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## **5.12 PUBLIC UTILITIES**

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This section analyzes impacts on City utility and service systems that may result from the implementation of the proposed Project. The section identifies anticipated demand and existing and planned infrastructure availability. The utilities addressed in this section include water supply, storage, and distribution; wastewater collection, transmission, and treatment; solid waste collection and disposal; and energy and natural gas supply. Storm drainage utilities are addressed in Section 5.9, Hydrology and Water Quality.

### 5.12.1 WATER SERVICE

This subsection provides information on water supplies that would be used by and may be available to the proposed Project. This subsection also discusses the availability and adequacy of existing and planned water treatment and conveyance infrastructure for use by the proposed Project.

#### WATER SERVICE EXISTING SETTING

There are three water service providers in Elk Grove: Sacramento County Water Agency (SCWA); Elk Grove Water District (EGWD), which is a department of the Florin Resource Conservation District; and Omochumne-Hartnell Water District (OHWD) (**Figure 5.12-1**).

The SCWA is both a retail urban water supplier and a wholesale water supplier; it provides retail water supply to the City, as well as portions of unincorporated Sacramento County and the City of Rancho Cordova. The EGWD serves an area of approximately 13 square miles in the City limits east of SR 99. Part of its supply is water purchased from the SCWA. The OHWD overlaps with parts of the SCWA, providing service to customers in both the incorporated City and in the East and North Study Areas. Additional information on each of these providers is presented below.

The Rural Area of the City, which is located within the service areas of these water providers, is not provided service for residential hookups, consistent with City policy and receives water from wells.

#### **Sacramento County Water Agency**

The SCWA manages water supplies in Sacramento County, and boundaries of the SCWA are identical to the county boundaries. Water supplies consist of surface water, groundwater, recycled water, and purchased water. As authorized by the Sacramento County Water Agency Act in 1952, the agency may contract with the federal government and the State of California with respect to the purchase, sale, and acquisition of water. The service area is divided into eight systems, the largest of which are the Mather Sunrise and Laguna Vineyard systems. The City, within City limits, is in the Laguna Vineyard system.

The SCWA constructs and operates water supply infrastructure as well as some drainage systems. Zones have been approved by the Sacramento County Board of Supervisors to “finance, construct, acquire, reconstruct, maintain, operate, extend, repair, or otherwise improve any work or improvement of common benefit to such zone.” (SCWA 2018) There are eight water and drainage zones, some of which are for drainage and long-range planning for water resources development. Other zones are specifically for planning, design, and construction of major water supply facilities that benefit the zone. Each zone encompasses a unique geographic area of benefit to achieve the desired objectives. Funding derived from a zone can only be used to benefit that zone.

Zone 40 comprises the Mather Sunrise and Laguna Vineyard potable water system service areas. The southern boundary of the Zone 40 service area is Kammerer Road, and the eastern

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boundary is the Cosumnes River, which also coincides with the boundaries of Zone 40. The western boundary is Interstate 5, and the northern boundary is irregularly shaped, extending through unincorporated Sacramento County from the Florin area northeast to the City of Rancho Cordova. A portion of the Planning Area (existing City limits) not served by the EGWD is located in SCWA Zone 40.

Zone 40 is divided into three service areas (north, central, and south). The Laguna Vineyard water system consists of the central service area (CSA) and the south service area (SSA). The City limits are in the CSA and SSA. The CSA is east of SR 99 and is supplied by surface water from the Vineyard Surface Water Treatment Plant (SWTP) and groundwater. The Elk Grove wholesale area is in the CSA and comprises much of the Planning Area east of Waterman Road. The EGWD, also in the CSA, is between the wholesale area and SR 99. The SSA is west of SR 99 and is supplied by a mix of surface water, groundwater, and recycled water. Both the CSA and SSA are predominantly residential.

### Water Supplies

The SCWA uses purchased water, surface water, groundwater, and recycled water as sources of water supply. The California Department of Water Resources (DWR) defines purchased water as water purchased from other suppliers, including non-self-supplied surface water. Surface water is defined as self-supplied water that is drawn from streams, lakes, and reservoirs. **Table 5.12-1** lists the SCWA's water supplies and amounts delivered in 2015. There is not a specific actual delivery identified for portions of the City served by Zone 40 supply.

### Purchased Water

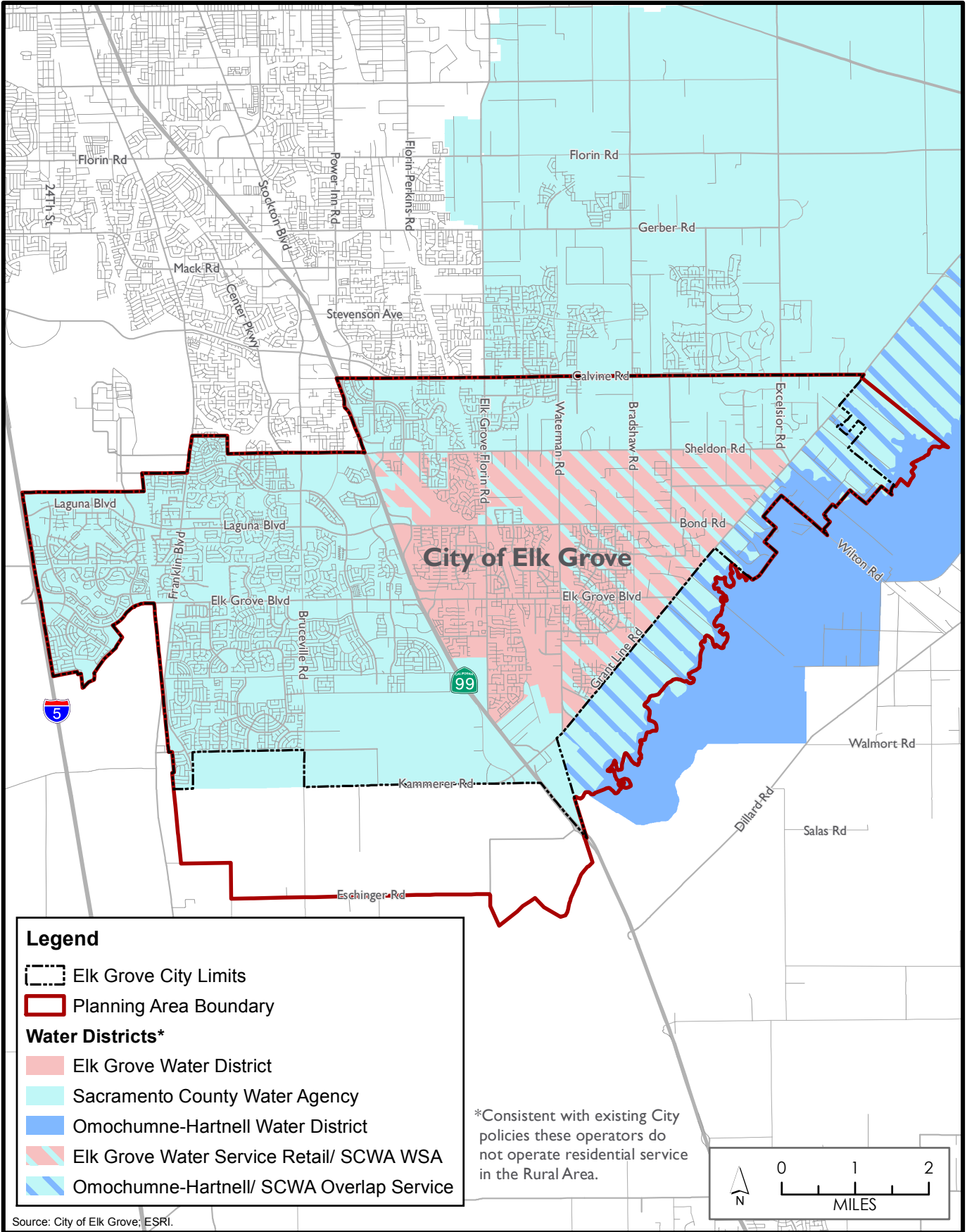
The SCWA has two sources of purchased water: the Central Valley Project (CVP) and the City of Sacramento's American River Place of Use (POU) Supply.

### *Central Valley Project Water*

CVP water consists of the following:

- SMUD 1 Assignment – 15,000 acre-feet per year (AFY) of Sacramento Municipal Utility District's (SMUD) CVP contract water has been assigned to the SCWA under the terms of an agreement with SMUD.
- SMUD 2 Assignment – 15,000 AFY of SMUD's CVP contract water has been assigned to the SCWA under the terms of an agreement with SMUD.
- CVP Water Public Law 101-514 ("Fazio" Water) – The SCWA has entered into a contract with the US Bureau of Reclamation for 22,000 AFY. Of this total, 7,000 AFY has been subcontracted to the City of Folsom for diversion from Folsom Lake. The remaining 15,000 AFY will be diverted by the SCWA from the Sacramento River. (SCWA 2016a, p. 6-1)

The SCWA's total CVP supply is subject to reductions in dry years.



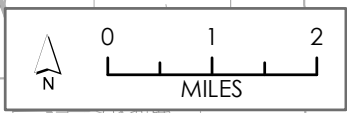
**Legend**

- Elk Grove City Limits
- Planning Area Boundary

**Water Districts\***

- Elk Grove Water District
- Sacramento County Water Agency
- Omochumne-Hartnell Water District
- Elk Grove Water Service Retail/ SCWA WSA
- Omochumne-Hartnell/ SCWA Overlap Service

\*Consistent with existing City policies these operators do not operate residential service in the Rural Area.



Source: City of Elk Grove; ESRI.



City of Elk Grove  
Development Services

**Figure 5.12-1**  
Water Service Boundaries

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*City of Sacramento's American River Place of Use*

A portion of Zone 40 lies within the City of Sacramento's American River POU. The City of Sacramento has a pre-1914 water right to the American River with a POU boundary that extends beyond the City's boundary and includes a portion of Zone 40. The amount of water available to serve the POU area within Zone 40 is estimated to be 9,300 AFY. SCWA is planning for the future wholesale delivery of American River water within the POU. (SCWA 2016a, p.6-2) The City is not located in the POU.

**TABLE 5.12-1  
SCWA WATER SUPPLIES AND 2015 DELIVERIES**

Water Supply	Additional Detail on Water Supply	2015		
		Volume Delivered	Water Quality	Total Right or Safe Yield
<b>Retail Water Supplies – Actual (AFY)</b>				
Purchased or imported water	CVP water	115	Drinking water	45,000
Surface water	Appropriative water	2,125	Drinking water	71,000
Groundwater		21,963	Drinking water	<sup>1</sup>
Groundwater	Remediated groundwater	4,176	Drinking water	8,900
Transfers	Other surface water supplies	0	Drinking water	9,600
Recycled water	Regional San	575	Recycled water	1,700
Raw water		170	Raw water	—
Other	Supply for SW Tract	25	Drinking water	—
Subtotal Retail		29,149		136,200
<b>Wholesale Water Supplies – Actual (AFY)</b>				
Purchased or imported water	CVP water	0	Drinking water	0
Surface water	Appropriative water	0	Drinking water	0
Groundwater		2,689 <sup>(2)</sup>	Drinking water	
Groundwater	Remediated groundwater	0	Drinking water	0
Transfers	Other surface water supplies	0	Recycled water	0
Recycled water		0	Drinking water	0
Subtotal Wholesale		2,689		
<b>Total</b>		<b>31,838</b>		<b>136,200</b>

Source: SCWA 2016a: Tables 6-10, 6-11

Notes:

1. Safe yield not determined
2. UWMP assumes wholesale water is supplied by groundwater.

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### Surface Water

The SCWA has an appropriative water supply that consists of self-supplied surface water drawn from the Sacramento River. In February 2008, the SWRCB approved the SCWA's appropriative right permit application to divert water from the American and Sacramento Rivers (Permit 21209). The amount of appropriated water available for use could range up to 71,000 AFY in wet years, primarily during the winter months. This water would be diverted at the Freeport diversion on the Sacramento River. Since the SCWA's demand is low in the winter months, it is possible that not all of this supply could be utilized without the ability to store the water (SCWA 2016a, p.6-2).

### Groundwater

The SCWA's water supply portfolio includes groundwater. The Laguna Vineyard system, which supplies the City, is supplied by groundwater as well as purchased water, surface water, and a small amount of recycled water. The Laguna Vineyard system depends on mostly groundwater during dry years when available surface water supplies are reduced. The groundwater is supplied by a system of groundwater wells and groundwater treatment plants. The other seven public water systems in the SCWA are completely reliant on groundwater. The SCWA system obtains water from the Sacramento Valley Groundwater Basin, South American Subbasin. The City overlies the Central Basin portion of the South American Subbasin. Additional information about groundwater basin characteristics is in Section 5.9, Hydrology and Water Quality. The South American Subbasin is not in critical overdraft or adjudicated.

