,425	50,662	57,583	67,565	77,712
Source: SCWA 2011.						



Source: City of Elk Grove, 2008. Sacramento County, 2008.



Michael Brandman Associates

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Exhibit 3.16-1 Municipal Water Service Providers

SACRAMENTO LAFCo • ELK GROVE SPHERE OF INFLUENCE AMENDMENT
RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT

Table 3.16-2: Zone 40 Water Supply (acre-feet annually)

d	Normal Water Year	Single Dry Year	Multiple Dry Years		
			Year 1	Year 2	Year 3
Supplier-produced groundwater	15,000	68,600	36,800	41,300	43,550
Wholesaler (City of Sacramento) to serve portion of Zone 40 in City of Sacramento’s American River POU	9,300	9,300	9,300	9,300	9,300
Supplier-produced surface water: U.S. Bureau of Reclamation – CVP Supply	45,000	8,700	40,500	36,000	33,750
Supplier-produced: Appropriate Water – SWRCB Permit 21209	21,700	0	0	0	0
Other surface water transfers	5,200	9,600	9,600	9,600	9,600
Recycled water	4,400	4,400	4,400	4,400	4,400
Remediated groundwater to serve Rio del Oro	8,900	8,900	8,900	8,900	8,900
Total Water Supply	109,500	109,500	109,500	109,500	109,500
Notes: POU = Place of Use CVP= Central Valley Project SWRCB = State Water Resources Control Board Source: SCWA 2011.					

Elk Grove Water District (Florin Resource Conservation District)

Elk Grove Water District (EGWD) currently provides municipal water to the southeastern portion of the City of Elk Grove, generally bounded by Sheldon Road to the north, State Route 99 to the west, Grantline Road to the east and the Union Industrial Park to the south. EGWD’s current service boundaries are immediately adjacent to a portion of the SOIA Area. EGWD is typically supplied from groundwater sources. During peak periods in the summer, EGWD purchases wholesale treated surface water and groundwater from SCWA Zone 40. EGWD provides water to approximately 12,050 connections, with a customer base of approximately 35,607 people within the City.

EGWD currently receives a portion of their water supply from SCWA Zone 40. EGWD is provided water through a wholesale master water agreement with SCWA. Tariff Area No. 2 is located within the boundaries of SCWA’s Zone 40, which has various sources of water supply, including groundwater and surface water. EGWD has a contractual agreement of up to 8,000 acre-feet per year. As a recipient of water supplies from SCWA as a wholesaler for Tariff Area No. 2, EGWD is indirectly a part of SCWA’s Zone 40 Water Supply Master Plan.

It is not anticipated that EGWD will be the municipal water service provider in the SOIA Area, as the extension of EGWD’s boundaries would cause overlapping service boundaries with SCWA. Exhibit 3.16-1 shows the municipal water service providers in the SOIA Area.

Recycled Water

Sacramento Regional County Sanitation District and Sacramento County Water Agency

Sacramento Regional County Sanitation District (SRCSD) and SCWA have a joint water recycling program to produce, wholesale and retail recycled water to select areas. Recycled water is produced by the SRCSD and wholesaled to SCWA and is used for non-potable purposes (e.g. landscape and irrigation). Recycled water is used in portions of the Laguna West, Lakeside and Stone Lakes communities located within the City of Elk Grove.

Irrigation Water

Omochumne-Hartnell Water District

The Omochumne-Hartnell Water District (OHWD) provides irrigation water strictly for agricultural uses. OHWD’s current service area includes the entire northeastern portion of the SOIA Area. Future growth of the SOIA Area will not require urban water services from OHWD; therefore, no infrastructure analysis is needed. OHWD will remain the irrigation water service provider until urban growth occurs.

Current Irrigation Water Demand

The estimated average water consumption of the crops in the SOIA Area is provided in Table 3.16-3. Crop-specific annual water consumption rates are not available for the project area; therefore, crop water consumption was calculated using the acres of crop types within the SOIA Area (as provided in Table 3.16-3) and average water consumption rates by crop type. The table does not account for other, non-crop sources of water demand within the SOIA Area.

Table 3.16-3: Annual Average Water Consumption by Crop

Crop Commodity	Estimated Harvest Acreage	Water Demand	
		AF/Ac/Year	AF/Year
Alfalfa	504	4.8	2,419
Corn	551	3.09	1,703
Grape	1,214	1.7	2,064
Oat	1,837	1.27	2,333
Pastureland	1,357	0	0
Rangeland	351	0	0
Ryegrass	188	1.27	239
Strawberry	8	2.99	24
Wheat	313	1.27	398

Table 3.16-3 (cont.): Annual Average Water Consumption by Crop

Crop Commodity	Estimated Harvest Acreage	Water Demand	
		AF/Ac/Year	AF/Year
Miscellaneous	302	0.79	239
Total	6,625		9,417
<p>Notes: Pastureland and Rangeland assumed to be non-irrigated. Miscellaneous includes: Forage hay, safflower, uncultivated land, miscellaneous vegetables and wheat for fodder Safflower has the lowest per-acre water application of these crop types; for a conservative estimate of irrigation demand, the rate for safflower is assumed. Source: Sacramento County Agricultural Commissioner’s Office, 2012; California Department of Water Resources, Irrigated Crop Acres and Water Use, Sacramento Region, 2001, http://www.water.ca.gov/landwateruse/anaglwu.cfm#.</p>			

Wastewater

Sacramento County Environmental Management Department

Septic Systems

Existing agricultural and rural residential land uses are served by individual septic systems. Major portions of the SOIA Area not served by a public wastewater service are served by private septic systems. The Sacramento County Environmental Management Department (EMD) provides mandated regulatory services in food service, hazardous materials, solid waste facilities, and septic service. Conventional septic systems use seepage pits of varying depths. The standard pit depth in the area is 35 feet.

Sacramento Area Sewer District

Wastewater Collection

The Sacramento Area Sewer District (SASD) provides local wastewater conveyance services and infrastructure throughout the Sacramento region. SASD maintains and provides wastewater collection and conveyance from the local residences and businesses in the urbanized, unincorporated areas of the County; the cities of Elk Grove, Rancho Cordova, and Citrus Heights; portions of the City of Sacramento; and a very small area in the City of Folsom. The service area covers approximately 270 square miles and has a population of over 750,000. Exhibit 3.16-2 shows the service area of the Sacramento County Sanitation District 1 (CSD-1), also known as the Sacramento Area Sewer District. As shown in Exhibit 3.16-2, CSD-1 does not currently extend into the SOIA Area.

The smaller local pipelines that SASD operates connect to the larger regional pipelines maintained by Sacramento Regional County Sanitation District. Existing SASD facilities are adjacent to the SOIA Area.

SASD has an adopted master planning document analyzing sewer conveyance needs of the area within the County's Urban Services Boundary (USB). Relief, rehabilitation, and expansion projects that are needed to meet demand are identified in the SASD Master Plan. In November 2011, SASD completed its most recent update of the District's Sewer System Capacity Plan, which identifies future relief and expansion project needs within their service area.

