

## 3.15 UTILITIES AND SERVICE SYSTEMS

Comments received on the Notice of Preparation (NOP) were reviewed during preparation of this SEIR. A comment letter was submitted by the Sacramento Local Agency Formation Commission (LAFCo), stating that LAFCo “maintains an interest” in the project’s impacts on water availability. The City reviewed and considered this information during preparation of this section.

A letter from the Sacramento Metropolitan Utility District (SMUD) expressing interest in impacts of the Project related to overhead and or underground transmission and distribution line easements; utility line routing; electrical load needs/requirements; energy efficiency; climate change; cumulative impacts related to the need for increased electrical delivery; the potential need to relocate and or remove any SMUD infrastructure.

Comments were also received by an individual requesting that the SEIR evaluate the effects of climate change on water availability. The California courts have stated that the required focus of an EIR is on the physical impacts of a project on the environment, not the impacts of the environment on a project. Therefore, the potential effects of climate change on water availability are not evaluated in this document. However, water supply planning efforts that are undertaken by a variety of agencies such as the City of Elk Grove, Sacramento County Water Agency, and the groundwater sustainability agencies that are currently jointly preparing the Groundwater Sustainability Plan for the South American Subbasin (see the Section 3.10, “Hydrology and Water Quality”) may consider climate change. The same individual also requested that the SEIR evaluate the financial cost to the community of improving water infrastructure and providing water to the proposed development. However, pursuant to the CEQA Guidelines Section 15131, “economic or social effects of a project shall not be treated as significant effects on the environment”, and therefore such impacts are not evaluated in this SEIR.

### 3.15.1 ENVIRONMENTAL SETTING

As reported in the 2019 SOIA EIR, utilities and service systems would be provided to future development by the Sacramento County Water Agency (SCWA), the Sacramento Area Sewer District (SASD) (formerly known as County Sanitation District-1), and Sacramento Regional County Sanitation District (SRCSD).

Since the 2019 SOIA EIR was approved, additional detailed water supply and wastewater studies have been conducted relative to the infrastructure that would be required to serve the Project site. Additional information related to on-site and off-site infrastructure needs is summarized below.

#### WATER SUPPLY

Currently, there are no public water supply facilities within the Project site. The majority of the Project site is located within the “overlap service area” of the Omochumne-Hartnell Water District (OHWD) and the SCWA, with the exception of 17 acre and 48 acres that are located exclusively in the OHWD and SCWA service areas, respectively.

Domestic water supplies are currently provided by private groundwater wells and most agricultural water supplies are provided by OHWD’s irrigation wells. The water use for the Project site was estimated using average annual water demand factors and the acreage of crop types within the SOIA Area (Johnson and Cody 2015, Jensen pers. comm., 2018). As shown in Table 3.15-1, the total annual water usage for agricultural crops on the SOIA Area is approximately 1,981.5 acre-feet per year (afy).

<b>Table 3.15-1 Estimate of Crop Water Usage within the SOIA Area</b>				
Crop Type	Average Annual Water Use per Acre <sup>1</sup>		Estimated Acres within SOIA Area <sup>2</sup>	Total Annual Water Usage (afy)
	Acre-Feet	Gallons		
Oats	1.4	456,192	118	165.2
Pasture	4.1	1,335,990	443	1,816.3
<b>Total</b>	<b>3.8</b>	<b>1,792,182</b>	<b>561</b>	<b>1,981.5</b>

Notes: afy = acre-feet per year  
Average acre-feet applied per acre values used from Johnson and Cody 2015. For oats, the value for grains was used (i.e., barley, oats, and rye).  
Acreage of crop types was provided by the Sacramento County Agricultural Department.  
Source: Average Annual Water Use per Acre from Johnson and Cody 2015; Jensen, pers. comm., 2018

### **Water Supply Sources for SCWA Zone 40**

Future development of the Project site would require adequate treated water service. As noted in the 2019 SOIA EIR, areas inside Zone 40 are served conjunctively with groundwater (pumped from the South American Sub-basin of the Sacramento Valley Groundwater Basin, which is identified locally as the Central Basin), surface water, and recycled water. SCWA’s conjunctive use program is a coordinated approach to manage surface water and groundwater supplies to maximize the yield of available water resources. In wet and normal water years, SCWA would divert surface water from the American and Sacramento Rivers, consistent with the entitlement contracts described below and shown in Table 3.15-2. The underlying groundwater basin would be replenished in wet years as a result of this reliance on surface water. In dry water years, SCWA’s surface water could be reduced based on recommended dry-year cutback volumes outlined in the Water Forum Agreement—those volumes that purveyors have agreed not to divert from the American River during dry years. During dry years, SCWA would increase groundwater pumping so that it could continue to meet the water demand of its customers.