As set forth in the Water Forum Agreement (see Regulatory Framework below), the long-term average annual pumping from the Central Basin is limited to 273,000 AFY. Groundwater production in the South American Subbasin has varied from approximately 202,300 AFY in 2011 to 260,200 AFY in 2008. Agriculture is the primary water use sector, accounting for approximately 65 percent of extractions. Monitoring and data analysis by the SCGA indicate that subbasin operations from 2005 through 2017 have not exceeded the sustainable yield conditions set forth in the Water Forum Agreement (SCWA 2016a, Section 2.3.1; SCGA 2018). No annual groundwater pumping amount has been defined in the Water Forum Agreement specifically for the SCWA in the Central Basin. Groundwater pumping by the SCWA in the South American Subbasin between 2011 and 2015 has decreased from a high of approximately 34,600 AFY in 2011 to approximately 24,600 AFY in 2015 (SCWA 2016a, Table 6-2). This represents approximately 10 percent, on average, of the limit established in the Water Forum Agreement for the South American Subbasin.

Even though the surface water supplies are not available for use at a consistent level, the SCWA has groundwater supplies available to be able to replace the reduction in surface water supplies in dry years. While groundwater is more consistently available over different climate year types, it has been constrained by groundwater contamination plumes, some naturally occurring contaminants, and the long-term need to not exceed the safe yield (SCWA 2016a, pp. 7-1).

### Other Water Supply Sources

#### *Recycled Water*

The Sacramento Regional County Sanitation District (Regional San) is responsible for the collection, treatment, disposal, and reuse of wastewater throughout most of the urbanized areas of Sacramento County. This includes much of the area where the SCWA provides retail water service. Through an agreement, Regional San has successfully implemented a nominal capacity of 5 million gallons per day (mgd) water recycling program with the SCWA. This program



provides recycled water for Regional San on-site uses and for large commercial irrigation customers within a portion of the Laguna Vineyard water system service area (e.g., commercial, industrial, right-of-way landscaping, schools, and parks). Recycled water is a desirable source of water for outdoor landscape irrigation and other nonpotable uses because of its high reliability and its independence of hydrologic conditions in any given year. Regional San's objective is to increase recycled water use in the Sacramento region during peak irrigation months to approximately 30 to 40 mgd. Water recycling at this scale will allow Regional San to better manage its effluent discharge to the Sacramento River and could help Sacramento area water purveyors improve water supply availability and reliability (SCWA 2016a, p.6–8).

### Water Transfers

Water transfers are water supplies obtained from various water users that hold surface water rights on the Sacramento River and the American River upstream of the SCWA's points of diversion. To obtain these supplies, the SCWA would enter into purchase and transfer agreements with other entities that hold these surface water rights. The assumed quantity of other water supplies is 9,600 AFY in dry years and no supplies transferred in wet years. The amount of needed water transfer supplies would vary depending on the amount of supplies needed to close the gap between supply and demand (SCWA 2016a, p. 6–14).

### SCWA Water Supply and Demand

The SCWA 2015 Urban Water Management Plan (UWMP) (2016a) provides estimates of existing and future water supply availability and demand for the areas it serves. In 2015, as shown in **Table 5.12-1**, retail deliveries were approximately 29,000 AFY. Of that amount, approximately 24,400 AFY was for the Laguna Vineyard and Mather Sunrise systems, combined. The demand for the Laguna Vineyard (which includes the City) and Mather Sunrise systems was based on the SCWA's 2016 Zone 40 Water System Infrastructure Plan (WSIP). The WSIP included projections for the Southeast Policy Area (SCWA 2016b, Table 3-20).<sup>1</sup> Because the SCWA's system is not fully metered, this is an estimate based on use type (SCWA 2016a, p. 4–1). There is not a specific demand identified in the UWMP for the portion of the City in Zone 40.

The projected reasonably available water supply volume for SCWA's retail water systems through 2040, during a normal climate year considering facility capacity constraints, is presented in **Table 5.12-2**. The increase in supply is the result of planned projects that will expand infrastructure capacity to allow the SCWA to use more of its available water supplies (i.e., it is not due to the acquisition of new or additional supplies) (SCWA 2016, Table 6-9). **Table 5.12-2** also summarizes the total projected retail demand for the same time frame. The projected annual availability of each water supply is constrained by available water infrastructure capacity (SCWA 2016a, p. 6-17).

Over 90 percent of the future demand is associated with the Mather Sunrise and Laguna Vineyard water systems, and most of the demand within those two systems is for residential uses (SCWA 2016a, Table 4-3 and Table 4-4). No demand was projected in the UWMP for the West and South Study Areas, because they are not within the SCWA planning area.

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<sup>1</sup> A Water Supply Assessment prepared in accordance with Senate Bill 610 and approved by the SCWA was prepared for the Southeast Policy Area General Plan Amendment project, which concluded there would be sufficient water supplies to meet the water demands of that project over the next 20 years during normal, single-dry, and multiple-dry years (SCWA 2013).

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In multiple-dry years, less water would be available for retail use because of reduced CVP supply, but wholesale supply would remain the same. The retail and wholesale demand for single-dry and multiple-dry years is assumed to be identical to normal year demand, which is shown in **Table 5.12-2**. Demands in dry years may be a few percentage points higher due to a typical hotter and drier climate, which leads to higher outdoor water use. On the other hand, during 2015, the SWRCB mandated demand reductions that amounted to 32 percent for SCWA. It is possible that future years with the same water supply conditions as 2015 may have similar demand reductions (SCWA 2016a, p. 7-4).

**TABLE 5.12-2**  
**SCWA REASONABLY AVAILABLE VOLUME OF WATER SUPPLIES COMPARED TO DEMAND (NORMAL YEAR)**

Water Supply	Source	2020	2025	2030	2035	2040
Purchased or imported water	CVP water. SCWA may vary this amount in combination with the appropriate surface water, remediated groundwater, and transfer supplies so that the combined total does not exceed the total annual demand (approximately 34,200 ac-ft/yr) that the Vineyard SWTP can supply.	21,300	21,300	21,300	21,300	21,300
Purchased or imported water	City of Sacramento supply. Not planned for use until the interconnection with the City is constructed after 2040.	0	0	0	0	0
Surface water	Appropriate water. SCWA may vary this amount as described for purchased water.	4,000	4,000	4,000	4,000	4,000
Groundwater	Available volume based on groundwater supply capacity. Safe yield not quantified.	47,000	47,000	52,000	62,000	62,000
Groundwater	Remediated groundwater. SCWA may vary this amount as described for purchased water.	8,900	8,900	8,900	8,900	8,900
Transfers	Other surface water supplies. SCWA may vary this amount as described for purchased water.	0	0	0	0	0
Recycled water	Regional San	1,700	1,700	1,700	1,700	1,700
Total Retail Supply		82,900	82,900	87,900	97,900	97,900
Total Wholesale Supply	Groundwater	5,000	5,000	6,000	7,000	7,000
Total Supply		87,900	87,900	93,900	104,900	104,900
Total Retail Demand		48,121	55,489	63,288	71,145	79,278
Total Wholesale Demand		4,120	4,826	5,733	6,233	6,769
Total Demand		52,241	60,315	69,021	77,378	86,047
Surplus		35,659	27,585	24,879	27,522	18,853

Source: SCWA 2016a, Table 4-6, Table 4-7, Table 6-12, and Table 6-13

A comparison of supply and demand for single-dry and multiple-dry year scenarios for the combined retail and wholesale uses is presented in **Table 5.12-3**. The multiple-dry year scenario mimics the water supply conditions of 2013 through 2015 when CVP allocations were 100 percent, 75 percent, and 25 percent of the average use of supplies during the previous three years.<sup>2</sup> The demands are the same as the normal year demands, but as explained for the single-dry year scenario, the second and third year demands might be lower if demand reduction mandates are imposed by the State (SCWA 2016a, p. 7-4).

Groundwater represents a substantial part of the SCWA’s water supply portfolio to meet projected demand, particularly for the area that includes the City. The SCWA 2015 UWMP (2016a, Table 6-12 and Table 7-10) provides projections of “reasonably available” groundwater volume, based on groundwater supply capacity, with safe yield not quantified. As shown in **Table 5.12-2**, the reasonably available groundwater volume would remain the same for normal, single-dry, and multiple-dry year scenarios, ranging from 47,000 AFY in 2020 and 2025, increasing to 52,000 AFY in 2030, and 62,000 AFY in 2035 and 2040. The remediated supply (8,900 AFY) is the same through the planning period, but the SCWA may vary the amount.<sup>3</sup> Therefore, to meet demand during dry years, the SCWA would seek to supplement its reduced CVP supplies with the use of other surface water supplies (SCWA 2016a, p. 7-5).

**TABLE 5.12-3  
SCWA PROJECTED SUPPLY-DEMAND COMPARISON FOR SINGLE-DRY AND MULTIPLE-DRY YEAR SCENARIOS**

Supply-Demand	2020	2025	2030	2035	2040
<b>Single-Dry Year</b>					
Supply total	75,200	75,500	80,600	90,600	90,800
Demand total	52,241	60,315	69,021	77,378	86,047
<b>Surplus</b>	<b>22,959</b>	<b>15,185</b>	<b>11,579</b>	<b>13,222</b>	<b>4,753</b>
<b>Multiple-Dry Year – First Year</b>					
Supply total	87,900	87,900	93,900	104,900	104,900
Demand total	52,241	60,315	69,021	77,378	86,047
<b>Surplus</b>	<b>35,659</b>	<b>27,585</b>	<b>24,879</b>	<b>27,522</b>	<b>18,853</b>
<b>Multiple-Dry Year – Second Year</b>					
Supply total	82,900	82,900	87,900	97,900	97,900
Demand total	52,241	60,315	69,021	77,378	86,047
<b>Surplus</b>	<b>30,659</b>	<b>22,585</b>	<b>18,879</b>	<b>20,522</b>	<b>11,853</b>

<sup>2</sup> The CVP dry year allocation is determined based on a percentage of the previous three years of use. During dry years, the SCWA would seek to supplement its reduced CVP supplies with other surface water supplies (SCWA 2016a, p.7-5).

<sup>3</sup> The SCWA has a remediated groundwater supply of 8,900 AFY in accordance with the terms and conditions in the agreement entitled “The Agreement between Sacramento County, Sacramento County Water Agency, and Aerojet-General Corporation With Respect To Transfer of GET Water” dated May 18, 2010. The remediated groundwater is pumped from the northern portion of the South American Subbasin and discharged into the American River from Aerojet’s Groundwater Extraction and Treatment (GET) facilities in the Rancho Cordova area that are used for groundwater clean-up operations. This remediated groundwater supply is diverted by the SCWA from the Sacramento River at Freeport along with the SCWA’s surface water supplies.

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Supply-Demand	2020	2025	2030	2035	2040
<b>Multiple-Dry Year – Third Year</b>					
Supply total	75,200	75,500	80,600	90,600	90,800
Demand total	52,241	60,315	69,021	77,378	86,047
<b>Surplus</b>	<b>22,959</b>	<b>15,185</b>	<b>11,579</b>	<b>13,222</b>	<b>4,753</b>

Source: SCWA 2016a, Tables 7-4 through 7-8

### SCWA Water Supply Infrastructure

#### Existing Surface Water Treatment and Conveyance Facilities

SCWA surface water supplies for Zone 40 are diverted from the Sacramento River at Freeport and through the City of Sacramento's Sacramento River SWTP. Surface water diverted from the Sacramento River at the Freeport diversion structure is conveyed through the Freeport Regional Water Authority pipeline, treated at the Vineyard SWTP, and then delivered via a SCWA 6-inch pipeline to the Zone 40 service area. The current capacity of the Vineyard SWTP is 50 mgd with an ultimate capacity of 100 mgd. The Vineyard SWTP currently provides treated surface water primarily to customers in the CSA with a smaller amount supplied to customers in the SSA.

Surface water diverted from the Sacramento River and treated at the Sacramento River SWTP is provided to the SSA through the Franklin Intertie, which has capacity of 11.1 mgd. Water from the intertie flows into the SSA through two routes. A dedicated transmission main connects to SCWA's Dwight Road facility where the supply is pumped into the SSA. Water from the intertie is also supplied to the SSA through an in-line booster pump that connects directly to the SSA distribution system.

Existing water distribution facilities in Zone 40 include storage tanks and pipelines. Three pipelines cross SR 99 and hydraulically connect the CSA and the SSA at Sheldon Road, Bond Road, and Grant Line Road. The two nearest points of connection to major SCWA infrastructure near the Study Areas are water transmission mains along Bilby Road at West Stockton Boulevard and at the Grant Line Road/SR 99 interchange.