Sacramento Regional County Sanitation District

Wastewater Collection

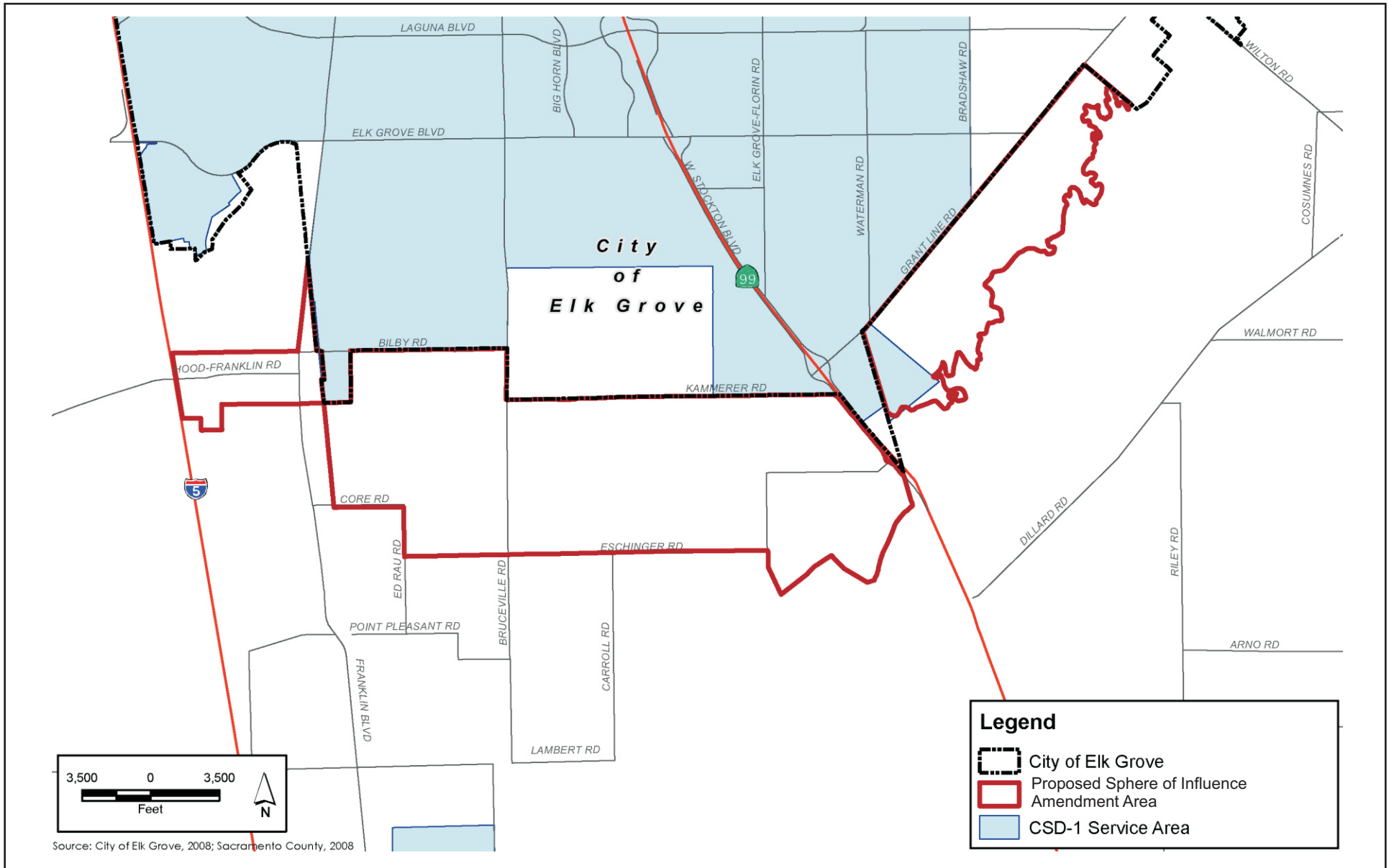
The SRCSD provides large pipeline conveyance of wastewater from all areas serviced by SASD, the City of Sacramento, the City of West Sacramento, and the City of Folsom to the wastewater treatment plant. The trunk lines that transport wastewater from the local residences and businesses flow into much larger regional pipelines maintained by SRCSD. SRCSD conveys wastewater through the larger regional pipes into the wastewater treatment plant operated and maintained by the District. After wastewater is treated and de-chlorinated, the treated effluent is discharged into the Sacramento River.

SRCSD is in the process of finalizing an Interceptor Sequencing Study that will aid SRCSD in planning and implementing regional conveyance projects and assisting contributing agencies in coordinating collection system facilities.

Wastewater Treatment

The Sacramento Regional Wastewater Treatment Plant (SRWTP) provides secondary treatment using an activated sludge process. Incoming wastewater flows through mechanical bar screens through a primary sedimentation process. This allows most of the heavy organic solids to settle to the bottom of the tanks. These solids are later delivered to the digesters. Next, oxygen is added to the wastewater to grow naturally-occurring microscopic organisms, which consume the organic particles in the wastewater. These organisms eventually settle on the bottom of the secondary clarifiers. Clean water pours off the top of these clarifiers and is chlorinated, removing pathogens or other harmful organisms that may still exist. Chlorine disinfection occurs while the wastewater travels through a two-mile 'outfall' pipeline to the Sacramento River, near the town of Freeport, California. Before entering the river, sulfur dioxide is added to neutralize the chlorine.

A new National Pollutant Discharge Elimination System (NPDES) Discharge Permit was issued to SRCSD by the Central Valley Regional Water Quality Control Board (RWQCB) in December 2010. In adopting the new Discharge Permit, the RWQCB required SRCSD to meet significantly more restrictive treatment levels over its current levels. SRCSD has appealed the permit decision to the State Water Resources Control Board. A decision on that appeal has not occurred at the time of preparation of this Revised Draft EIR. In the meantime, SRCSD is required to begin the necessary activities, studies and projects to meet the new permit conditions. All new treatment facilities must be completed by 2020.



Source: City of Elk Grove, 2008. Sacramento County, 2008.



Currently, the Sacramento Regional Wastewater Treatment Plant can treat up to 5 million gallons per day of wastewater to Title 22 tertiary standards. This recycled water is used for landscape irrigation as well as wastewater treatment processes. SRCSD has prepared a wastewater treatment and disposal facilities Master Plan for the Sacramento Regional Wastewater Treatment Plant (2020 SRWTP Master Plan). The purpose of the 2020 SRWTP Master Plan is to identify wastewater treatment and reuse/disposal facility needs for a 20-year planning period through the year 2020. Although the SOIA Area is not included in the current SRWTP service area boundaries, and is not within the SRCSD SOI, the area south of Elk Grove is identified in the 2020 SRWTP Master Plan as an area of potential future annexation. (SRCSD 2008)

Storm Drainage

Sacramento County Water Agency

Storm Drainage

Sacramento County Water Agency provides for the construction of major drainage facilities in the urban and urbanizing areas of the unincorporated county and the cities of Citrus Heights, Elk Grove, and Rancho Cordova. A majority of the City of Elk Grove and a portion of the SOIA Area are within SCWA's Zone 11A. Fees collected within the zone at the time of development fund the construction of the major drainage infrastructure in the urbanizing areas.

The area zones were created in order to finance, construct, acquire, reconstruct, maintain, operate, extend, repair, or otherwise improve any work or improvement of common benefit to such zone or participating zones.

SCWA Development Review staff evaluates new development proposals for subdivisions and commercial properties to ensure that improvement plans are in compliance with drainage and floodplain management policies. New development is required to conform to County standards, drainage ordinances, and floodplain development policies. SCWA also administers the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) for the unincorporated portion of the County.

City of Elk Grove, Development Services Group, Public Works Department, Water Resources

Storm Drainage

The City of Elk Grove provides local stormwater drainage services to residents within the City's boundaries. The Water Resources Division is responsible for drainage, flood control, stormwater quality, and long-term water and urban runoff planning within the City. The Division's mission is to protect the residents and businesses from the threat and damage of flooding, preserve natural areas, and protect water quality throughout the City.

The Division operates and maintains 66 miles of open channels, 330 miles of drainage pipes, four pump stations, over 8 miles of levees, four stormwater pump stations, and 19 flood control and water quality detention basins.

The Division's activities include:

- Pipeline, channel, and creek clearing and repairing;
- Detention basin and pump station maintenance, rehabilitation, and replacement;
- Response to drainage and flooding problems during storms;
- Complying with state and federal permitting requirements; and
- Engineering and Planning.

The Division reviews drainage studies and plans for new development to ensure that new storm drainage facilities will accommodate the stormwater runoff generated from new structures and roads to convey stormwater to the Sacramento and Cosumnes Rivers. The Division also works to protect the City from seasonal flooding.

The City is a partner in the Sacramento Storm Water Quality Partnership, comprising the County of Sacramento and the cities of Sacramento, Citrus Heights, Folsom, Rancho Cordova, Elk Grove, and Galt. The California Regional Water Quality Control Board, Central Valley Region issued members in the partnership a NPDES Municipal Storm Water Permit to allow the lawful discharge of Sacramento area urban runoff into local creeks and rivers. The Storm Water Permit, a result of federal regulations driven by the Clean Water Act requires the members in the Partnership to reduce pollutants in urban stormwater discharges to maximum extent practicable.

Sacramento-San Joaquin Drainage District (State Reclamation Board)

The Sacramento-San Joaquin Drainage District (SSJDD) is currently operated by the State Reclamation Board (SRB) as a regulatory agency, and does not provide any physical services. As a regulatory agency, the SSJDD is responsible for flood control within the Central Valley by regulating encroachments into the system via a permitting process, pursuant to Title 13. This process ensures proper flood control by limiting land uses.

A very small portion of the SOIA Area is within the SSJDD's boundaries near the Hood-Franklin Interstate 5 Interchange. The SSJDD is not expected to provide any drainage or flood control service to the SOIA Area.