#### **Surface-Water Supplies**

SCWA surface-water supplies are obtained from the following sources (Brown and Caldwell 2020):

- ▶ Central Valley Project Water (Public Law 101-514 [“Fazio water”]) – SCWA executed a Central Valley Project (CVP) water-service contract pursuant to Public Law 101-514 (referred to as “Fazio water”) that provides a permanent water supply of 22,000 afy, with 15,000 afy allocated to SCWA and 7,000 afy allocated to the City of Folsom.
- ▶ SMUD 1 Assignment – 15,000 afy of SMUD’s CVP contract water has been assigned to the SCWA under the terms of an agreement with SMUD. The long-term availability of SMUD 1 water is 13,000 afy.
- ▶ SMUD Assignment 2 – 15,000 afy of SMUD’s CVP contract water has been assigned to the SCWA under the terms of an agreement with SMUD. The long-term availability of SMUD 2 water is 13,000 afy.
- ▶ Appropriative Water Supplies – the State Water Resources Control Board (SWRCB) appropriates water from the American River to SCWA under Permit 21209. The amount of appropriated water available for use could range up to 71,000 afy in wet years, primarily during winter months.

- ▶ City of Sacramento’s American River Place of Use Agreement – The City of Sacramento provides wholesale American River water to SCWA for use in a portion of the SCWA 2030 Study Area that lies within the City of Sacramento’s American River POU. The estimated long-term average volume of water that would be used by SCWA within this Place of Use Agreement would be approximately 9,300 afy.
- ▶ Other Water Supplies – Other water supplies are water transfers that would be obtained from various water users that hold surface water rights on the Sacramento River and the American River upstream of SCWA’s point of diversion. To obtain these supplies, SCWA would enter into purchase and transfer agreements with other entities that hold surface water rights. SCWA’s estimated long-term average use of these water supplies would be approximately 9,600 afy.

Table 3.15-2 summarizes SCWA’s surface water supplies for the normal water years, single-dry water years, and multiple dry-years assuming no constraint on supply capacity. The long-term average supply values presented in Table 3.15-2 assume that the supplies are all fully utilized with no infrastructure capacity constraints for all of the water year types (Brown and Caldwell 2020).

<b>Table 3.15-2 Summary of Zone 40 Surface Water Supplies</b>	
Water Supply Source	Contract Water Right Transfer Amount (afy)
Central Valley Water Project (Fazio water, SMUD 1, and SMUD 2)	45,000
Appropriative Water (SWRCB Permit 21209)	71,000
City of Sacramento Place of Use Agreement	9,300
Other Water Supplies <sup>2</sup>	9,600
<b>Total</b>	<b>134,900</b>
Notes: afy = acre-feet per year	
<sup>1</sup> Other water supplies are water transfers that would be obtained from various water users that hold surface water rights on the Sacramento River and the American River upstream of SCWA's point of diversion.	
Source: Brown and Caldwell 2020	

### Recycled Water

Recycled water is currently provided to SCWA by SRCSD. This water is used within the Zone 40 service area to offset demand by parks and for other nonpotable uses. Recycled water use would increase to a total of 3,300 afy when the recycled water system is completed in the East Franklin and Laguna Ridge areas. Recycled water supply is assumed to be available at 100 percent of full supply in wet, average, dry, and driest years. (Brown and Caldwell 2020). Extension of recycled water to the Project area is not planned.

### Groundwater Supplies

Approximately 75 percent of SCWA’s water supply comes from groundwater wells. SCWA pumps groundwater from the South American Sub-basin of the Sacramento Valley Groundwater Basin (identified locally as the Central Basin). This groundwater basin is not adjudicated. As a signatory to the Water Forum Agreement, SCWA is committed to adhering to the long-term average sustainable yield of the Central Basin (273,000 acre-feet) (Brown and Caldwell 2020). See Section 3.10, “Hydrology and Water Quality,” for further discussion of groundwater conditions in the Central Basin.