#### Existing Groundwater Production, Treatment, and Conveyance Facilities

Groundwater is supplied to Zone 40 from wells that are connected to groundwater treatment plants (GWTPs) and from wells that pump directly into the distribution system (direct feed). Each GWTP consists of wells that are manifolded into a treatment plant, a ground-level storage tank, and a pump station. Zone 40 has 14 active storage tanks. Eleven of the storage tanks are located at GWTPs. These tanks are used to meet the peak hour increment of demand that is greater than the maximum day demand as well as emergency and fire flow demands. Most GWTPs are supplied by more than one well. Treated water from the GWTPs flows into the ground-level storage tanks and is subsequently pumped into the distribution system. The pump stations are typically sized larger than the GWTP capacities so that peak hour supply can be pumped to the distribution system from the storage tanks.

The CSA is supplied water from five groundwater treatment plants and the Vineyard SWTP. There are also three direct feed wells that supply the CSA. In the case of the Dwight Road GWTP in the SSA, the pump station is sized larger than the GWTP to also pump the Franklin Intertie supply into the SSA. The direct feed wells pump directly into the distribution system and do not require treatment. Direct feed wells are located in some areas of the CSA and SSA. The SCWA also has

some wells that were drilled and planned to be equipped in the future. The existing capacity of groundwater facilities and of the Vineyard SWTP (50 mgd) each is sufficient to meet the CSA's existing water demand.

The SSA is supplied water from four GWTPs and from the Franklin Intertie. There are six direct feed wells that supply the SSA. The SSA also receives some supply from the CSA. The three existing connections between the CSA and SSA can be used to supply surface water or groundwater to the SSA. The CSA has minimal to no spare surface water capacity in a wet/average year and no groundwater capacity in a dry year on the maximum demand day (SCWA 2016b).

The closest facilities to the West and South Study Areas are the Poppy Ridge GWTP and storage tanks in the Southeast Policy Area (the policy area has not yet been developed and does not have any distribution infrastructure); the Lakeside GWTP and storage tank in the eastern portion of the City in the SSA; and some wells and storage tanks in the CSA (SCWA 2016b, Figure 2-2 and Figure 2-3).

### Planned Facilities

The SCWA has identified six projects that would increase the projected supplies shown in **Table 5.12-1**. As noted previously, these projects would expand infrastructure capacity to allow the SCWA to use more of its available water supplies. These projects are the Phase A NSA project and disconnection of the Anatolia GWTP in 2020 (with equivalent supply to come from the Poppy Ridge GWTP expansion in 2020), the Phase B NSA project in 2025, and the West Jackson GWTP and Big Horn GWTP expansion in 2035 (SCWA 2016a, Table 6-9).

### Elk Grove Water District

The EGWD is a department of the Florin Resource Conservation District, and operates the Elk Grove Water District's water system. The EGWD provides service to residents and businesses within an approximately 13-square-mile area within the current City limits (see **Figure 5.12-1**). The service area is bounded to the north by Sheldon Road, to the east by Grant Line Road, to the south by Union Industrial Park, and to the west by SR 99. The Sheldon/Rural Area Community Plan and Eastern Elk Grove Community Plan areas are in the eastern part of the EGWD service area boundary, though no services are provided in the Sheldon/Rural Area.

The EGWD's service area is separated into two subareas. Service Area 1 relies entirely on groundwater from seven wells and a potable groundwater treatment plant owned by the EGWD (Railroad Street Treatment and Storage Facility). Service Area 2 is served by water purchased from the SCWA, which delivers both surface water and groundwater from its conjunctive use operations; but as a matter of practice, water served to customers in Service Area 2 is almost entirely derived from SCWA's production wells (EGWD 2016, p. 3-1). There are approximately 7,500 residential accounts and approximately 500 acres of nonresidential uses served in Service Area 1, which is mostly built out, and approximately 4,100 residential accounts and approximately 220 acres of nonresidential uses served in Service Area 2 (EGWD 2016, Table 4-4).

The EGWD covers approximately 3 percent of the entire Central Basin. Taking into account the Central Sacramento County Groundwater Management Plan's (2006) overall estimated sustainable groundwater yield of 273,000 AFY, the EGWD has 9,168 AFY of groundwater available within its service area. In 2015, the district supplied 5,312 acre-feet of water, 1,914 of which was supplied by the SCWA, and 3,398 of which was produced from the EGWD's groundwater wells. The EGWD projects that total demand for both service areas would increase from 7,694 AFY in 2020 to 8,059 AFY in 2040, and that there would be sufficient water to meet

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current needs and anticipated future demand. The EGWD assumed the majority of growth would be in Service Area 2, which would consist of approximately 2,000 new residential accounts and an additional approximately 120 acres of nonresidential uses (EGWD 2016, Table 4-5, Table 4-6, p. 3-10 and p. 4-10).

### Omochumne-Hartnell Water District

The OHWD serves the region surrounding the Cosumnes River, including the City's eastern planning areas (North and East Study Areas). The region overlaps with a portion of the SWCA service area along the City's southeastern border. The OHWD purchases and manages supplemental water from the CVP for the benefit of South Basin Groundwater District agricultural users adjacent to the Cosumnes River and Deer Creek.

### **Climate Change**

Climate change is anticipated to have an impact on water supplies. Changes in weather patterns resulting from increases in global average temperature could bring about a decreased proportion and total amount of precipitation falling as snow. This phenomenon is predicted to result in an overall reduction of snowpack in the Sierra Nevada. Runoff from precipitation and snowmelt from the Sierra Nevada is the main source of surface water supply for SCWA and other purveyors in the Planning Area, as well as in the entire Sacramento region and much of the rest of the State. During the summer months, irrigation and agricultural runoff are the main sources of surface water. Most streams are intermittent and historically dry during the summer; however, urbanization and agricultural practices have resulted in low summer flows consisting of runoff.

The US Bureau of Reclamation has evaluated the risks and impacts of climate change in the Sacramento River Basin, which is detailed in the Sacramento and San Joaquin Climate Impact Assessment. The report incorporates an overview of the current climate and hydrology of California's Central Valley as well as projections of hydrologic changes that the basin may experience because of climate change. The report projects a north-to-south trend of decreasing annual average precipitation throughout the 21st century. Additionally, the report predicts a shift to an increase in the rate of winter runoff and a decrease in precipitation falling as snow in the winter months. These shifts in precipitation patterns may result in an exceedance of surface water capacity earlier in the year. If flow rates exceed the capacity of reservoirs in the Sacramento and American River watersheds, fresh water would need to be released to accommodate river flow, which comprises a source of potable water that previously would have been stored in the Sierra Nevada snowpack. These conditions are already affecting summer water supply in the county (Ascent Environmental 2017).

A quantitative vulnerability assessment prepared by the Regional Water Authority included in the American River Basin Integrated Regional Water Management Plan (IRWMP) evaluated the effects on both surface water and groundwater. The assessment indicates that surface water supplies would be reduced and would be mostly associated with reduced diversions from the American River. Climate change is also anticipated to have an impact on groundwater. Also noted is that increased groundwater pumping would occur to meet urban and agricultural demands, i.e., the long-term average groundwater pumping in the Central Basin would increase by 6 percent. Groundwater elevations would decrease from 6 to 15 feet from the baseline condition in the SCWA's service area. Planned actions to address these vulnerabilities include decreasing urban per capita water demand and continuing current efforts such as implementing conjunctive use management, recycled water use, and interconnections between adjacent water purveyors (SCWA 2016a, Section 6.11).

## WATER SERVICE REGULATORY FRAMEWORK

### Overview

The City is not a water purveyor, and it does not manage supply or infrastructure. However, there are several regional and local programs and plans administered by various entities that direct water supply planning and management of water resources in Sacramento County. Those regional and local programs and plans affect the amount of water available to the Planning Area; they are briefly described below, following the “State” subheading. The City’s General Plan supports goals to ensure a sustainable future water supply to support growth while also advancing water conservation objectives.

In addition, the SCWA and EGWD, as operators of public water systems, are required to comply with certain federal and State water quality requirements, such as the federal Safe Drinking Water Act, which is regulated at the State level by the California Department of Public Health. As such, these regulations are not directly applicable to private discretionary projects or public projects approved by the City. However, the City is responsible for ensuring that development within its boundaries does not affect surface water quality or groundwater quality. Applicable regulations and General Plan policies are identified in Section 5.9, Hydrology and Water Quality.

### State

#### Water Supply Planning

Although the City does not directly provide water to the Planning Area, there are specific State requirements that apply to water purveyors, and the City has a responsibility to identify existing and potential water supplies and their availability to serve the proposed Project.

#### Urban Water Management Planning Act – Assembly Bill 797

The Urban Water Management Planning Act (California Water Code Section 10610 et seq.) requires water suppliers in California providing water for municipal purposes, either directly or indirectly to more than 3,000 customers or supplying more than 3,000 AFY of water, to prepare and adopt a plan every five years that defines their current and future water use, sources of supply and its reliability, and existing conservation measures. The adopted plan must be updated at least once every five years on or before December 31 in years ending in five and zero. The UWMP contains information about water supplies, water supply reliability, water conservation, water shortage contingencies, and recycled water usage and is the foundation document for water supply assessments. Water Code Section 10631 directs that the UWMPs include further information on future water supply projects and programs and groundwater supplies. Both the SCWA and EGWD adopted 2015 UWMP; however, the OHWD is not required to prepare one.

#### Senate Bill 610 (California Water Code Section 10910)

As revised by SB 610 (Stats. 2002, ch. 643), Sections 10910 et seq. of the California Water Code set forth the circumstances in which CEQA lead agencies must seek preparation of, or prepare themselves, water supply assessments (WSAs) for certain types of proposed projects. The specific criteria for which project types require a WSA are defined in Section 10912. SB 610 functions together with CEQA, in that a WSA must be included in any environmental document for any project subject to SB 610, which includes negative declarations and draft and final EIRs.

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One of the fundamental tasks of a WSA is to determine whether total projected water supplies available during normal, single-dry, and multiple-dry water years during a 20-year projection will meet the projected water demand associated with a proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses. When making such a determination, the authors of the WSA must address several factors. Specifically, the WSA must contain information regarding existing water supplies, projected water demand, and dry year supply and demand. In *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 433 (*Vineyard*), the California Supreme Court briefly summarized the key content requirements as follows:

With regard to existing supply entitlements and rights, a water supply assessment must include assurances such as written contracts, capital outlay programs and regulatory approvals for facilities construction ... but as to additional future supplies needed to serve the project, the assessment need include only the public water system's plans for acquiring the additional supplies, including cost and time estimates and regulatory approvals the system anticipates needing. (Wat. Code, §§ 10910, subd. (d)(2), 10911, subd. (a).)

Existing water supplies can be based on different kinds of legal rights or arrangements, including entitlements, water rights, and water service contracts. In many cases, these supplies are likely already described in detail in the supplier's UWMP. Suppliers are expressly permitted to rely on information contained in the most recently adopted UWMPs, so long as the water needed for the proposed project was accounted for therein.

A finding of insufficiency in a WSA does not require a city or county to deny or downsize a proposed development project. Rather, after identifying a shortfall, the public water system must provide its plans for acquiring "additional supplies" (or what the California Supreme Court called "future" supplies). The Water Code requires the public water system to lay out a roadmap for obtaining new water supplies once it becomes aware that existing supplies are insufficient for the proposed project together with other foreseeable planned growth.

Regardless of the information provided to a city or county in a WSA, SB 610 stops short of preventing cities and counties from approving the projects under consideration absent sufficient water supplies. However, where existing water supply entitlements, water rights, or water service contracts are or may be insufficient to serve proposed projects, SB 610 does require that, in approving projects in the face of insufficient supplies, cities and counties must include in their findings for the project[s] their determination[s] regarding water supply insufficiency.

The California Supreme Court's decision in *Vineyard* also resulted in the requirement of an assessment of potential environmental effects of supplying water to large land use projects. In general, EIRs for such projects should address the following: (1) disclose the existing (or realistically available) water supplies for a proposed project; (2) assess whether such supplies are reasonably likely or reasonably certain; (3) address alternative water supplies if a primary proposed supply is not reasonably likely or reasonably certain; and (4) assess the physical impacts associated with providing water to the project from the preferred source and, if that source is not reasonably likely, from an identified alternative source as well. Under the last scenario, an EIR must also address the potential environmental consequences of curtailing planned development due to inadequate supplies (i.e., a partially built-out project).

### Senate Bill 221 (California Government Code Section 66473.7)

SB 221 was enacted to ensure that collaboration on finding the needed water supplies occurs early in the planning process. California Government Code Section 66473.7 applies to subdivisions and requires an affirmative written verification of sufficient water supply. This



verification must also include documentation of historical water deliveries for the previous 20 years, as well as a description of reasonably foreseeable impacts of the proposed subdivision on the availability of water resources of the region. Government Code Section 66473.7 (b)(1) states, "The legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove the tentative map, shall include as a condition in any tentative map that includes a subdivision a requirement that a sufficient water supply shall be available. Proof of the availability of a sufficient water supply shall be requested by the subdivision applicant or local agency, at the discretion of the local agency, and shall be based on written verification from the applicable public water system within 90 days of a request." As a result of the information contained in the written verification, the city or county may attach conditions to assure there is an adequate water supply available to serve a project as part of the tentative map approval process.