Solid Waste

Sacramento Regional Solid Waste Authority

The Sacramento Regional Solid Waste Authority (SWA) is a joint powers authority between two agencies: the County and the City of Sacramento. SWA regulates commercial solid waste collection by franchised haulers through SWA ordinances. The SOIA Area is currently within the service boundaries of the Sacramento County Municipal Services Agency Department of Waste Management & Recycling, but service is provided by mostly private franchised hauling companies for the commercial and industrial customers. The private hauling companies are under a franchise agreement

with the Sacramento Regional Solid Waste Authority to perform collection and disposal at properties and convey waste to landfills and recycling stations, as appropriate. Private providers do not fall under the jurisdiction of Sacramento Local Agency Formation Commission (LAFCo).

Residential Service (Central Valley Waste Services)

Sacramento County has contracted out residential solid waste services in the unincorporated area south of Calvine Road, which includes the proposed SOIA Area, to Central Valley Waste Services (doing business as Waste Management), a private commercial hauler. These services include solid waste management and recycling services.

Commercial Service (Various Commercial Haulers)

The commercial solid waste collected by private franchised haulers are sent to private transfer stations to be processed and disposed of at various facilities, including the Sacramento County Keifer Landfill, Yolo County Landfill, and L and D Landfill.

City of Elk Grove, Neighborhood Services Group, Integrated Waste Department

The Integrated Waste Department manages the City's residential solid waste franchise and plans, and it coordinates, promotes, and implements citywide solid waste reduction, recycling, composting, and public education activities.

Solid waste diversion information indicates that the City discarded 2.6 pounds per person per day of solid waste in the year 2009, exceeding the 50-percent diversion requirement of CalRecycle and thus complying with Assembly Bill (AB) 939. Approximately 667,000 tons of solid waste was disposed at various landfills in 2009. This volume of waste could double within 25 years.

The City's solid waste is currently sent to transfer stations in the City of Sacramento, and then transported outside of the region for permanent disposal. The City is currently considering sites for a 20-acre solid waste transfer station within the City for greater convenience.

Residential Service (Allied Waste)

The City of Elk Grove has contracted out residential solid waste services to Allied Waste, a private commercial hauler. Allied Waste Services provides solid-waste collection services under an exclusive franchise agreement with the City. These services include collection of all solid waste, residential recyclables, used motor oil, and yard trimmings, along with other services. Residential garbage service is provided on a weekly basis. Green waste and mixed recycling are collected on an alternating week basis: green waste is collected one week and mixed recycling the next. Refuse from residences are collected by an automated truck collection system.

Commercial Service (Various Commercial Haulers)

The City of Elk Grove has contracted out commercial solid waste services to a variety of commercial haulers. All commercial waste haulers operating, conducting business, or providing solid waste

services within the City of Elk Grove boundaries must register with the City and receive a registration decal placed in their vehicles in order to operate. Businesses may select which commercial hauler to utilize for solid waste services.

Current solid waste facilities being utilized include the Kiefer Landfill, Elder Creek Transfer & Recovery Inc, BLT Enterprises, Florin-Perkins Transfer Station, Jackson Road Landfill, and Sacramento Recycling & Transfer Station.

Landfills

Table 3.16-4 summarizes the three regional landfills that serve the various jurisdictions in the Sacramento County area, based on information provided by the California Department of Resources Recycling and Recovery. As shown in the table, the landfills collectively have more than 154 million cubic yards of remaining capacity.

Table 3.16-4: Landfill Summary

Landfill	Location	Maximum Daily Throughput	Remaining Capacity	Closure Date
Kiefer Landfill	Sacramento	10,815 tons	112.9 million cubic yards	2064
L & D Landfill	Sacramento	2,540 tons	4.1 million cubic yards	2016
Yolo County Landfill	Davis	1,800 tons	37.3 million cubic yards	2081
Source: California Department of Resources Recycling and Recovery, 2010.				

Energy

Electricity is currently supplied by the Sacramento Municipal Utility District (SMUD). Natural gas service is currently unavailable in the SOIA Area, but would be supplied by Pacific Gas and Electric Company, a private provider. Below is a discussion of each energy source.

Sacramento Municipal Utility District

SMUD is currently providing electricity service to customers in Sacramento County, including the SOIA area, and a small part of Placer County. SMUD has sufficient electricity generation capacity to provide adequate electrical supplies from its power plants, including hydroelectric, natural gas, wind, and solar-power electrical generation facilities. In addition, SMUD is able to purchase additional electricity as the need arises.

Pacific Gas and Electric Company

Pacific Gas and Electric Company (PG&E) currently does not have any existing natural gas facilities within the SOIA Area. PG&E is currently providing natural gas service to most of northern California. PG&E has an extensive natural gas distribution pipeline network to provide adequate service in the Sacramento area. All construction and maintenance activities for natural gas facilities

are the responsibility of PG&E. PG&E is an investor owned utility regulated by the California Public Utilities Commission (PUC.) It does not fall under the purview of LAFCo.

3.16.2 - Regulatory Framework

Federal

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) of 1974 gave the United States Environmental Protection Agency (EPA) the authority to set standards for contaminants in drinking water supplies. The EPA was required to establish primary regulations for the control of contaminants that affect public health and secondary regulations for compounds that affect the taste, odor, or aesthetics of drinking water. Under the provisions of the SDWA, the California Department of Health Services (DHS) has the primary enforcement responsibility. Title 22 of the California Administrative Code establishes DHS authority and stipulates State drinking water quality and monitoring standards.

National Pollution Discharge Elimination System Permit

Discharge of treated wastewater to surface water(s) of the United States, including wetlands, require a National Pollutant Discharge Elimination System (NPDES) permit. In California, the Regional Water Quality Control Boards (RWQCB) administers the issuance of these federal permits. Obtaining an NPDES permit requires preparation of detailed information, including characterization of wastewater sources, treatment processes, and effluent quality. Whether or not a permit may be issued, the conditions of a permit are subject to many factors such as basin plan water quality objectives, impaired water body status of the receiving water, historical flow rates of the receiving water, effluent quality and flow, the State Implementation Plan (SIP), the California Toxics Rule (CTR), and established Total Maximum Daily Loading (TMDL) rates for various pollutants. These factors are highly specific to the potential discharge point. Obtaining an NPDES permit is generally considered difficult in inland areas and may not be possible in sensitive areas.

Clean Water Act (CWA)

The Clean Water Act (CWA), initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation.

Stormwater

Section 402(p) of the Act establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES Program. Section 402(p) requires that stormwater associated with industrial activities that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The State Water Resources Control Board (SWRCB) is responsible for implementing Section 402 of the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Sacramento County is located within a portion of the State that

is regulated by the Sacramento Main Office of the Central Valley Regional Water Quality Control Board (RWQCB).

The SWRCB has issued a statewide General Permit (Water Quality Order No. 99-08-DWQ) for construction activities within the State. The Construction General Permit (CGP) is implemented and enforced by the RWQCBs. The CGP applies to construction activities that disturb one acre or more and requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that requires control of pollutant discharges that utilize the best available technology (BAT) economically feasible and best conventional pollution technology (BCT) to meet water quality standards.

The SWRCB has also issued a statewide General Permit (Water Quality Order No. 97-03-DWQ) for regulating stormwater discharges associated with industrial activities. This General Permit requires the implementation of management measures that will achieve the performance standard of best available technology (BAT) economically achievable and best conventional pollutant control technology (BCT). It also requires the development and implementation of an SWPPP, a monitoring plan, and the filing of an annual report.

Certain actions also need to conform to a General Permit (Water Quality Order No. 5-00-175), which requires that a permit be acquired for dewatering and other low-threat discharges to surface waters, provided that they do not contain significant quantities of pollutants and are either (1) four months or less in duration, or (2) the average dry weather discharge does not exceed 0.25 mgd. Examples of activities that may require the acquisition of such a permit include well development water, construction dewatering, pump/well testing, pipeline/tank pressure testing, pipeline/tank flushing or dewatering, condensate discharges, water supply system discharges, and other miscellaneous dewatering/low-threat discharges.

The SWRCB has renewed a NPDES Permit (Renewed Waste Discharge Requirements NPDES No. CAS082597) for the County of Sacramento and the cities of Citrus Heights, Elk Grove, Folsom, Galt, and Sacramento. This permit is for stormwater discharges from municipal separate storm sewer systems (MS4).

Publicly Owned Treatment Works

Section 301(b)(1)(B) of the CWA requires that EPA develop secondary treatment standards for POTWs as defined in Section 304(d)(1) of the CWA. Based on this statutory requirement, EPA developed secondary treatment regulations, which are specified in 40 CFR Part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment.

EPA evaluated performance data for POTWs practicing secondary treatment and established performance standards based on its evaluation. Secondary treatment standards, therefore, are

concentration-based effluent limitations on total suspended solids, pH, biochemical oxygen demand, and removal efficiency. Municipal wastewater treatment facilities are required to meet secondary treatment standards with few exceptions. Exceptions are identified at 40 CFR 133.103.

Federal Emergency Management Agency (FEMA)

The City and County are participants in the National Flood Insurance Program (NFIP), a Federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by FEMA and DWR to insure the proper implementation of FEMA floodplain management regulations.

State

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Sections 10610–10656) requires that all urban water suppliers with at least 3,000 customers prepare urban water management plans and update them every 5 years. The act requires that urban water management plans include a description of water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions. Specifically, urban water management plans must:

- Provide current and projected population, climate, and other demographic factors affecting the supplier’s water management planning;
- Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier;
- Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage;
- Describe plans to supplement or replace that source with alternative sources or water demand management measures;
- Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis (associated with systems that use surface water);
- Quantify past and current water use;
- Provide a description of the supplier’s water demand management measures, including schedule of implementation, program to measure effectiveness of measures, and anticipated water demand reductions associated with the measures;
- Assessment of the water supply reliability.

Senate Bill (SB) 610 and Assembly Bill (AB) 910

During the 2001 regular session of the State Legislature, SB 610 and AB 910 – Water Supply Planning, were signed and became effective January 1, 2002. SB 610 amends Public Resources Code Section 21151.9, requiring any EIR, negative declaration, or mitigated negative declaration for a qualifying project to include consultation with affected water supply agencies (previous law applied only to Notices of Preparation). SB 610 also amended the following: (1) Water Code Sections 10656 and 10657—to restrict state funding for agencies that fail to submit their Urban Water Management Plan to the Department of Water Resources, and (2) Water Code Section 10910—to describe the water supply assessment that must be undertaken for projects referred under PRC Section 21151.9, including an analysis of groundwater supplies. Water agencies would be given 90 days from the start of consultation to provide a water supply assessment to the CEQA lead agency; Water Code Section 10910 would also specify the circumstances under which a project for which a water supply assessment was once prepared would be required to obtain another assessment. AB 910 amended Water Code Section 10631, expanding the contents of the Urban Water Management Plans to include further information on future water supply projects and programs and groundwater supplies.

Senate Bill 221

SB 221 adds Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within 5 days of the subdivision application being accepted as complete for processing by the City or County. It adds Government Code Section 66473.7, establishing detailed requirements for establishing whether a “sufficient water supply” exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement.

When approving a qualifying subdivision tentative map, the City or County must include a condition requiring a sufficient water supply to be available. Proof of availability must be requested of and provided by the applicable public water system. If there is no public water system, the City or County must undertake the analysis described in Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance was adopted by the Office of Administrative Law in September 2009 and requires local agencies to implement water efficiency measures as part of its review of landscaping plans. Local agencies can either adopt the Model Water Efficient Landscape Ordinance or incorporate provisions of the ordinance into code requirements for landscaping. For new landscaping projects of 2,500 square feet or more that require a discretionary or ministerial approval, the applicant is required to submit a detailed Landscape Documentation Package that discusses water efficiency, soil management, and landscape design elements.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed AB 939, the California Integrated Waste Management Act of 1989, effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent by 1995 and 50 percent by 2000; established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. In 2007, Senate Bill (SB) 1016, Wiggins, Chapter 343, Statutes of 2008, introduced a new per capita disposal and goal measurement system that moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a per capita disposal rate factor. As such, the new disposal-based indicator (pounds per person per year) uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers safe, reliable utility service at reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings

Title 24, Part 6, of the California Code of Regulations establishes California's Energy Efficiency Standards for Residential and Nonresidential Buildings. The standards were updated in 2010. The 2010 standards set a goal of reducing growth in electricity use by 561.2 gigawatt-hours per year (GWh/y) and growth in natural gas use by 19 million therms per year (therms/y). The savings attributable to new nonresidential buildings are 151.2 GWh/y of electricity savings and 3.3 million therms. For nonresidential buildings, the standards establish minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC]; and water heating systems), indoor and outdoor lighting, and illuminated signs.

California Green Building Standards Code

The California Green Building Standard Code was adopted January 12, 2009. The purpose of this code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories:

- Planning and design
- Energy efficiency

- Water efficiency and conservation
- Material conservation and resource efficiency
- Environmental air quality

The Code addresses exterior envelope, water efficiency, and material conservation components. The aim is to reduce energy usage in non-residential buildings by 20 percent by 2015 and help meet reductions contemplated in AB 32. With the 2008 Building Code, a 15-percent energy reduction over 2007 edition is expected. Compliance will be mandatory as of January 1, 2011.

Local

Sacramento LAFCo Policies, Standards, and Procedures

Sacramento LAFCo has developed standards and guidelines in its Plans, Policies, and Procedures Manual that aide in the implementation of the Cortese-Knox-Hertzberg Act. The following Sacramento LAFCo policies, standards, and procedures relate to the project in respect to utilities and service systems.

Chapter IV, General Standards,

Section F. Application of the California Environmental Quality Act to Changes of Organization or Reorganization and Spheres of Influence.

- **Standard F.4.** In preparing an Initial Study for the project subject to LAFCo review, the LAFCo will generally consider the project to have the potential to significantly affect the environment if the project has substantial growth-inducing potential because it would result in:
 - b. If buildout of the project may result in the capacity of any public service or facility being exceeded or substantially affected. For the purposes of this provision, public facilities or services include, but are not limited to: sewage disposal, water service, flood control facilities, drainage facilities, law enforcement, fire protection, school, parks, libraries, gas and electric service, and solid waste disposal. A public service or facility shall be considered “substantially affected” if the additional demand generated by the project would result in the facility or service exceeding 110 percent of its design capacity, or 120 percent of the available capacity.

Section I. Amendments to Spheres of Influence

- **Standard I.2.** The Sphere of Influence Master Services Element must be current before additions to a Sphere of Influence will be approved by LAFCo.
- **Standard I.4.** Amendment proposals must be consistent with the updated Sphere of Influence and Master Services Element.

- **Standard I.9.** The LAFCo will deny proposals that would result in significant unmitigable adverse effects upon other service recipients or other agencies serving the affected area unless the approval is conditioned to avoid such impacts.
- **Standard I.10.** The LAFCo will approve a proposed amendment to a Sphere of Influence only if the subject agency will be the most logical and prospectively most efficient provider of services to the subject territory.

Water Forum Agreement and Successor Effort

The Water Forum is a diverse group of business and agricultural leaders, citizens groups, environmentalists, water managers, and local governments in Sacramento County. SCWA and EGWD are both signators to the Water Forum. Elk Grove is not a signator to the Water Forum. The Water Forum was developed to address water-related issues facing the Sacramento region, which include water shortages, environmental degradation, groundwater contamination and reliability, and economic prosperity. The Water Forum resulted in the establishment of principles to guide regional development and the development of the Water Forum Agreement (WFA).

The comprehensive WFA allows the region to meet its needs in a balanced way through implementation of seven elements. The elements provide detailed understandings among stakeholders on how this region will deal with key issues, which include groundwater management practices, water diversions, dry year water usage, water conservation measures, and the protection of the Lower American River. The understandings were included in the Memorandum of Understanding for the Water Forum Agreement, which created the overall political and moral commitment to the WFA. The WFA established the following two main co-equal objectives: “Provide a reliable and safe water supply for the region’s economic health and planned development to the year 2030” and “Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.”