### Water Conservation

#### Senate Bill x7-7 (Chapter 4, Statutes of 2009)

SBx7-7, the Water Conservation Act of 2009, requires the State to achieve a 20 percent reduction in urban per capita water use by December 31, 2020. The responsibility for this conservation falls to local water agencies, which must increase water use efficiency through promotion of water conservation standards that are consistent with the California Urban Water Conservation Council's best management practices. Each urban retail water supplier was also required to develop urban water use targets and an interim urban water use target, expressed in units of gallons per capita per day (gpcd) by July 1, 2011, based on the alternative methods set out in the 2009 act. The agencies must meet those targets by the 2020 deadline. These requirements and the SCWA's specific compliance plan are outlined in its 2015 UWMP. For 2015, the SCWA reported actual water use at 153 gpcd, which was well below its 2015 interim target of 265 gpcd. The 2020 per capita demand target is 236 gpcd (SCWA 2016a, Section 5.0).

#### California Building Code

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a Statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures for water efficiency and conservation, among others. CALGreen also has voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics.

#### California Model Water Efficient Landscape Ordinance

In 2006, the Water Conservation in Landscaping Act was enacted, which required the DWR to update the Model Water Efficient Landscape Ordinance. The provisions of this ordinance are applicable to new construction with a landscape area greater than 2,500 square feet. The State updated provisions of the Model Ordinance in 2015. The City incorporated requirements mandated by DWR into Elk Grove Municipal Code Chapter 14.10.

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### Regional and County Programs and Plans

#### Water Forum Agreement

The Water Forum was developed to address water-related issues facing the Sacramento region and resulted in the development of the Water Forum Agreement. The coequal objectives of the Water Forum Agreement are to: 1) provide a reliable and safe water supply for the region's economic health and planned development through the year 2030; and 2) preserve the fishery, wildlife, recreational, and aesthetic values of the lower American River. The Water Forum Agreement contains seven major elements to meet its objectives, including purveyor-specific agreements: increased surface water diversions; actions to meet customer needs while reducing diversion impacts in drier years; support for improved pattern of fishery flow releases from Folsom Reservoir; lower American River habitat management; water conservation; groundwater management; and the Water Forum Successor Effort. The Groundwater Element of the Water Forum Agreement sets out specific recommendations designed to protect groundwater resources, including on the sustainable yields and groundwater management governance structures for the three Sacramento groundwater basins. The SCWA is a signatory to the Water Forum Agreement and the Water Forum Successor Effort, but the City is not.

#### Groundwater Management

In 2002, stakeholders of the Central Basin began a process of groundwater management planning and development of a governance structure. That effort resulted in the adoption of the Central Sacramento County Groundwater Management Plan in February 2006, and the formation of the Sacramento Central Groundwater Authority (SCGA) through a joint powers agreement signed by the Cities of Elk Grove, Folsom, Rancho Cordova, and Sacramento, and Sacramento County. Among its many purposes, the SCGA is responsible for managing the use of groundwater in the Central Basin to ensure long-term sustainable yield, and facilitating a conjunctive use program. The SCGA's Groundwater Management Plan identifies available water supplies to meet the total water demands of users within the basin, partakes in maintaining ecological flows in the Cosumnes River, and includes specific goals, objectives, and an action plan to manage the basin. The plan also prescribes a well protection program to protect existing private domestic well and agricultural well owners from declining groundwater levels resulting from increased groundwater pumping due to new development in the basin (SCWA 2016a).

The Sustainable Groundwater Management Act enacted by the State legislature in 2014, with subsequent amendments in 2015, directs the DWR to identify groundwater basins and subbasins in conditions of critical overdraft. None of the basins that provide groundwater for the SCWA and EGWD are on the list issued by DWR in 2015. Groundwater basins designated as high or medium priority, and critically overdrafted must be managed under a groundwater sustainability plan by January 31, 2020. All other high- and medium-priority basins must be managed under a groundwater sustainability plan by January 31, 2022. The two subbasins that supply the SCWA are covered by the latter deadline. The act also requires formation of groundwater sustainability agencies. The SCGA is currently in discussions with other groundwater basin users of the South American Subbasin to evaluate options for management of the basin to meet these requirements (SCWA 2016a).

The Sustainable Groundwater Management Act also authorizes a groundwater management agency in a basin compliant with the California Statewide Groundwater Elevation Monitoring program to prepare an "Alternative" to a groundwater sustainability plan. The SCGA submitted

a Final Draft South American Subbasin Alternative Submittal document to DWR for review in December 2016 (SCGA 2016). Approval is anticipated in 2018.

### SCWA Zone 40 Water Supply Master Plan

The Water Forum Agreement is the foundation for the Zone 40 Water Supply Master Plan (WSMP), which was adopted in February 2005 by the SCWA. The Zone 40 WSMP describes available water supply and makes recommendations to meet future water demands in Zone 40 through 2030 through implementation of a regional conjunctive use program that balances the use of groundwater, surface water, and recycled water supplies. The SCWA prepared amendments to the 2005 Zone 40 WSMP to address the sufficiency of water supply for the West Jackson, Jackson Township, and NewBridge projects (SCWA 2016b, Section 1). The existing City limits are within the boundaries of the Zone 40 WSMP, but the West and South Study Areas are not located within the buildout area identified in this plan.

### SCWA Zone 40 Water Supply Infrastructure Plan

In 2006, the SCWA prepared the Water Supply Infrastructure Plan (WSIP), which identified the water supply infrastructure needs necessary to support buildout of Zone 40. The SCWA updated the plan in 2016 to reflect changes in the Zone 40 water supply portfolio, adoption of the Sacramento County General Plan, and completion of the Freeport Regional Water Project. The 2016 WSIP (SCWA 2016b) includes water demand factors, growth projections, and estimates of projected water demand and supply. It also identifies recommended infrastructure types, locations, and timing to meet future demand through buildout.<sup>4</sup> The West and South Study Areas are not located within the buildout area of the 2016 WSIP.

## **Local**

### Climate Action Plan

The City adopted a Climate Action Plan (CAP) in 2013. The CAP, which is currently being updated as part of the proposed Project, identifies water use strategies, among others, to help reduce the City's greenhouse gas emissions. Resource Conservation Strategy RC-2 addresses water conservation, and RC-3 addresses recycled water. The strategies are narrative and describe various measures that may be used to reduce water consumption. The CAP also recognizes the requirements of CalGreen.

### City of Elk Grove Municipal Code

Municipal Code Chapter 14.10 (Water Efficient Landscape Requirements) outlines provisions for water management practices and water waste prevention for existing landscapes. It also specifies the requirements for planning, designing, installing, maintaining, and managing water-efficient landscapes in new construction and rehabilitated projects. Recycled water systems for irrigation are allowed, provided they comply with code requirements.

Chapter 22.24 (Water and Sewer Requirements) establishes that for subdivisions less than 2 acres in size, domestic water must be provided to all lots from a public water supply source and

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<sup>4</sup> The 2016 WSIP identifies buildout for the CSA as 2051 and 2031 for the SSA (SCWA 2016b, Table 3-8).

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distribution system conforming to the standards of Sacramento County or a water purveyor acceptable to the City's Public Works Director.

### WATER SERVICE IMPACTS AND MITIGATION MEASURES

#### Standards of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. A project is considered to have a significant effect on the environment if it will:

- 1) Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- 2) Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

#### Methodology

The following impact analysis is based on information presented in SCWA's and EGWD's 2015 UWMPs, SCWA Zone 40 planning documents, and development capacity assumptions for the proposed Project.

As shown in **Table 2.0-2** in Section 2.0, Project Description, with the proposed Project, there would be an increase in residential units in the Planning Area compared to existing conditions, but a reduction in the number of projected residential units in the existing City limits compared to the existing General Plan. However, there would be a substantial increase in the Study Areas, with most of that growth directed to the West and South Study Areas. Therefore, for purposes of the water supply analysis, the primary and largest source of water demand under the proposed Project would be associated with the Study Areas. The West and South Study Areas are not currently within the SCWA service area and therefore are not accounted for in the SCWA 2015 UWMP. No water supply assessments pursuant to SB 610 have been prepared for any location in the Study Areas because no specific projects triggering a WSA are proposed as part of the proposed Project.

Development capacity assumptions (acreages) for general land use types in the Study Areas were multiplied by the SCWA demand factors to generate total demand, not accounting for system losses. Although the Study Areas are not in the current SCWA service area, the demand factors in the SCWA 2016 WSIP are appropriate to provide a reasonable estimate of future water supply demand for the Study Areas because the future types of development would be of similar scale and intensity as uses in the City limits. This provides a rough, order-of-magnitude estimate of water demand for the planning horizon. The analysis also assumes the SCWA, or water made available by the SCWA (e.g., wholesale supply to the EGWD), would be the likely water provider because the Study Areas are in Sacramento County.

Identification of infrastructure locations and facilities to serve the Study Areas is beyond the scope of the programmatic analysis presented in this Draft EIR.

#### General Plan Policies and Standards

The proposed Project contains the following policies and standards related to the provision of water to future development in the Planning Area.

**Policy INF-1-1:** Water supply and delivery systems shall be available in time to meet the demand created by new development.

**Standard INF-1-1.a:** The following shall be required for all subdivisions to the extent permitted by State law:

- Proposed water supply and delivery systems shall be available at the time of tentative map approval to the satisfaction of the City. The water agency providing service to the project may use several alternative methods of supply and/or delivery, provided that each is capable individually of delivering water to the project.
- The agency providing water service to the subdivision shall demonstrate prior to the City's approval of the Final Map 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.
- Off-site and on-site 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.
- Off-site and on-site 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 INF-1-3:** Establish and expand recycled water infrastructure for residential, commercial, industrial, and recreational facilities and support the use of reclaimed water for irrigation wherever feasible.

**Policy IFP-1-7:** New development shall fund its fair share portion of impacts to all public facilities and infrastructure as provided for in State law.

**Policy IFP-1-8:** Infrastructure improvements must be financed and constructed concurrent with or prior to completion of new development.

**Standard IFP-1-8.a:** Establish concurrency measures to ensure infrastructure adequately serves future development:

- Coordinate public facility and service capacity with the demands of new development.
- Require that the provision of public facilities and service to new development does not cause a reduction in established service levels for existing residents.
- Ensure that new infrastructure will meet the required level of service standards set by the City's General Plan and Municipal Code.

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**Standard IFP-1-8.b:** Phase new development in expansion areas to occur where public services and infrastructure exist or may be extended to serve the public interest with minimal impact.

**Policy NR-3-4:** Ensure adequate water supply is available to the community by working with water providers on facilities, infrastructure, and appropriate allocation.

**Policy NR-3-5:** Continue to coordinate with public and private water users, including users of private wells, to maintain and implement a comprehensive groundwater management plan.

**Policy NR-3-6:** Continue interagency partnerships to support water conservation.

**Policy NR-3-7:** Continue to eliminate water use inefficiencies and maintain ongoing communication with water suppliers to ensure sustainable supply.

**Policy NR-3-8:** Reduce the amount of water used by residential and nonresidential uses by requiring compliance with adopted water conservation measures.

**Policy NR-3-9:** Promote the use of greywater systems and recycled water for irrigation purposes.

**Policy NR-3-10:** Improve the efficiency of water use at City facilities through retrofits and employee education.

**Policy NR-3-11:** Promote upgrades to existing buildings to support water conservation.

**Policy NR-3-12:** Advocate for native and/or drought-tolerant landscaping in public and private projects.

**Standard NR-3-12.a:** Require the planting of native and/or drought-tolerant landscaping in landscaped medians and parkway strips to reduce water use and maintenance costs.

**Policy ER-6-6:** Work with the Sacramento County Water Agency and water utilities to support programs and conservation activities intended to help water customers voluntarily conserve approximately 10 percent over time.

**Policy ER-6-7:** Enforce the City's water-efficient landscape ordinance that is as strict or stricter than the State Water Resources Control Board regulations affecting local water agencies, and ensure future state updates are incorporated in some form to the City's ordinance. Provide opportunity for and encourage public reporting of violations.

**Policy SRA-2-4:** Limit the extension of water service into the Sheldon/Rural Area. Lot sizes should be large enough to accommodate private water wells. This policy shall not be construed to limit the ability of any water agency to construct lines through or adjacent to the Sheldon/Rural Area.

**Policy SRA-2-5:** Lots should be large enough to accommodate private water wells with adequate spacing to minimize the potential for groundwater depletion.

## Project Impacts and Mitigation Measures

### Sufficiency of Water Supplies (Standard of Significance 1)

**Impact 5.12.1.1** Implementation of the proposed Project would increase demand for domestic water supply, which may result in the need for additional water supplies. This is a **significant** impact.