City of Elk Grove

The City of Elk Grove General Plan sets forth the following goals and policies that are relevant to utility systems:

Public Facilities and Finance

- **Policy PF-2:** The City shall coordinate with outside service agencies - including water and sewer providers, the Elk Grove Community Services District, and the Elk Grove Unified School District - during the review of plans and development projects.
- **Policy PF-3:** Water supply and delivery systems shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City’s satisfaction.
- **PF-3-Action 1:** The following shall be required for all development projects, excluding subdivisions:

- An assured water supply and delivery system shall be available at the time of project approval. The water agency providing service to the project may provide several alternative methods of supply and/or delivery, provided that each is capable individually of providing water to the project.
- All required water infrastructure for the project shall be in place at the time of project approval, or shall be assured through the use of bonds or other sureties to the City's satisfaction. Water infrastructure may be phased to coincide with the phased development of large-scale projects.
- **PF-3-Action 2:** The following shall be required for all subdivisions to the extent permitted by state law:
 - Proposed water supply and delivery systems shall be identified at the time of tentative map approval to the satisfaction of the City. The water agency providing service to the project may provide several alternative methods of supply and/or delivery, provided that each is capable individually of providing water to the project.
 - The agency providing water service to the subdivision shall demonstrate prior to the approval of the Final Map by the City that sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects in the same service area, and other projects that have received commitments for water service.
 - Offsite and onsite water infrastructure sufficient to provide adequate water to the subdivision shall be in place prior to the approval of the Final Map or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.
 - Offsite and onsite water distribution systems required to serve the subdivision shall be in place and contain water at sufficient quantity and pressure prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.
- **Policy PF-8:** Sewage conveyance and treatment capacity shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City's satisfaction.
- **PF-8-Action 1:** The following shall be required for all development projects, excluding subdivisions:
 - Sewer/wastewater treatment capacity shall be available at the time of project approval.
 - All required sewer/wastewater infrastructure for the project shall be in place at the time of project approval, or shall be assured through the use of bonds or other sureties to the City's satisfaction.
- **PF-8-Action 2:** The following shall be required for all subdivisions to the extent permitted by state law:
 - Sewage/wastewater treatment capacity shall be available at the time of tentative map approval.

- The agency providing sewer service to the subdivision shall demonstrate prior to the approval of the Final Map by the City that sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects using the same conveyance lines, and projects which have received sewage treatment capacity commitment.
- Onsite and offsite sewage conveyance systems required to serve the subdivision shall be in place prior to the approval of the Final Map, or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.
- Sewage conveyance systems within the subdivision shall be in place and connected to the sewage disposal system prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.
- **Policy PF-19:** Public facilities should be phased in a logical manner which avoids “leapfrog” development and encourages the orderly development of roadways, water and sewer, and other public facilities. The City shall not provide public financing or assistance for projects that do not comply with the planned phasing of public facilities. Interim facilities may be used only if specifically approved by the City Council
- **Policy PF-21:** New development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law.
- **Policy PF-23:** The City will coordinate with independent public service providers, including schools, parks and recreation, reclamation, water, transit, electric, and other service districts, in developing financial and service planning strategies.

Safety

- **Policy SA-13:** The City shall require that all new projects not result in new or increased flooding impacts on adjoining parcels on upstream and downstream areas.
- **Policy SA-23:** The City shall require all new urban development projects to incorporate runoff control measures to minimize peak flows of runoff and/or assist in financing or otherwise implementing Comprehensive Drainage Plans.

Sacramento County Water Agency Zone 41 Urban Water Management Plan and Zone 40 Water Supply Master Plan

Every urban water supplier that provides water to more than 3,000 customers or supplies more than 3,000 acre-feet per year is required to prepare and adopt an Urban Water Management Plan (UWMP) that describes the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier’s water management planning. The plan describes the sources of supplies and the major infrastructure required to meet those demands.

Additionally, the UWMP identifies and quantifies, to the extent practicable, the existing and planned sources of water available to the supplier and the reliability of the water supply and vulnerability to seasonal or climatic shortages. SCWA is responsible for developing the UWMP for their service area.

The 2010 Zone 41 Urban Water Management Plan (2010 UWMP) was published July 2011. The 2010 UWMP addresses the SCWA's water systems and includes a description of the water supply sources, magnitudes of historical and projected water use, and a comparison of water supply water demands during normal, single-dry, and multiple-dry years. Also described is SCWA's conservation program. The Plan provides a flexible plan of water management alternatives, which can be implemented and revised as availability and feasibility of water supply sources change in the future.

Sacramento County Department of Water Resources Local Floodplain Management Plan

Sacramento County Water Agency has established the Local Floodplain Management Plan. The Local Floodplain Management Plan area has been mapped out, and the Planning Area is included in the majority of the Morrison Creek Stream Group and a portion of the South County area. The Floodplain Management Plan outlines policies and mitigations for minimizing impacts from new development within most areas of Sacramento County.

The Sacramento Regional County Sanitation District

SRCSO, under the direction of the Sanitation Districts Agency, provides public wastewater treatment, and disposal in the unincorporated and urbanized portions of Sacramento County, but does not currently include the majority of the SOIA Area. SRCSO was formed in 1973, and in 1982 the Sacramento Regional Wastewater Treatment Plant began service. SRCSO is governed by a 17-member Board of Directors representing the jurisdictions served. SRCSO has prepared the following documents to guide the development of wastewater facilities in Sacramento County:

- **Sanitary Sewer Management Plan.** SRCSO is required to comply with the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. The purpose of the Order is to require agencies to prepare a plan and schedule for measures to be implemented to reduce sanitary sewer overflows, as well as measures to effectively clean-up and report sanitary sewer overflows. Supporting documentation for the Sanitary Sewer Management Plan includes the 2000 Interceptor Master Plan, as described below.
- **Regional Interceptor Master Plan 2000.** SRCSO has prepared a long-range master plan for the large diameter interceptors that transport wastewater to the Sacramento Regional Wastewater Treatment Plant and includes interceptor upgrades/expansions to accommodate anticipated growth through 2035.

- **The Interceptor Master Plan 2000 (Plan 2000)** uses land use and population projections to determine wastewater needs. Plan 2000 uses geographically based sewer-billing information to predict existing flows and Sacramento Council of Governments (SACOG) geographically based population projections to predict areas of future growth and development densities.
- **Regional 2020 Master Plan.** The Sacramento Wastewater Treatment Plant Master Plan (2020 Master Plan) for the SRWTP provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements through the year 2020. The 2020 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 2020 Master Plan are to provide sufficient capacity to meet growth projections and an orderly expansion of SRWTP facilities, to comply with applicable water quality standards, and to provide for the most cost-effective facilities and programs from a watershed perspective.

New regulations and policies will have a significant influence on the operation of the wastewater treatment plant. As stated in the Section 3.16.1, a new National Pollutant Discharge Elimination System (NPDES) Discharge Permit was issued to SRCSD by the Central Valley Regional Water Quality Control Board (RWQCB) in December 2010. In adopting the new Discharge Permit, the RWQCB required SRCSD to meet significantly more restrictive treatment levels over its current levels. SRCSD has appealed the permit decision to the State Water Resources Control Board. A decision on that appeal has not occurred at the time of preparation of this FEIR. In the meantime, SRCSD is required to begin the necessary activities, studies and projects to meet the new permit conditions. All new treatment facilities must be completed by 2020.

Sacramento Area Sewer District

In 1999, SASD agreed to prepare its own studies, separate from that of SRCSD, which are known as the SASD Sewerage Facilities Expansion Master Plan, and the SASD Rehabilitation Master Plan.

- **Sacramento Area Sewer District Sewerage Facilities Expansion Master Plan.** The overall goal of the SASD Sewerage Facilities Master Plan is to estimate the future capital improvement needs of the SASD trunk sewer system, both in capacity relief projects for the existing system and expansion projects to serve newly developed areas. This plan provides for sewerage facilities and relief sewers to address future development within SASD's service area and to minimize the risk from potential sewer overflows that could occur during storm events. This plan also addresses the financial aspects of the SASD Trunk Expansion Program.

3.16.3 - Methodology

Michael Brandman Associates evaluated potential impacts on utility systems through review of the Sacramento County General Plan, the City of Elk Grove Sphere of Influence Amendment Area Draft Municipal Service Review, and the SCWA Urban Water Management Plan.

The impacts related to utilities and service systems from implementation of the 2003 Elk Grove General Plan were evaluated in the General Plan Environmental Impact Report (EIR). All mitigation measures identified for impacts in the Elk Grove General Plan EIR and adopted by the City continue to remain the responsibility of the City as part of implementation of the General Plan. Consequently, upon approval of any future annexation request for the SOIA Area, those General Plan policies and EIR mitigation measures are assumed to apply to development within the SOIA Area.

3.16.4 - Thresholds of Significance

According to Appendix G, Environmental Checklist, and Appendix F, Energy Conservation, of the CEQA Guidelines, utilities and services impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- b) 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?
- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- g) Comply with federal, state, and local statutes and regulations related to solid waste?
- h) Result in the unnecessary, wasteful, or inefficient use of energy?

3.16.5 - Project Impacts and Mitigation Measures

Water

Impact USS-1: **The proposed project could result in the generation of a demand for increased water services over that which is currently produced in the area and would result in a need for additional water supplies or facilities.**

Impact Analysis

The SOIA Area contains primarily agricultural land uses and currently requires minimal municipal water services. The proposed SOIA includes no specific land use plan. Existing service providers are expected to continue the current level of service. Approval of the SOIA would cause no additional immediate demand for municipal water service, water supplies, and infrastructure.