General Plan Update policies and the General Plan Land Use Map provide development capacity for up to approximately 48,000 new homes in the Planning Area compared to existing conditions, although there is no requirement that this level of development be achieved. This includes several different housing types, including rural residential, estate residential, lower-density residential, medium-density residential, high-density residential, and mixed uses that include residential units. Future nonresidential development would include a wide range of commercial, office, industrial/flex space, mixed-use, and public uses. Population growth would occur gradually as both infill in the existing City limits and construction in the Study Areas.

For development within the existing City limits, water demand and supply projections associated with the existing General Plan are accounted for in the SCWA 2015 UWMP and EGWD 2015 UWMP. As indicated in **Table 2.0-2** in Section 2.0, Project Description, fewer residential units are anticipated for the existing City limits, most of which is served by SCWA Zone 40. As such, demand would not be expected to be substantially greater than assumed in the SCWA 2015 UWMP. In the Eastern Elk Grove Community Plan area, which is served by EGWD Service Area 2, the proposed Project provides development capacity for 1,400 units. This is less than the 2,000 units of future growth projected by the EGWD in its 2015 UMWP and would not, therefore, be anticipated to exceed demand projections. In the area served by the OHWD, little growth is anticipated because that area would remain rural.

Therefore, almost all of the new demand under the proposed Project would be the result of development in the Study Areas. The anticipated land uses in the Study Areas and the estimated water demand associated with those uses are provided in **Table 5.12-4**, which includes demand for the four Study Areas based on the development capacity assumptions for the proposed Project. The projected annual water demand for developed uses in the Study Areas is approximately 14,600 AFY, not including system losses.<sup>5</sup> Most of the demand is from the West and South Study Areas. As noted in Methodology, above, this is a rough order-of-magnitude approximation because no specific projects are proposed or specific land uses and associated densities identified in the proposed Project for the Study Areas. The demand would not occur all at once, but would be expected to increase over time. The proposed Project includes numerous policies directed at water conservation, such as policies NR-3-6 through NR-3-12 and ER-6-6 and ER-6-7, which would help reduce demand.

The SCWA would be the likely purveyor of water supply for the Study Areas not served by the EGWD or OHWD because the Planning Area is located in Sacramento County. **Table 5.12-2** shows the SCWA's projected surplus for normal years, and **Table 5.12-3** shows the projected surplus for single-dry and multiple-dry year scenarios associated with demand in its current water service area. This includes Zone 40 deliveries as well as deliveries in its wholesale area (EGWD

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<sup>5</sup> By comparison, the EIR prepared by Sacramento LAFCo for the previously proposed Elk Grove Sphere of Influence Amendment, which included the Study Areas, projected an estimated demand of approximately 15,249 AFY corresponding to 7,869 acres of developed uses. As such, the estimate provided in Table 5.12-4 is in general agreement with previous estimates and is a reasonable estimate of future demand in the Study Areas for purposes of this EIR.

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Service Area 2). Under a normal year and first-year multiple-dry scenario, the SCWA projects a surplus over its 20-year UWMP planning horizon, and the additional demand generated by the proposed Project specific to the Study Areas would not exceed the surplus. However, in 2025 and beyond for the first and third year multiple-dry year scenarios, there may not be sufficient surplus water with SCWA's existing supplies and entitlements to meet proposed Project demands. In addition, the West and South Study Areas are not in the SCWA's current service area. As noted above, climate change may also have an effect on water supplies.

**TABLE 5.12-4  
ELK GROVE GENERAL PLAN UPDATE PLANNING AREA STUDY AREAS WATER DEMAND ESTIMATE**

Elk Grove General Plan Update Land Use Type	Area (acres) <sup>1</sup>	Corresponding Land Use Classification in WSIP	Unit Water Demand Factor <sup>2</sup> (AF/acre/year)	Water Demand (AFY)
Community Commercial	258	Commercial	2.02	522
Regional Commercial	163	Commercial	2.02	330
Employment Center	390	Commercial	2.02	787
Light-Industrial/Flex	74	Industrial	2.02	148
Light Industrial	74	Industrial	2.02	148
Heavy Industrial	147	Industrial	2.02	297
Village Center Mixed Use	108	Mixed Land Use	2.15	231
Residential Mixed Use	179	Mixed Land Use	2.15	384
Parks and Open Space	624	Public Recreation	2.8	1,746
Public Services	280	Public	0.81	226
Rural Residential	716	Rural Estate	1.37	981
Estate Residential	1,497	Rural Estate	1.37	2,051
Low Density Residential	2,291	Single Family	2.13	4,881
Medium Density Residential	525	Single Family	2.13	1,119
High Density Residential	315	MFR-LD	2.44	768
<b>Total Demand</b>				<b>14,619</b>

Notes:

1. Acreage based on land use density and development capacity assumptions for the proposed General Plan Land Use Diagram. The proposed Project includes descriptions for specific estate residential sizes 1 acre or less, agriculture, roads, and tribal trust lands, but the development capacity assumptions do not specify acreages for these particular land use types. Acreage is allocated to the resource management and conservation category, but this would not result in water demand. Therefore, no water demand estimate is calculated for those categories.
2. Demand factors from SCWA 2016b. The unit water demands in this table use SCWA land use type factors that generally correspond with the land use types identified for development capacity assumptions in the General Plan Update for the Study Areas.

As shown in **Table 5.12-2**, the SCWA's retail supply available through the UWMP planning period would increase slightly, and is a function solely of increases in groundwater pumping (surface water and other supplies are held constant). The SCWA has not identified future water supply projects (other than infrastructure-related projects) that could meet future additional demand because it is not projecting any shortfalls. Surface water for the American River POU would not be available for the Study Areas unless the SCWA obtains approvals from the DWR to modify the



POU. Based on the data, analysis, and information presented in the UWMP, it is possible that Study Area demand may need to be met with increased groundwater pumping in shortfall years, or the SCWA could seek to increase surface water supplies. This is a **potentially significant** impact because new or expanded entitlements may be needed to meet the SCWA's projected demands for its service area in addition to the demand of the proposed Project in buildout years. The City would not determine how the SCWA might manage its existing supplies and proceed with acquiring additional entitlements, if needed, to meet the buildout demand generated by the Study Areas.

### Existing Laws, Regulations, Procedures, and General Plan Policies That Provide Mitigation

General Plan Update Policy INF-1-1 requires that water supply and delivery systems must be available in time to meet the demand created by new development, or shall be assured using bonds or other sureties to the City's satisfaction. To accomplish this, as directed by Policy NR-3-4, long-term water supply and infrastructure planning to meet buildout demand for the Study Areas will need to be coordinated with SCWA. There are established laws, regulations, and mechanisms in place that provide for such planning. These include preparation of WSAs pursuant to California Water Code Section 10910, as applicable, and written verification of supply (California Government Code Section 66473.7). Prior to providing water to new development that is not within its service area (i.e., Study Areas), the SCWA would need to annex the Study Area into its service area, and plan and extend infrastructure and services to serve the Study Area. This would not require any action by Sacramento LAFCo, but a Plan for Services would need to be submitted by the City as required by Government Code Section 56430, or its successor. The SCWA would need to update its Zone 40 WSMP and WSIP, which would include a determination regarding whether supplies would be adequate or whether additional supplies would be needed. WSAs that may be required for specific projects, and the results of those WSAs would help inform the Zone 40 WSMP and/or WSIP.

### Conclusion

Implementation of the proposed Project would increase demand for domestic water supply, which may result in the need for additional water supplies. General Plan Update Policy INF-1-1 requires that water supply and delivery systems must be available in time to meet the demand created by new development. However, the development of future water supplies by the SCWA (if determined by the SCWA to be necessary) could result in environmental impacts, some of which may be significant. Examples of such impacts could include effects on biological resources, changes in surface water flows, or changes in groundwater levels. The SCWA would need to conduct project-level CEQA and possibly NEPA analysis, as necessary, to analyze specific impacts and identify any required mitigation measures.

### Mitigation Measures

**MM 5.12.1.1** Prior to LAFCo approval of annexation of any portion of the Planning Area into the City of Elk Grove for which the SCWA would be the retail provider for water service, the City must prepare the Plan for Services to allow LAFCo 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 and that groundwater will be provided in a manner that ensures no overdraft will occur, (3) the amount of water provided will be consistent with the geographical extent of the annexation territory; 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

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affected territory pursuant to Government Code Section 56668, subdivision (l), or its successor.

The Plan for Services shall demonstrate that the SCWA water supplies are adequate to serve the amount of development identified in the annexation territory, in addition to existing and planned development under normal, single-dry, and multiple-dry years. The Plan for Services shall depict the locations and approximate sizes of all on-site water system facilities to accommodate the amount of development identified for the specific annexation territory; demonstrate that the SCWA has annexed the territory into its service area; and demonstrate that adequate SCWA off-site water facilities are available to accommodate the development identified in the annexation territory, or that fair-share funding will be provided for the construction of new or expanded treatment and/conveyance facilities and/or improvement of existing off-site water system facilities with no adverse fiscal impacts on existing ratepayers.

Implementation of mitigation measure **MM 5.12.1.1** requires demonstration of adequate water supply prior to annexation. LAFCo would condition future annexation on compliance with mitigation measure **MM 5.12.1.1**. Documenting sufficient water supply would conform to General Plan Update Policy INF-1-1 requirements. However, the evaluation and analysis needed to demonstrate sufficient supply and the effects of obtaining and delivering that supply, along with necessary environmental review and implementation of mitigation measures, would be the responsibility of the SCWA, not the City. Such an evaluation by the City would be remote and speculative, considering the programmatic nature of this EIR. There is no additional feasible mitigation to reduce this impact to less than significant, and this would remain a **significant and unavoidable impact**.

### Require Construction of Water System Facilities (Standard of Significance 2)

**Impact 5.12.1.2** Implementation of the proposed Project would require the construction of new and expanded water supply infrastructure, which could result in impacts to the physical environment. This impact would be **potentially significant**.

Water demand within the existing City limits and the East and North Study Areas were accounted for in the SCWA demand projections and therefore the 2016 WSIP, but the West and South Study Areas were not. As a result, necessary infrastructure, such as water conveyance facilities, are also not reflected in the 2016 WSIP.

New water transmission infrastructure would be required for the Study Areas. Some improvements may also be needed in the existing City limits. The SCWA may also determine that improvements are needed elsewhere within its service area to meet Planning Area demand at buildout.

### Proposed General Plan Policies and Standards That Provide Mitigation

General Plan Update Standard INF-1-1.a sets forth specific requirements for ensuring necessary infrastructure is in place to serve new development. General Plan Standard IFP-1-8.b directs that new development in expansion areas should be phased where public services and infrastructure exist or may be extended with minimal impact. Policies IFP-1-7 and IFP-1-8 and Standard IFP-1-8a provide similar direction to ensure that adequate infrastructure is in place to serve future development.

Conclusion

Potential impacts of construction of new or modified water system infrastructure could include disturbance of biological and/or cultural resources, conversion of agricultural land, construction-related air emissions, soil erosion and water quality degradation, handling of hazardous materials (e.g., fuels), temporary excessive noise, and temporary construction traffic. Because new water system facilities would be required, and the construction of such facilities could result in environmental impacts, this is a **potentially significant** impact.

Mitigation Measures

Implement mitigation measure **MM 5.12.1.1**.

Mitigation measure **MM 5.12.1.1** requires demonstration of adequate water system facilities prior to annexation. However, the evaluation and analysis needed to identify the required water system infrastructure improvements, environmental review, and implementation of mitigation measures would be the responsibility of the SCWA, not the City. Such an evaluation by the City would be remote and speculative, considering the programmatic nature of this EIR. There is no additional feasible mitigation to reduce this impact to less than significant, and this would remain a **significant and unavoidable** impact.

WATER SERVICE CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

**Cumulative Setting**

The cumulative setting for water supply is the boundary of the SCWA, which includes the entire City as well as portions of the cities of Sacramento and Rancho Cordova.

**Cumulative Impacts and Mitigation Measures**

Cumulative Water Service Impacts

**Impact 5.12.1.3** Implementation of the proposed Project, in combination with other development, would contribute to cumulative demand for domestic water supply. The proposed Project's contribution to this impact may be **cumulatively considerable**.

As discussed above, the SCWA projects a water surplus for cumulative development for all scenarios out to 2040. Therefore, the cumulative demand for domestic water supply is considered a less than significant cumulative impact. As described under Impact 5.12.1.1, the proposed Project's projected total water demand at buildout would be approximately 15,000 AFY, which predominantly includes demand associated with future development in the West and South Study Areas. This demand was not considered in the SCWA's 2015 UWMP, and the infrastructure to deliver water to and within the West and South Study Areas is not a component of the Zone 40 WSMP or WSIP. While the demand associated with the proposed Project could be accommodated in the short term by the surplus identified by the SCWA, in the long term, project demand would be greater than this surplus. Therefore, because the proposed Project's long-term demand would exceed projected supply and infrastructure was not assumed for the West and South Study Areas, the proposed Project's contribution to significant cumulative water supply and infrastructure impacts would be **cumulatively considerable**.

## 5.12 PUBLIC UTILITIES

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### Mitigation Measures

No additional feasible mitigation available beyond compliance with proposed General Plan policies and mitigation measure **MM 5.12.1.1**.

Implementation of mitigation measure **MM 5.12.1.1** is intended to ensure that sufficient water supplies are available to meet the demand of new development in the Planning Area, in addition to existing and planned development under normal, single-dry, and multiple-dry years. However, the identification of potential supplies and their management is not within the purview of the City to implement. Provision of water supplies and distribution infrastructure may also result in significant impacts, and therefore the Project's contribution to this impact would remain **cumulatively considerable**, and the impact would remain **significant and unavoidable**.

### 5.12.2 WASTEWATER SERVICE

#### WASTEWATER SERVICE EXISTING SETTING

##### Wastewater Service

##### Sacramento Regional County Sanitation District

The Sacramento Regional County Sanitation District (Regional San) provides wastewater treatment for the City. Regional San serves approximately 1.4 million residents, industrial and commercial customers, and owns and operates the regional wastewater conveyance system. Regional San manages wastewater treatment, major conveyance, and wastewater disposal (Regional San 2017a).

##### Sacramento Area Sewer District

The Sacramento Area Sewer District (SASD) serves as one contributing agency to Regional San. The SASD provides wastewater collection and conveyance services in the urbanized unincorporated area of Sacramento County, in the Cities of Citrus Heights, Elk Grove, and Rancho Cordova, and in a portion of the Cities of Sacramento and Folsom. The SASD owns, operates, and maintains a network of 107 pump stations and approximately 80 miles of pressurized force main pipes (SASD 2017).

SASD trunk sewer pipes function as conveyance facilities to transport the collected wastewater flows to the Regional San interceptor system. The existing City trunk line extends southeast from the Sacramento Regional Wastewater Treatment Plant (SRWTP) influent diversion structure to Laguna Boulevard, then parallel to SR 99 along East Stockton Boulevard, extending close to the southern City boundary.

##### Sacramento Regional Wastewater Treatment Plant

The SRWTP, operated by Regional San, is located on 900 acres of a 3,550-acre site between I-5 and Franklin Boulevard, north of Laguna Boulevard. The remaining 2,650 acres serve as a "bufferland" between the SRWTP and nearby residential areas.

The SRWTP has 169 miles of pipeline and treats an average of 181 million gallons of wastewater per day. Wastewater is treated by accelerated physical and natural biological processes before it is discharged to the Sacramento River (Regional San 2017b).

The Sacramento Regional Wastewater Treatment Plant 2020 Master Plan provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements in the Regional San service area through the year 2020. The Master Plan uses SACOG population projections multiplied by per capita flow and load values to determine future facility needs (Regional San 2008, p. 14). The SRWTP's reliable capacity is currently limited, based on hydraulic considerations, to an equivalent 207 mgd average dry weather flow (ADWF). This existing capacity falls short of the projected 218 mgd ADWF in 2020. Therefore, the SRWTP has been master planned to accommodate 350 mgd ADWF (Regional San 2008, p. 15). In addition, Regional San has prepared a long-range master plan for the large-diameter interceptors that transport wastewater to the SRWTP. The master plan includes interceptor upgrades/expansions to accommodate anticipated growth through 2035 (Regional San 2008, p. 5).

### **Septic Service**

#### Sacramento County Environmental Management Department

The Sacramento County Environmental Management Department (EMD) provides mandated regulatory services in food service, hazardous materials, solid waste facilities, and septic service. The EMD is responsible for regulating septic systems within the county. The eastern portions of the City, which comprise primarily agriculture and rural residential land uses, are generally served by individual septic systems.

### WASTEWATER SERVICE REGULATORY FRAMEWORK

#### **Federal**

##### Clean Water Act

The Clean Water Act (CWA) was established in 1972, authorizing the EPA as the federal body responsible for developing water quality standards and implementing the act to assure the protection of human health and the environment. The CWA made grant funds available to construct wastewater treatment plans and upgrades. The act also made it unlawful to discharge pollutants directly to land and water bodies, such as oceans, rivers, lakes, or creeks, without a permit from the EPA.

#### **State**

##### Regional Water Quality Control Board

The Central Valley RWQCB regulates and enforces permits to dischargers in the Central Valley, including the SRWTP. The National Pollutant Discharge Elimination System (NPDES) is the permitting system for discharges to water bodies. The NPDES goal is to protect beneficial uses of the water body. Beneficial uses of the Sacramento River include, but are not limited to, agricultural irrigation, drinking water supply, recreation, and freshwater habitat. The SRWTP's NPDES permit requires specific, measurable quality assurance and is updated every five years to accommodate new environmental concerns and larger wastewater flows. Permit limitations explain, in detail, the quality that the SRWTP's discharge must achieve. Permit monitoring requirements provide a basis for systematic sampling of the discharge and the Sacramento River to monitor water quality. In addition to limitations and monitoring requirements, the RWQCB requires several studies to evaluate the impacts of the SRWTP's discharge to the Sacramento River.

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### Local

#### Sacramento Regional County Sanitation District

##### Sacramento Regional Wastewater Treatment Plant 2020 Master Plan

The SRWTP 2020 Master Plan provides a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements through the year 2020. The Master Plan addresses both public health and environmental protection issues while ensuring reliable service at affordable rates for Regional San customers. The Master Plan's key goals 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 (Regional San 2008).

##### Regional Interceptor Master Plan 2000

Regional San has prepared a long-range master plan for the large-diameter interceptors that transport wastewater to the SRWTP, which includes interceptor upgrades/expansions to accommodate anticipated growth through 2035 (Regional San 2000).

### **Sacramento County Environmental Management Department**

#### Onsite Wastewater Treatment System Guidance Manual

The EMD regulates the design, installation, and operation of on-site wastewater treatment systems, the management of non-discharging liquid waste systems, and liquid waste disposal requirements associated with land use modifications such as subdivisions, parcel splits, and lot line adjustments. The EMD oversees the on-site wastewater treatment systems for the unincorporated areas and incorporated cities in Sacramento County. The Onsite Wastewater Treatment System Guidance Manual complements Sacramento County Code 6.32 (EMD 2013).

## WASTEWATER SERVICE IMPACTS AND MITIGATION MEASURES

### **Standards of Significance**

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. A project is considered to have a significant effect on the environment if it will:

- 1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- 2) Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- 3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

### Methodology

The following evaluation of the proposed Project's potential wastewater facilities and services impacts, as well as septic system impacts, are based on a review of relevant planning documents, including the SRWTP 2020 Master Plan, Regional Interceptor Master Plan 2000, and the City's current General Plan and Zoning Code, as well as of available information regarding wastewater and septic systems in the Planning Area.

### General Plan Policies and Standards

The proposed Project contains the following policies and standards related to the provision of wastewater services to future development in the Planning Area.

**Policy INF-2-1:** 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.

**Standard INF-2-1.a:** 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.

**Standard INF-2-1.b:** 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 City's approval of the Final Map 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 commitments.
- On-site and off-site 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 in 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 INF-2-2:** Development along corridors identified by sewer providers in their master plans as locations of future sewerage conveyance facilities shall incorporate appropriate easements as a condition of approval.

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- Policy INF-2-3:** Reduce the potential for health problems and groundwater contamination resulting from the use of septic systems.
- Policy INF-2-4:** Residential development on lots smaller than 2 gross acres shall be required to connect to public sewer service, except in the Rural Area.
- Policy INF-2-5:** Independent community sewer systems shall not be established for new development.
- Policy SRA-2-1:** Prohibit the extension of sewer service into the Sheldon/Rural Area. Lots in the Sheldon/Rural Area should be large enough to accommodate septic systems. This policy shall not be construed to limit the ability of any sewer agency to construct interceptor lines through or adjacent to the Sheldon/Rural Area, provided that no trunk or service lines are included.
- Policy SRA-2-2:** The City shall not require the installation of dry sewers as a condition of approval of development.
- Policy SRA-2-3:** The City shall not require residential development on lots less than 2 gross acres which existed as legal lots as of November 19, 2003, to connect to public sewer service.

### Project Impacts and Mitigation Measures

#### Increase Demand for Wastewater Treatment (Standards of Significance 1, 2, and 3)

- Impact 5.12.2.1** Implementation of the proposed Project would result in additional wastewater generation and require treatment of additional wastewater at the Sacramento Regional Wastewater Treatment Plant. There is sufficient capacity at the existing Regional San treatment plant to accommodate Project demand. Therefore, this impact would be **less than significant**.

Potential increases in wastewater generation from the proposed Project were calculated based upon equivalent dwelling units for land uses proposed for the Project, assuming 310 gallons per day per equivalent dwelling unit (Wood Rodgers 2014). Using these assumptions, the proposed Project would generate an additional 16.2 million gallons per day of wastewater. As described previously, the SRWTP's Master Plan 2020 identifies that existing facilities are limited, based on hydraulic considerations, to an equivalent 207 mgd ADWF and do not meet the year 2020 projection of 218 mgd ADWF. However, the SRWTP has been master planned to accommodate additional growth beyond the planning year to 350 mgd ADWF of conventional and advanced treatment capacity (Regional San 2008, p.15).

Planned facility expansions are based on projected growth rates provided by SACOG. The construction of future treatment facilities will occur in incremental stages to best accommodate the growth rates. If the actual growth rate is slower than projected, construction of the next increment of treatment capacity can be delayed. Conversely, if the growth rate is faster than projected, the next increment of treatment capacity can be constructed earlier than anticipated (Regional San 2008, p. 14). As a result, additional Project-generated wastewater would not exceed capacity of the treatment plant, and the treatment plant would have adequate capacity to serve the proposed Project. In addition, the SRWTP currently operates in compliance with all applicable existing regulatory requirements. Therefore, the proposed Project



would not exceed the Central Valley RWQCB's wastewater treatment requirements. This impact would be **less than significant**.

Mitigation Measures

None required.

Require Construction of Wastewater System Facilities (Standard of Significance 2)

**Impact 5.12.2.2** Implementation of the proposed Project may require the construction of new and expanded wastewater infrastructure, which could result in impacts to the physical environment. This impact would be **less than significant**.

According to SRWTP Master Plan 2020, conventional secondary treatment facilities will be based on wastewater flow and load projections. Generally, facility expansion is phased in five- to ten-year increments over the planning period to allow for observation of the economy and wastewater flows/loads, and to determine if facilities are idle and need to be minimized (Regional San 2008, p. 41). Also, as discussed above, SRWTP Master Plan 2020 provides recommended wastewater treatment facilities and management programs to provide service for planned growth. Currently capacity is limited, and does not achieve the projected 2020 average dry weather flow of 218 mgd (ADWF). However, the SRWTP has been designed to accommodate 350 mgd ADWF and would, therefore, be able to accommodate the approximately 16.2 mgd demand generated by the proposed Project (Regional San 2008, p. 15).

Construction impacts associated with extension, expansion, and/or replacement of on-site wastewater system facilities may result in temporary aesthetic impacts, disturbance of biological and/or cultural resources, conversion of agricultural land, temporary air emissions, soil erosion and water quality degradation, handling of hazardous materials, temporary excessive noise, and temporary construction traffic. However, the impact of development in the entire Planning Area, including the provision of infrastructure, are considered throughout this Draft EIR. There would be no additional impacts, so this impact would be **less than significant**.

Mitigation Measures

None required.

WASTEWATER SERVICE CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

**Cumulative Setting**

The cumulative setting for wastewater impacts would be the Regional San service area, which includes portions of unincorporated Sacramento County as well as the Cities of Citrus Heights, Elk Grove, Folsom, Rancho Cordova, Sacramento, and West Sacramento and the communities of Courtland and Walnut Grove.

**Cumulative Impacts and Mitigation Measures**

Cumulative Wastewater Impacts

**Impact 5.12.2.3** Implementation of the proposed Project, in addition to other development in the Regional San service area, would generate new wastewater flows

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requiring conveyance and treatment. The proposed Project's contribution to this significant impact would be **cumulatively considerable**.

Future development in the Regional San service area would result in an incremental cumulative demand for wastewater and related services, and the construction of new and expanded wastewater facilities would provide additional capacity to accommodate current and future demand. The construction of these facilities would result in associated environmental impacts. This is considered a significant cumulative impact.

As described under Impact 5.12.2.1, the SRWTP has been master planned to accommodate 350 mgd ADWF to accommodate future growth in the Regional San service area, and the plant would be expanded and upgraded to respond to future growth. Similarly, Regional San has prepared a master plan for the district's regional interceptors that would ensure adequate capacity for future growth to 2035. As noted above, the proposed Project would generate approximately 16.2 mgd of wastewater that would require treatment at the SRWTP, increasing demand beyond that assumed for the plant. Because the design and location of any future improvements at the SRWTP that may be required to accommodate the Project's increased contribution is at the discretion of Regional San and is currently unknown, this analysis cannot adequately assess the potential environmental impacts of such improvements without speculating. Therefore, this would remain a **significant and unavoidable** impact, and the proposed Project's contribution would be **cumulatively considerable**.