Future development of the SOIA Area will require adequate planning for long-term growth. The proposed SOIA will provide direction to municipal water service providers about the location and extent of the City's anticipated growth. This will allow providers to conduct long-term planning to ensure adequate services and infrastructure are available. As described below, future actions to urbanize the SOIA Area would require the expansion of the SCWA boundaries. Further, as identified above, Elk Grove General Plan Policy PF-23 requires the City to coordinate with independent public service providers, such as the SCWA, in developing financial and service planning strategies.

SCWA is the most likely municipal water service provider for future residents in the SOIA Area. SCWA would need to plan for, annex, and extend infrastructure and services to fully serve the entire SOIA Area. Changes in the service area of SCWA are not subject to LAFCo purview.

There are several major points of connection to major SCWA infrastructure near the SOIA Area boundaries. SCWA's nearest water transmission mains are along Bilby Road at West Stockton Boulevard and at the Grantline-SR-99 interchange. SCWA is capable of expanding infrastructure and services to provide adequate municipal water services in the SOIA Area. Nearly all of the SOIA Area lies outside of Zone 40 and is currently not included in SCWA's 2030 Study Area. SCWA can conduct master planning for adequate infrastructure during its next master plan update for Zone 40. Area-specific planning will be conducted when service demands require an expansion of services in the area to ensure adequate facilities are available to serve the area.

SCWA staff has envisioned general future service requirements for the SOIA Area. The public water system could be similar to the water system in the Laguna Ridge and East Franklin area. This water system could be served with wells, groundwater treatment, storage tanks, pump stations, transmission and distribution mains, and fire hydrants. SCWA staff also envisioned a non-potable water supply system to meet specific non-potable water demands.

The land use assumptions discussed in Section 2, Project Description indicate that future growth of the SOIA Area would require the provision of water infrastructure and services to meet the demands of the community. It is anticipated that future water supply, treatment, and delivery systems can be

extended to provide adequate service to residents. The current SCWA service area boundary includes a portion of the SOIA Area; however, the majority of the SOIA Area currently lies outside of SCWA’s 2030 Study Area. SCWA would need to amend its boundaries and undergo environmental review process in order to fully serve future growth.

Indirect and potential buildout water demands for the SOIA Area would likely increase the consumption of potable water. As shown above in Table 3.16-3, water demand from existing agricultural uses is approximately 9,417 acre-feet per year. It should be noted that this does not account for the total acreage of the SOIA Area or for non-irrigation demands, as this information was not available.

The estimated average water consumption for potential urban land uses that could be developed in the SOIA Area are provided in Table 3.16-5. Future water consumption was calculated using the proposed land use projections, as provided in Table 2-6 in the Project Description, and the urban water demand rates for year 2030 from the Sacramento County Water Agency (SCWA) Zone 40 Water Supply Master Plan.

Table 3.16-5: Estimated SOIA Area Annual Average Water Consumption (2030)

Land Use Category	Acreage	Water Demand	
		AF/Ac/Year	AF/Year
Rural Residential (0.1 to 0.5 du/acre)	1,625	1.33	2,161
Estate Residential (0.6 to 4.0 du/acre)	320	1.33	426
Low Density Residential (4.1 to 7.0 du/acre)	2,390	2.89	6,907
Medium Density Residential (7.1 to 15.0 du/acre)	131	3.70	485
High Density Residential (15.1 to 30.0 du/acre)	76	4.12	313
Office/Multi-Family (20.0 du/ac maximum)	146	2.51	366
Commercial/Office	28	2.75	77
Commercial/Office/Multi-Family (20.0 du/ac maximum)	32	2.51	80
Commercial	659	2.75	1,812
Office	46	2.75	127
Public Schools	483	1.04	502
Institution	113	1.04	118
Public/Quasi Public	230	1.04	239
Light Industry	247	2.71	669

Table 3.16-5 (cont.): Estimated SOIA Area Annual Average Water Consumption (2030)

Land Use Category	Acreage	Water Demand	
		AF/Ac/Year	AF/Year
Heavy Industry	357	2.71	967
Open Space	987	—	—
Total	7,869	—	15,249
Notes: AF = Acre feet of water Ac = Acre of land Land Use assumptions from Table 2-6, Proposed Land Use Projections within the SOIA Area Source: Michael Brandman Associates, SCWA 2005.			

As stated previously, the SOIA would not directly change the current municipal water demands in the SOIA Area; existing services, such as irrigation water provided by the Omochumne-Hartnell Water District, will continue at their existing level of service. As shown in Tables 3.16-1 and 3.16-2, SCWA’s water supply in normal and dry years would exceed projected demand through 2035 by 31,788 acre-feet (2035 annual demand of 77,712 acre-feet with an annual water supply of 109,500 acre-feet; see Tables 3.16-1 and 3.16-2).

Assuming projected demand of 15,249 acre-feet for buildout of the SOIA Area (see Table 3.16-5), SCWA water supply would be adequate to serve the SOIA Area and there would exist a surplus of over 16,000 acre-feet in 2035. However, as shown in Table 0-2, approximately 9,300 acre-feet of SCWA’s water supply is geographically limited for use within the within the City of Sacramento’s American River Place of Use (POU). The SOIA Area is not within the American River POU. Even without the 9,300 acre-feet for the American River POU, SCWA supplies would still exceed 2035 demand by over 7,000 acre-feet.³ While this would result in a less than significant project-specific impact, because buildout of the general plans of jurisdictions served by SCWA could exceed supplies, the cumulative impact would be significant. Implementation of Mitigation Measure USS-1 requires demonstration of adequate water supply prior to annexation, but the cumulative impact would remain significant and unavoidable. .

Level of Significance Before Mitigation

Potentially significant cumulative impact.

³ 9,300 acre-feet subtracted from 109,500 acre-feet total yields 100,200 acre-feet. Project demand of 15,249 plus SCWA-reported 2035 demand of 77,712 results in a 92,961 acre-foot demand with the project. The resulting surplus would be 7,239 acre-feet.

Mitigation Measures

MM USS-1 Prior to LAFCo approval of annexation of any portion of the City of Elk Grove SOIA territory, the City must demonstrate that through the Plan for Services as required by Government Code section 56430, or its successor, to allow the Commission to determine that: (1) the requirement for timely water availability, as required by law, is met; (2) its water purveyor is a signatory to the Water Forum Successor Effort, (3) the amount of water provided will be consistent with the geographical extent of the SOIA territory and the groundwater sustainable yield described in the Water Forum Agreement. water will be provided in a manner that ensures no overdraft will occur; and (4) existing water customers will not be adversely affected. The Plan for Services shall be sufficient for LAFCo to determine timely water availability to the affected territory pursuant to Government Code Section 56668, subdivision (k), or its successor.

Level of Significance After Mitigation

Significant and unavoidable cumulative impact.

Wastewater

Impact USS-2: **The proposed project may require or result in the construction of new wastewater collection and treatment facilities or expansion of existing facilities.**

Impact Analysis

The SOIA Area currently does not require municipal wastewater services, as the area remains primarily agricultural. The land use assumptions discussed in Section 2, Project Description, indicate that future growth of the SOIA Area will require adequate planning for long-term growth. Expansion of the City’s SOI into the SOIA Area would provide direction to municipal wastewater service providers about the location and extent of the City’s growth. This will allow the provider to conduct long-term planning to ensure adequate services and infrastructure are available. Future actions may include the expansion of the service provider’s SOI.

In general, future development in the SOIA Area could convert primarily undeveloped, agricultural land uses to an integrated community of land uses including workplace, residential, mixed use, retail, public services (schools, parks, fire stations, etc.), and infrastructure. An analysis by the Sacramento Area Sewer District (SASD) indicates that the existing 42-inch and 33-inch lines in the Elk Grove/Laguna area have existing and/or future capacity limitations (Sacramento Area Sewer District Sewerage Facilities Expansion Master Plan, 2006). Accordingly, the urbanization of the SOIA Area would require the installation of new or expanded sanitary sewer conveyance to serve the future needs of proposed development within the SOIA Area.

Sacramento Area Sewer District

SASD will be the local wastewater service provider for any future residential and employment land uses in the SOIA Area. The City of Elk Grove would need to annex into the Sacramento Regional County Sanitation District (SRCSD) and SASD service areas and extend infrastructure and services to fully serve the entire SOIA Area. Both SASD and SRCSD would also need to amend the respective spheres.