### Mitigation Measures

No additional feasible mitigation available beyond mitigation measure **MM 5.12.2.1**.

## 5.12.3 SOLID WASTE SERVICE

### SOLID WASTE EXISTING SETTING

#### **Existing Solid Waste Collection and Disposal**

Republic Services, formerly known as Allied Waste, provides residential solid waste services in the City under an exclusive franchise agreement (City of Elk Grove 2017d). Solid waste generated by commercial and multifamily residential developments is served by registered commercial haulers or county-authorized recyclers (City of Elk Grove 2017a).

#### **Landfill Capacity**

Solid waste generated in the Planning Area is taken to a variety of landfills. **Table 5.12-5** shows landfills used by the City and the permitted and remaining capacities of those landfills. As shown, the majority of the landfills serving City waste haulers have over 70 percent remaining capacity (CalRecycle 2017a).

**TABLE 5.12-5  
DISPOSAL FACILITIES AND REMAINING CAPACITIES**

Facility	Total Estimated Permitted Capacity (in cubic yards)	Total Estimated Capacity Used		Remaining Estimated Capacity		Estimated Closure Year
		Cubic Yards	Percentage	Cubic Yards	Percentage	
Altamont Landfill & Resource Recovery (01-AA-0009)	124,400,000	59,000,000	47.4%	65,400,000	52.6%	2025
Recology Hay Road (48-AA-0002)	37,000,000	6,567,000	17.7%	30,433,000	82.3%	2077
Bakersfield Metropolitan SLF (15-AA-0273)	53,000,000	20,191,740	38.1%	32,808,260	61.9%	2046
Foothill Sanitary Landfill (39-AA-0004)	138,000,000	13,000,000	9.4%	125,000,000	90.6%	2082
Forward Landfill, Inc. (39-AA-0015)	51,040,000	28,940,000	56.7%	22,100,000	43.2%	2020
Keller Canyon Landfill (07-AA-0032)	75,018,280	11,609,870	15.5%	63,408,410	91%	2030
L and D Landfill Co. (34-AA-0020)	6,031,055	1,931,055	32%	4,100,000	84.5%	2023
North County Landfill (39-AA-0022)	41,200,000	5,800,000	14.1%	35,400,000	85.9%	2048
Potrero Hills Landfill (48-AA-0075)	83,100,000	69,228,000	83.3%	13,872,000	16.7%	2048
Sacramento County Landfill (Kiefer) (34-AA-0001)	117,400,000	4,500,000	3.8%	112,900,000	96.2%	2064

Source: CalRecycle 2017a

**SOLID WASTE SERVICES REGULATORY FRAMEWORK**

**State**

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) required all California cities and counties to reduce the volume of waste deposited in landfills by 50 percent by the year 2000, and requires all California cities and counties to continue to remain at 50 percent or higher for each subsequent year. The purpose of AB 939 is to reduce the amount of solid waste generated and extend the life of landfills.

AB 939 requires each California city and county to prepare, adopt, and submit to California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element (SRRE) that demonstrates how the jurisdiction will meet the act's mandated diversion goals. Each jurisdiction's SRRE must include specific components defined in PRC Sections 41003 and 41303. In addition, the SRRE must include a program for management of solid waste generated within the jurisdiction that is consistent with the following hierarchy: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation

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and land disposal. Included in this hierarchy is the requirement to emphasize and maximize the use of all feasible source reduction, recycling, and composting options in order to reduce the amount of solid waste that must be disposed of by transformation and land disposal (PRC Sections 40051, 41002, and 41302) (CalRecycle 2017b).

### CalRecycle Model Ordinance

Subsequent to the Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (SB 1327) (PRC Sections 42900–42911) required CalRecycle to approve a model ordinance for adoption by any local government for the transfer, receipt, storage, and loading of recyclable materials in development projects by March 1, 1993. The act also required local agencies to adopt a local ordinance by September 1, 1993, or to allow the model ordinance to take effect.

### **Local**

#### City of Elk Grove Source Reduction and Recycling Element

In response to AB 939, the City prepared an SSRE that includes policies and programs that will be implemented by the City to achieve the State waste reduction mandates. As required by AB 939, the SRRE must project the amount of disposal capacity needed to accommodate the waste generated within the City for a 15-year period. In addition, the jurisdictional mandated goal is 50 percent diversion, with diversion meaning source reduction, recycling, composting, and related activities.

#### Space Allocation and Enclosure Design Guidelines for Trash and Recycling

Municipal Code Chapter 30.90, Space Allocation and Enclosure Design Guidelines for Trash and Recycling, provides recycling and waste collection requirements for all development in the City. Integrated collection areas with recycling components assist in the reduction of waste materials, thereby prolonging the life of landfills and promoting environmentally sound practices, and help the City meet the State-mandated recycling requirements described previously in this subsection.

The guidelines include information and resources for designing trash and recycling sites that will be used by building occupants in new developments or significant remodels. Conventional recycling and green waste recycling must be designed into the site along with the trash capacity. The California Solid Waste Reuse and Recycling Access Act of 1991 requires new commercial and multifamily developments of five units or more, or improvements that add 30 percent or more to the existing floor area, to include adequate, accessible, and convenient areas for collecting and loading recyclable materials (City of Elk Grove 2017c).

#### Construction and Demolition Debris Reduction, Reuse, and Recycling

Municipal Code Chapter 30.70, Construction and Demolition Debris Reduction, Reuse, and Recycling, makes construction and demolition debris recycling mandatory for all new construction (with a valuation greater than \$200,000) and demolition projects. Materials required to be recycled include scrap metal, inert materials (concrete, asphalt paving, bricks, etc.), corrugated cardboard, wooden pallets, and clean wood waste. A waste management plan must be completed to identify waste that would be generated by a project as well as the proposed recycling and hauling methods. During construction and/or demolition, a waste log

must be maintained on the project area and submitted to the City at project completion (City of Elk Grove 2017b).

### Commercial Refuse Hauler Fee

Municipal Code Chapter 30.50, Nonresidential Haulers, provides information relating to the setting, charging, collecting, and enforcement of nonresidential refuse hauler fees, as well as establishing registration requirements stating that all nonresidential waste haulers operating, conducting business, or providing solid waste services must register with the City and receive a registration decal to operate and remit an amount based on their diversion performance (City of Elk Grove 2010).

## SOLID WASTE IMPACTS AND MITIGATION MEASURES

### Standards of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. A project is considered to have a significant effect on the environment if it will:

- 1) Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or negatively impact the provisions of solid waste services.
- 2) Impair the attainment of solid waste reduction goals.

### Methodology

The following impact analysis is based on discussions with City Staff, and review of available landfill capacity data; population and employee projections for the proposed Project; and planning documents such as the City's current General Plan, Design Guidelines, and Zoning Code.

### General Plan Policies and Standards

The proposed Project contains the following policies and standards related to the provision of solid waste services to future development in the Planning Area.

**Policy CIF-1-1:** Facilitate recycling, reduction in the amount of waste, and reuse of materials to reduce the amount of solid waste sent to landfill from Elk Grove.

**Policy CIF-1-2:** Reduce municipal waste through recycling programs and employee education.

**Standard CIF-1-2.a:** Recycle waste materials for all municipal construction and demolition projects.

**Policy CIF-1-3:** Encourage businesses to emphasize resource efficiency and environmental responsibility and to minimize pollution and waste in their daily operations.

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### Project Impacts and Mitigation Measures

#### Increase Demand for Solid Waste Collection Services and Landfill Capacity (Standards of Significance 1 and 2)

**Impact 5.12.3.1** Construction and operation of future development projects within the Planning Area would generate solid waste, thereby increasing demand for waste collection and disposal services. This impact would be **less than significant**.

Implementation of the proposed Project would result in the development of residential and nonresidential uses, the construction and operation of which would generate new volumes of solid waste and recyclable materials. Using the most recent disposal projections, which are based on 10 years of historical disposal data from 2006 to 2016 and California's projected population, the predicted Statewide per capita disposal rate for 2017 is an average of 5.9 pounds per person per day (using AB 347's measurement system). It is important to note that there is no sure way to project future disposals, as many factors influence the amount of waste generated and ultimately disposed.

**TABLE 5.12-6  
PROJECTED SOLID WASTE GENERATION**

Projection	Daily Disposal Rate Target	Annual Disposal Rate	Total Annual Projected
158,179 residents	5.9 lbs/resident <sup>1</sup>	1.08 tons/resident	170,319 tons
77,339 employees	11.4 lbs/employee <sup>2</sup>	2.08 tons/employee	160,904 tons
<b>Total Projected Solid Waste Generation</b>			<b>331,223 tons/year</b>

Source: CalRecycle 2017c, 2017d

Notes:

1 Calculated with per capita disposal rate using AB 347's measurement system (2017c)

2 Calculated with per capita disposal rate using SB 1016's measurement system (2017d)

As shown in **Table 2.0-2** in Section 2.0, Project Description, the proposed Project would generate approximately 158,179 new residents and 77,339 new employees in the Planning Area. Based on these estimates, the proposed Project would generate an additional 331,223 tons of solid waste annually as shown in **Table 5.12-6**. However, according to the City's Integrated Waste Manager (Neff 2018), based on CalRecycle data, the City achieved a per capita disposal rate in 2016 of 2.8 pounds per capita per day. This rate far exceeded (i.e., is better than) the State's disposal rate target for the City of 5.9 pounds per capita per day. Assuming a disposal rate of 2.8 pounds per capita per day, the proposed Project would generate approximately 241,733 tons per year. Therefore, with implementation of the City's recycling program, actual total solid waste generated by the proposed Project would be approximately 27 percent less than what would be required to meet the Statewide target rate

Future construction in the Planning Area would also generate significant volumes of construction and demolition debris. However, the City's construction diversion rate is estimated at over 50 percent. Therefore, implementation of the City's existing recycling programs and associated regulations would significantly reduce the volume of generated wastes that would be disposed of in landfills. In addition, Elk Grove Municipal Code Section 30.70.030(E) requires that all projects

recycle or divert at least 65 percent of the material collected at the construction site, not including excavated soil and land clearing debris.

Solid waste generated by existing and future residential uses could be hauled by Republic Services. Waste generated by existing and future commercial and multifamily uses could be hauled by several permitted haulers as selected by the individual developer, and wastes would be hauled to a permitted landfill for disposal as selected by the hauler. Republic Services and the other permitted haulers that serve the City would need to expand services to meet this projected future demand, which would be funded by service fees imposed on customers. As shown in **Table 5.12-5**, there is substantial remaining capacity in the landfills serving local waste haulers, with an average remaining capacity of more than 70 percent. Therefore, the proposed Project would be served by solid waste management companies and landfills with sufficient capacity to serve the future development.

In addition, all future development projects in the Project area would be required to comply with all applicable solid waste regulations, including the City's Space Allocation and Enclosure Design Guidelines for Trash and Recycling. Compliance with these regulations would be ensured through the development review process. Therefore, because the proposed Project would not generate solid waste in excess of State or local standards or in excess of the capacity of the local infrastructure, negatively impact the provisions of solid waste services, or impact the attainment of solid waste reduction goals, this impact would be **less than significant**.

Mitigation Measures

None required.

SOLID WASTE CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

**Cumulative Setting**

The cumulative setting for solid waste impacts the service areas of the landfills that serve the City. **Table 5.12-5** provides descriptions of the landfills which receive waste from the City, including an estimated remaining capacity and estimated closure date for each.

**Cumulative Impacts and Mitigation Measures**

Cumulative Solid Waste Service (Standards of Significance 1 and 2)

**Impact 5.12.3.2** Implementation of the proposed Project, in combination with other development in other jurisdictions that contribute to regional landfills, would generate solid waste, thereby increasing demand for hauling and disposal services. The Project's solid waste generation would be substantially less than average, so the Project's contribution to this impact would be **less than cumulatively considerable**.

As discussed above, there is substantial remaining capacity in the landfills serving City waste haulers and the majority of which have over 60 percent remaining. However, any existing capacity that currently exists within a landfill's service area is finite; although several landfills have remaining capacity, any additional solid waste incrementally added to these existing facilities will decrease the amount of time until they are completely full. Without approved plans for substantial expansion of these landfill facilities, solid waste generation from future

recycle or divert at least 65 percent of the material collected at the construction site, not including excavated soil and land clearing debris.

Solid waste generated by existing and future residential uses could be hauled by Republic Services. Waste generated by existing and future commercial and multifamily uses could be hauled by several permitted haulers as selected by the individual developer, and wastes would be hauled to a permitted landfill for disposal as selected by the hauler. Republic Services and the other permitted haulers that serve the City would need to expand services to meet this projected future demand, which would be funded by service fees imposed on customers. As shown in **Table 5.12-5**, there is substantial remaining capacity in the landfills serving local waste haulers, with an average remaining capacity of more than 70 percent. Therefore, the proposed Project would be served by solid waste management companies and landfills with sufficient capacity to serve the future development.

In addition, all future development projects in the Project area would be required to comply with all applicable solid waste regulations, including the City's Space Allocation and Enclosure Design Guidelines for Trash and Recycling. Compliance with these regulations would be ensured through the development review process. Therefore, because the proposed Project would not generate solid waste in excess of State or local standards or in excess of the capacity of the local infrastructure, negatively impact the provisions of solid waste services, or impact the attainment of solid waste reduction goals, this impact would be **less than significant**.

Mitigation Measures

No additional mitigation required beyond compliance with existing regulations and General Plan policies.

SOLID WASTE CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

**Cumulative Setting**

The cumulative setting for solid waste impacts the service areas of the landfills that serve the City. **Table 5.12-5** provides descriptions of the landfills which receive waste from the City, including an estimated remaining capacity and estimated closure date for each.

**Cumulative Impacts and Mitigation Measures**

Cumulative Solid Waste Service (Standards of Significance 1 and 2)

**Impact 5.12.3.2** Implementation of the proposed Project, in combination with other development in other jurisdictions that contribute to regional landfills, would generate solid waste, thereby increasing demand for hauling and disposal services. The Project's solid waste generation would be substantially less than average, so the Project's contribution to this impact would be **less than cumulatively considerable**.

As discussed above, there is substantial remaining capacity in the landfills serving City waste haulers and the majority of which have over 60 percent remaining. However, any existing capacity that currently exists within a landfill's service area is finite; although several landfills have remaining capacity, any additional solid waste incrementally added to these existing facilities will decrease the amount of time until they are completely full. Without approved plans for substantial expansion of these landfill facilities, solid waste generation from future



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development would continue to affect regional landfill capacity. This is considered a significant cumulative impact.

Future development projects in the Planning Area would be reviewed during the development review process to ensure they are designed to comply with all applicable solid waste regulations, including the City's Space Allocation and Enclosure Design Guidelines for Trash and Recycling. In addition, the City implements EGMC Chapter 30.70 (Construction and Demolition (C&D) Debris Reduction, Reuse and Recycling) and regularly reviews solid waste disposal data provided by its contracted haulers to ensure that it achieves the mandated diversion rate. Implementation of source reduction measures would be required on a project-specific basis and plans, such as those for recycling, would partially address landfill capacity issues by diverting additional solid waste at the source of generation.

As described under Impact 5.12.3.1, at buildout, the Planning Area could generate as much as 331,223 additional tons of solid waste each year. However, the City exceeds the mandated 50 percent diversion rate, so the amount of material reaching the landfills would be less than that amount, likely as low as 241,733 tons per year. Solid waste generated in the City is ultimately disposed of in a variety of landfills. While the proposed Project would generate additional solid waste that would be sent to regional landfills, because the proposed Project would generate less solid waste per capita than the State's diversion requirement, due to the success of existing solid waste reduction programs, the proposed Project's contribution to this impact would be **less than cumulatively considerable**.

### Mitigation Measures

No additional mitigation required beyond compliance with existing regulations.

### 5.12.4 ELECTRIC, NATURAL GAS, AND TELEPHONE SERVICES

#### ELECTRIC, NATURAL GAS, AND TELEPHONE SERVICES EXISTING SETTING

##### Electric Service

The Sacramento Municipal Utility District (SMUD) provides all electric services in the City. SMUD is an independent operator of power and generates, transmits, and distributes electricity to an approximately 900-square-mile area with 10,473 miles of power lines located mostly in Sacramento County and small portions of Placer and Yolo Counties. With 626,460 total customers, SMUD is the nation's sixth largest community-owned electric utility in terms of customers served (SMUD 2017a).

SMUD gets its electricity from a variety of resources, including hydropower, natural gas-fired generators, renewable energy such as solar and wind power, and power purchased on the wholesale market. SMUD's largest single source of electricity is the 500-megawatt Cosumnes Power Plant located in southern Sacramento County (SMUD 2017c).

SMUD owns and operates the Upper American River Project (UARP), which consists of 11 reservoirs and 8 powerhouses. In a normal water year, the UARP provides approximately 1.8 billion kilowatt-hours of electricity—enough energy to power approximately 180,000 homes—and provides operational flexibility, system reliability, and economical power generation for SMUD. The value of the UARP extends beyond the boundaries of SMUD's service territory by assisting in the maintenance of integrity for Northern California's entire electric transmission system (SMUD 2017b).

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reliable utility service at reasonable rates. The CPUC also protects against fraud and promotes the health of California's economy.

### California Building Energy Efficiency Standards, Title 24

In 1977, the California Energy Resources Conservation and Development Commission adopted energy conservation standards for new residential and commercial buildings. The California building energy efficiency standards were most recently updated in 2016 (Title 24, Part 6 of the California Code Regulations). In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. See also Section 5.7, Greenhouse Gas Emissions and Energy, for additional information on Title 24.

### ELECTRIC, NATURAL GAS, AND TELEPHONE IMPACTS AND MITIGATION MEASURES

#### **Standard of Significance**

The impact analysis provided below is based on the following CEQA Guidelines Appendix G threshold of significance. A project is considered to have a significant effect on the environment if it will:

- 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities.

#### **Methodology**

The following impact analysis is based on a review of available service level and infrastructure information, discussions with utility provider staff, and population and employment projections for the proposed Project.

#### **General Plan Policies and Standards**

The proposed Project contains the following policies and standards related to the provision of electric, natural gas, and telephone services to future development in the Planning Area.

**Policy CIF-2-2:** Require that new utility infrastructure for electrical, telecommunication, natural gas and other services avoid sensitive resources, be located so as to not be visually obtrusive, and, if possible, be located within roadway rights-of-way or existing utility easements.

**Policy CIF-2-3:** To minimize damage to roadways and reduce inconvenience to residents and businesses, the City shall seek to coordinate roadway utility efforts so that they are installed in a single operation whenever possible. Multiple installations in which separate utilities are installed at different times and/or in different trenches, are specifically discouraged.

**Policy CIF-2-4:** Maintain, improve, and modernize existing facilities and services when necessary in order to meet the needs of Elk Grove residents and businesses.

**Policy CIF-3-1:** Be a regional leader in technology infrastructure.

**Policy CIF-3-2:** Encourage and coordinate with service providers to utilize advanced technologies such as fiber optic internet and Citywide information services.

**Standard CIF-3-2.a:** Conduit to support future technologies shall be laid in new development areas as a condition of project approval.

**Policy CIF-3-3:** Support technology that builds on the City's agricultural legacy.

**Policy CIF-3-4:** Acknowledge and adapt to innovations in technology to facilitate infrastructure investments as appropriate.

### **Project Impacts and Mitigation Measures**

#### Impacts to Electric, Natural Gas Service, and Telecommunication Utilities (Standard of Significance 1)

**Impact 5.12.4.1** Implementation of the proposed Project would increase demand for electric, natural gas, and telephone services. This impact would be **less than significant**.

Implementation of the proposed Project would result in the development of residential and nonresidential uses which would increase demand for electric, natural gas, and telephone services.

#### Electric Service

Implementation of the proposed Project would increase use of electricity in the City, in particular, for electricity to light, heat, ventilate, and air condition new buildings. As discussed in Section 5.7, Greenhouse Gas Emissions and Energy, the proposed Project would increase electricity demand by 6,778,161 kilowatts per year, which equates to an approximately 10.5 percent increase from existing demand. These projections for electricity use assume implementation of the policies and actions of the proposed General Plan and CAP that would reduce energy consumption in the Planning Area.

The 1,000-megawatt Cosumnes Power Plant currently provides adequate electrical supply to accommodate existing and proposed growth. In addition, SMUD's Franklin Electric Transmission Project, an electric substation, would increase electric system capacity by providing approximately 299 kV in power lines and overhead transmission facilities to meet the customer electric load growth due to the planned development in the southwest portion of Sacramento County. The impacts associated with the construction and operation of this transmission project were determined to be less than significant with mitigation identified by SMUD (SMUD 2016a).

Potential environmental effects of generating and conveying more power through the development of substations and additional power lines include impacts on air quality (during construction), biological resources (depending on location), cultural resources (depending on location), hazardous materials, land use, noise and vibration (during construction), traffic, visual resources, waste management, water and soil resources, and personal health. Construction of electrical infrastructure within the Planning Area boundaries is assumed throughout this EIR; there would be no additional impact associated with the provision of electrical facilities in the Planning Area. The extent to which additional off-site infrastructure would be required is not known at this time and evaluation of potential infrastructure would be remote and speculative,

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considering the programmatic nature of this EIR. Therefore, this impact would be less than significant.

### Natural Gas Service

The anticipated population increase associated with the proposed Project would increase demand for natural gas and related facilities. As discussed in Section 5.7, Greenhouse Gas Emissions and Energy, the proposed Project would increase demand for natural gas by 20,619,345 thousand British thermal units per year. This represents an increase of approximately 18.4 percent increase from existing demand. PG&E declares itself a reactive utility that provides natural gas as customers request its services. It is anticipated that PG&E would be able to provide services to the growing population in the Planning Area, as PG&E is responsible for natural gas services to the greater Sacramento area and Northern California (PG&E 2014).

PG&E purchases gas supplies from producers and marketers in Canada, the Rockies and the U.S. Southwest. PG&E makes purchases on a daily, monthly, and longer-term basis to ensure supplies to its customers (PG&E 2018). Potential environmental effects associated with developing new sources of natural gas and construction of gas lines include impacts on air quality (during construction), biological resources (depending on location), cultural resources (depending on location), hazardous materials, land use, noise and vibration (during construction), traffic, and personal health. Construction of natural gas infrastructure within the Planning Area boundaries is assumed throughout this EIR; there would be no additional impact associated with the provision of natural gas facilities in the Planning Area. The extent to which additional off-site infrastructure would be required is not known at this time and evaluation of potential infrastructure would be remote and speculative, considering the programmatic nature of this EIR. Therefore, this impact would be less than significant.

### Telephone Service

Development in the Planning Area would result in an increase in demand for telephone service and related facilities. Most underground and aerial telephone transmission lines and wireless facilities are co-located with other utilities on poles or in underground trenches and constructed in public rights-of-way to reduce visual and aesthetic impacts and potential safety hazards. As noted above, construction of infrastructure within the Planning Area boundaries is assumed throughout this EIR; there would be no additional impact associated with the provision of telecommunications facilities in the Planning Area. It is not anticipated that substantial off-site infrastructure would be required to serve the telecommunications needs of the Planning Area. Therefore, this impact would be **less than significant**.

### Mitigation Measures

None required.

## ELECTRIC, NATURAL GAS, AND TELEPHONE SERVICES CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

### **Cumulative Setting**

The cumulative settings for electric, natural gas, and telephone service impacts would be the service areas of the respective service providers as described previously in this subsection.

## Cumulative Impacts and Mitigation Measures

### Cumulative Electric, Telephone, and Natural Gas Impacts (Standard of Significance 1)

**Impact 5.12.4.2** Implementation of the proposed Project, in combination with other development within the service areas of the applicable providers, would increase demand for electric, natural gas, and telephone services. The proposed Project's contribution to this impact would be **less than cumulatively considerable**.

Cumulative development within SMUD and PG&E's service boundaries would result in the permanent and continued use of electricity and natural gas resources. SMUD is in the process of approving a substation facility to accommodate expected customer electrical load growth in the anticipated future development in the southwest portion of Sacramento County. In addition, as PG&E is a reactive provider that supplies natural gas services to customers at their request, it is assumed that PG&E would also serve future development under the proposed Project, in combination with projected future developments in its service boundaries. However, existing facilities may not be adequate to meet this cumulative demand. Development in undeveloped areas of these providers' service areas could require the extension of existing lines, new transmission facilities, and substations. Natural gas regulators and transmission lines would be required to serve residences and businesses. Expansion of these types of facilities would be required to serve the growing population of the service areas, and would be required to be constructed by the service provider as demand warrants. The physical impacts of construction of these facilities within the Planning Area are addressed throughout the Draft EIR. The location of future facilities outside the Planning Area is not known at this time and it would be speculative to determine potential effects of construction and operation of those facilities.

As described under Impact 5.12.4.1, implementation of the proposed Project would result in the development of residential and nonresidential uses that would increase demand for electric, natural gas, and telecommunication services. While the proposed Project would contribute to increased demand for these resources, implementation of proposed General Plan and CAP policies and actions would reduce energy consumption in the Planning Area. Because the proposed General Plan contains policies for energy-efficient buildings that would reduce the increase in demand for energy, the proposed Project's contribution to this impact would be **less than cumulatively considerable**.

#### Mitigation Measures

None required beyond compliance with the CAP Update and proposed General Plan policies.

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