Infrastructure Extensions

There are several points of connection to major SASD infrastructure near the SOIA Area boundaries that lie just north of the SOIA Area. In addition, SASD's 2006 Sewerage Facilities Expansion Master Plan indicates that additional future interceptors and expansion trunk sewers would be evaluated in the 2011–2020 period and post 2020 period, immediately adjacent to the SOIA Area. Exhibit 3.16-3 shows the expansion trunk projects near the SOIA Area.

SASD would need to expand its infrastructure and services to provide adequate local wastewater conveyance services in the SOIA Area. Nearly all of the SOIA Area lies outside of SASD's boundaries and is currently not included in the 2006 Master Plan document. SASD can conduct master planning for adequate infrastructure during its next master plan update. Current infrastructure planning efforts focus on a large area of the Sacramento region. Area-specific planning will be conducted when service demands require an expansion of services in the area to ensure adequate facilities to serve the area.

The following areas are currently located within the SASD's service area and have been identified in the 2006 SASD Master Plan Update:

- The portion of the area Southeast of Grant Line Blvd that is located within the SOIA Area can be served by the EG Elk Grove East Trunk sheds.
- The EGO-1 trunk shed in this area is scheduled to be evaluated for possible completion between 2011 and 2020, and the EGO-2 shed will be evaluated for possible completion after 2020.
- The area north of Bilby Road will be served by the SO East Franklin Trunk Shed, and the trunk line ELK-13 relief project is scheduled to be evaluated for possible completion between 2011 and 2020.
- A portion of the area south of Bilby Road that is within the USB will be served by the SO East Franklin Trunk Shed. The trunk line that will serve this area is tentatively scheduled to be evaluated for possible completion before 2011.

Development projects are required to design and build project-specific infrastructure, sized appropriately for anticipated demand. These improvements typically consist of underground

pipelines that connect to the overall conveyance systems, through varying pipeline sizes and pump stations. Since the City's incorporation, SASD has approved every new connection to the existing conveyance system from a development project. SASD staff has indicated that the SASD system would have adequate capacity to meet future demands as a result of appropriate, long-term service planning. SASD will issue sewer permits to connect to the system if it is determined that capacity is available and the property has met all other requirements for service.

Sacramento Regional County Sanitation District (SRCSD)

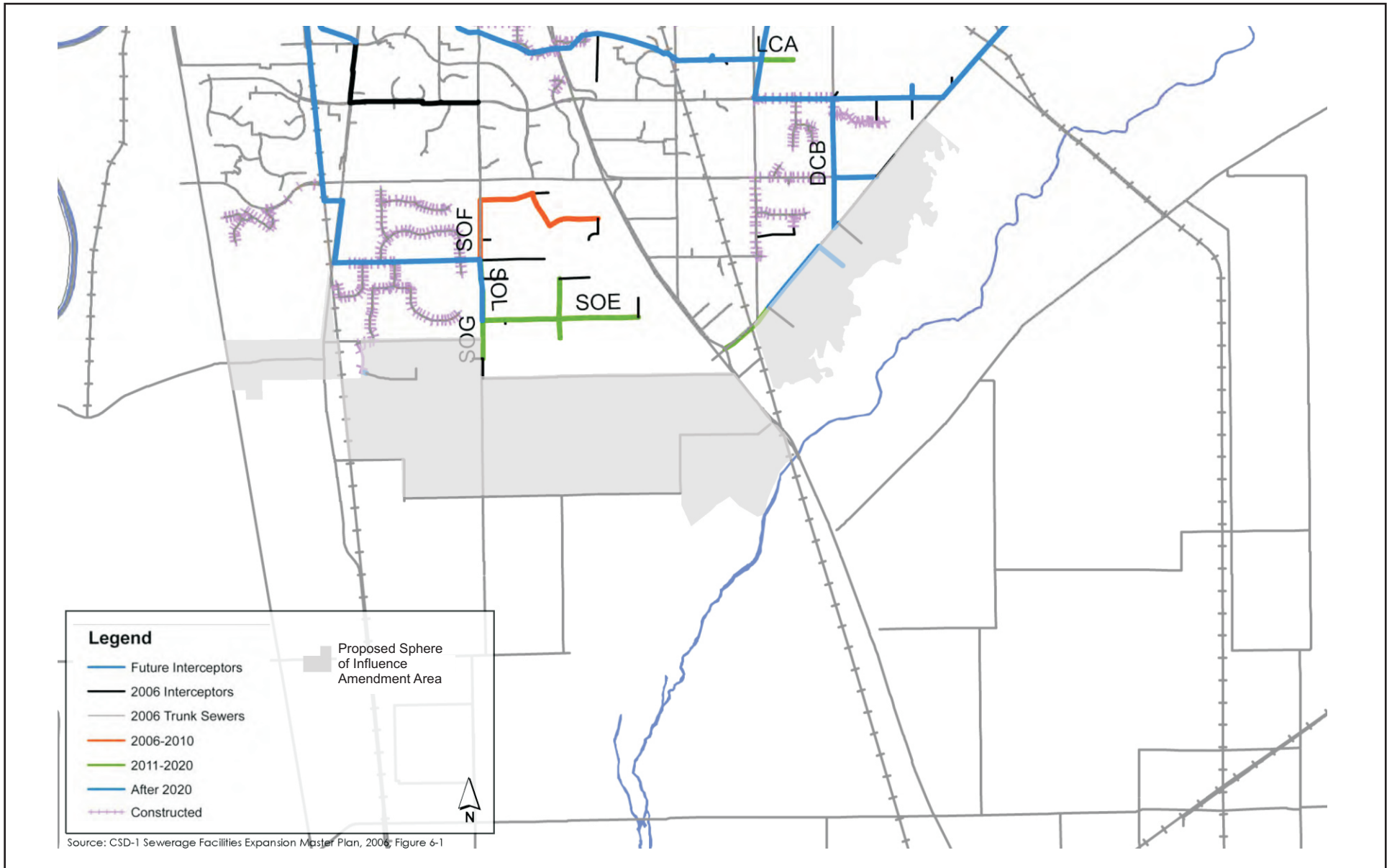
SRCSD is the most likely regional wastewater treatment service provider for residents in the SOIA Area. SASD conveys wastewater to SRCSD's regional interceptors for treatment at SRCSD's regional wastewater treatment plant, located just northwest of the City. The City of Elk Grove would need to annex the SOIA Area to the SRCSD service area in order to receive regional wastewater treatment services.

Infrastructure Expansions

SRCSD's 2000 Master Plan was originally planned for the area located within the USB to be served by the South Interceptor. All wastewater from the SOIA Area is anticipated to travel through SASD's pipelines, then to SRCSD's pipelines to the treatment plant. SRCSD will issue sewer permits to connect to the system if it is determined that capacity is available and the property has met all other requirements for service.

SRCSD is currently in the process of finalizing an Interceptor Sequencing Study that recognizes the SOIA as potential expansion area and will provide general information about the best way to serve the SOIA Area, including reevaluating the current alignment and/or need for the South Interceptor and potential interim facilities that may be necessary to provide service. The Interceptor Sequencing Study will also study potential impacts that areas outside the County's USB may have on future facilities. However, SRCSD staff has stated that future sewer service to these areas cannot be planned until annexation into SRCSD has occurred.

The land use assumptions discussed in Section 2, Project Description, indicate that future growth of the SOIA Area would require the provision of wastewater infrastructure and services to meet the demands of the community. Should growth occur in the SOIA Area, future wastewater conveyance and treatment systems could be extended to provide adequate service to residents. SASD and SRCSD would be the most logical municipal wastewater service providers for the SOIA Area. The current SASD and SRCSD service area boundaries would need to be amended in order to fully serve future growth. SASD and SRCSD would conduct master planning to adequately serve growth in the SOIA Area once annexed.



Source: City of Elk Grove, 2008. Sacramento County, 2008.



Michael Brandman Associates

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Exhibit 3.16-3 County Sanitation District-1 Expansion Trunk Project

SACRAMENTO LAFCo • ELK GROVE SPHERE OF INFLUENCE AMENDMENT
RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT

Any future development and land use activities would be subject to an independent CEQA review necessary to address any impacts, including the need for wastewater treatment capacities and infrastructure. However, the SOIA does have the potential to indirectly increase the demand for wastewater services through the potential for future urbanization of the SOIA Area, which would result in the need for new wastewater facilities or expansion of existing facilities. As discussed above in the Setting subsection, the 2020 SRWTP Master Plan includes projections for annexation of land south of Elk Grove. While the expansion of the SRWTP would result in physical environmental effects, the SRCSD would be the lead agency under CEQA for any expansion project.

Neither LAFCo nor the City of Elk Grove could assure implementation of mitigation measures to reduce physical effects. While implementation of Mitigation Measure USS-2 would ensure that adequate wastewater treatment capacity is available for any proposed annexation, LAFCo cannot assure implementation of mitigation to reduce physical effects associated with wastewater treatment plant expansions to serve the SOIA Area. Therefore, this impact would remain significant and unavoidable. .

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM USS-2 Prior to submittal of any application to annex territory within the Sphere of Influence Amendment (SOIA) Area, the City of Elk Grove will provide a Plan for Services that demonstrates that the wastewater transmission and treatment providers have requested that the SOIA Area be within their respective Spheres of Influence if a public agency, and that such providers have prepared or approved an infrastructure plan and funding program to ensure compliance with Federal Clean Water Act and applicable state standards; and that sufficient transmission infrastructure, and treatment and disposal capacity adequate for projected needs are available to accommodate the buildout of the annexation territory, with no adverse impact to existing ratepayers.

Level of Significance After Mitigation

Significant and unavoidable impact.

Storm Drainage

Impact USS-3: The proposed project may require or result in the construction of new stormwater drainage facilities or expansion of existing facilities.

Impact Analysis

The SOIA Area currently requires minimal storm drainage services, as the area remains primarily agricultural. The SOIA would not cause an additional, immediate demand for municipal storm drainage service and infrastructure.

Utilities and Service Systems

Expansion of the City’s SOI into the SOIA Area will provide direction to storm drainage and flood control service providers about the potential location and extent of the City’s growth. This will allow providers to conduct long-term planning to ensure adequate services and infrastructure are available. Future actions may include the expansion of the service provider’s SOI.

The City and SCWA would likely be the storm drainage and flood control service providers for the SOI Area. Both SCWA and the City review drainage studies and plans for new development within their jurisdictions to ensure that storm drainage facilities would accommodate the stormwater runoff generated from new structures and roads.

The land use assumptions discussed in Section 2, Project Description, indicate that future growth of the SOIA Area could result in increased runoff in the area and may require the construction and maintenance of additional drainage infrastructure and facilities to ensure adequate drainage.

Since there are no immediate land use changes, there would be no direct increase in impervious surface coverage that would result in increased stormwater runoff volumes and peak flows and create a need for offsite storm drainage facilities. However, the project may result in indirect increases in stormwater runoff through the potential of future urbanization within the SOIA Area. Therefore, implementation of Mitigation Measure HYD-3 is recommended to ensure that future annexation and development activities would result in less than significant impacts.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measure HYD-3.

Level of Significance After Mitigation

Implementation of the mitigation measure referenced above would ensure that impacts related to storm drainage would be less than significant through either the preparation of a Drainage Master Plan or modifications of the City’s existing Stormwater Master Plan.

Less than significant impact.

Solid Waste

Impact USS-4: **The proposed project would be served by landfills with sufficient permitted capacity and would comply with applicable regulations.**

Impact Analysis

Land uses within the proposed SOIA Area generate solid waste that is landfilled at one of the three landfills shown in Table 3.16-4. As discussed previously, there is more than 154 million cubic yards of remaining capacity at those three landfills and a combined throughput of 15,155 tons per day. The

SOIA Area is currently within the service boundaries of the Sacramento County Municipal Services Agency, Department of Waste Management & Recycling; however, service is provided by mostly private, franchised hauling companies for the commercial and industrial customers. The private hauling companies are under a franchise agreement with the Sacramento Regional Solid Waste Authority to perform collection and disposal at properties and convey waste to landfills and recycling stations, as appropriate. The SOIA would not cause an additional immediate demand for solid waste services. Existing service providers are expected to continue the current level of service to the SOIA Area. However, the SOIA may result in an indirect increase in demand for solid waste by way of future urbanization of the SOIA Area. While specific solid waste generation rates by land use are not available for the area, the City of Elk Grove Sphere of Influence Amendment Area Draft Municipal Service Review states the average per capita rate for the area is 2.6 pounds per day (City of Elk Grove 2010). Assuming an increase in population in Elk Grove of approximately 40,000 at 2035⁴ that would generate 2.6 pounds per day (0.0013 tons per day) of solid waste per person, there would be an increase of 52 tons per day of solid waste generated in the City, which represents 0.34 percent of the total daily throughput (15,155 tons per day) at the landfills that serve the City.

Future growth or change in organization is not anticipated to significantly affect the current solid waste services provided. Solid waste collection and disposal for commercial, industrial, and multi-family residential units would be serviced by the current private haulers. It is anticipated that single-family residential customers would be served by the City. Subsequent project-specific environmental review would be required, as appropriate and necessary, prior to approval and construction of these facilities. Potential environmental impacts include noise and odors from solid waste collection and disposal activities as well as impacts to biological resources and water quality. AB 939 and the County Integrated Waste Management Plan will continue to apply to the SOIA Area, which require recycling programs that result in a 50-percent diversion away from landfills.

The land use assumptions discussed in Section 2, Project Description, indicate that future growth of the SOIA Area may require the provision of additional coordinated collection efforts to meet service demands. The City of Elk Grove would be the most likely provider of solid waste service services within the SOIA Area. The City would need to amend its service boundaries in order to fully serve future growth. Future growth within the SOIA Area would increase service demands for solid waste collection providers. Future land use changes would be required to comply with existing federal, state, and local statutes and regulations related to solid waste. Additional solid waste generated in the City would not represent a substantial increase in solid waste at the local landfills that serve the City. However, Mitigation Measure USS-4 is included to ensure that adequate solid waste service is available to the SOIA Area. Implementation of Mitigation Measure USS-4 would reduce potential

⁴ Based on an estimated 2010 population of 153,015 and 2035 population of 192,889, as discussed in Section 3.12, Population and Housing.

solid waste demand impacts to a less than significant level by requiring that a solid waste services plan be in place prior to potential future annexation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM USS-4 At the time of submittal of any application to annex any or all territory within the Sphere of Influence Amendment (SOIA) Area, the City of Elk Grove shall identify solid waste services, including contract service operation if applicable, to be extended, the level and range of services, timing of services, improvements of facility upgrades associated with the services, and how the services will be financed to accommodate the buildout of the SOIA Area.

Level of Significance After Mitigation

Implementation of the mitigation measure referenced above would ensure that impacts related to solid waste would be less than significant through identification of solid waste services to accommodate the buildout of the SOIA Area.

Less than significant impact.

Energy

Impact USS-5: The proposed project would not result in the unnecessary, wasteful, or inefficient use of energy.

Impact Analysis

Electrical service and natural gas service to the SOIA Area are provided by SMUD and PG&E, respectively. Each service provider is discussed separately below.

Sacramento Municipal Utility District

SMUD is able to expand services to provide adequate electrical services in the SOIA Area. Area-specific planning would be conducted if demands require an expansion of services in the area to ensure adequate facilities to serve the area. Electrical facilities could be extended from nearby facilities to serve the SOIA Area. SMUD is expected to remain the future electrical service provider, since SMUD is the electrical service provider for the area.

SMUD routinely plans for future electrical service needs. SMUD's Systems Plan is updated annually and is based on the latest summer peak information. The information is used to determine which projects are needed over the next 5 years in order to continue reliable service.

Pacific Gas and Electric Company

PG&E has stated that natural gas service can be provided to the SOIA Area upon future growth. PG&E is capable of expanding services to provide adequate natural gas services. Area-specific

planning would be conducted if demands require an expansion of services in the area to ensure adequate facilities to serve the area. Natural gas facilities could be extended from nearby facilities to serve the SOIA Area. PG&E is expected to remain the natural gas service provider, as PG&E is the natural gas service provider for the area.

Determination

The land use assumptions discussed in Section 2, Project Description indicate that future growth of the SOIA Area could require the provision of additional electrical facilities and gas pipeline facilities to meet service demands. SMUD and PG&E would remain the logical electrical and natural gas service providers within the SOIA Area.

Since there are no immediate land use changes, there would be no direct additional energy demands. However, future urbanization within the SOIA Area would increase energy demands. Future development would be required to comply with existing state statutes and regulations related to energy conservation, such as Title 24 and the new Green Building Code. This would ensure that future development would not result in the inefficient or wasteful use of energy. Specific, detailed analysis of potential energy consumption resulting from indirect growth within the SOIA Area would be speculative at this time. In addition, Section 6, Other CEQA Considerations, found the project would not result in inefficient, wasteful, or unnecessary energy requirements. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant impact.