SCWA has a remediated groundwater supply of 8,900 afy in accordance with the terms and conditions in the agreement entitled “Agreement between Sacramento County, SCWA, and Aerojet-General Corporation With

Respect To Transfer of GET Water” dated May 18, 2010. The timing and amount of remediated groundwater available is subject to change as a result of on-going negotiations with water purveyors affected by groundwater contamination and with Aerojet/Boeing, as their remediation plans may change as directed by various regulatory agencies (Brown and Caldwell 2020).

## **SCWA Zone 40 Water Supplies and Demands**

SCWA has amended its Water Supply Master Plan (WSMP) to address the sufficiency of water supplies to meet the demand of the proposed Project (Brown and Caldwell 2020). In addition, the amended WSMP updates substantial portions of the 2005 WSMP, including Zone 40 buildout land use acreages, unit water demand factors, recent historical demographics and water demands, projected water demands, growth rate projections, projected water supply availability, and groundwater supply descriptions, and presents new information, including existing water facilities descriptions; buildout population, connections, and dwelling units by service area; water demand factors expressed as demand per dwelling unit and per type of customer; projected maximum day and annual use of surface water and groundwater for dry and wet/average years; and an evaluation of storage and pump station capacity (Brown and Caldwell 2020).

Water supplies and demands within SCWA Zone 40 would be the same during normal, single-dry, and multiple-dry years; however, the year-to-year mix of surface and groundwater would be adjusted, as necessary, to meet the demands as part of its conjunctive use water supply program. Table 3.15-3 identifies surface water and groundwater supply and demand within SCWA Zone 40 from 2020 to 2040 in normal, single dry, and multiple dry years excluding the proposed Project. As shown in Table 3.15-3, SCWA would have water supplies that exceed demands in all water years.

## **WATER SUPPLY INFRASTRUCTURE**

SCWA will deliver water supplies to the Project site through existing 24-inch and 16-inch transmission pipelines located in Grant Line Road. The 24-inch transmission main originates west of the Project site and extends easterly within Grant Line Road to the intersection of Waterman Road. From Waterman Road, the transmission main continues easterly as a 16-inch-diameter transmission main. There are two proposed points of connection to the existing transmission main in Grant Line Road: one at the intersection of Waterman Road, and one at the intersection of Mosher Road. Exhibit 2-4 in Chapter 2, “Project Description,” shows the proposed points of connection with existing off-site SCWA facilities.

The maximum day, peak hour, and fire flow demands for the proposed Project would be primarily supplied from the Elk Grove Groundwater Water Treatment Plant (GWTP) and to some extent from the East Park GWTP (Brown and Caldwell 2020). The Elk Grove GWTP and storage tanks are located west of Waterman Road and north of Grant Line Road and the East Park GWTP is located east of Waterman Road and north of Elk Grove Boulevard (Brown and Caldwell 2020). The WSMP amendment determined other planned SCWA water system improvements required to serve the Project site would consist of an additional 16-inch transmission pipeline along Grant Line Road that would provide additional water supply from the future the Bond Road GWTP (Brown and Caldwell 2020).

Water Year	Source	Projected Demands (afy)				
		2020	2025	2030	2035	2040
Normal Year	<b>Supply</b>					
	Surface water <sup>2</sup>	134,900	134,900	134,900	134,900	134,900
	Groundwater	40,000	40,000	40,000	40,000	40,000
	Recycled water	1,700	1,700	1,700	1,700	1,700
	Remediated groundwater	8,900	8,900	8,900	8,900	8,900
	<b>Total Supply</b>	<b>185,500</b>	<b>185,500</b>	<b>185,500</b>	<b>185,500</b>	<b>185,500</b>
	<b>Total Demand</b>	<b>45,500</b>	<b>53,900</b>	<b>62,800</b>	<b>71,800</b>	<b>80,900</b>
Difference (Supply minus Demand)	140,000	131,600	122,700	113,700	104,600	
Single-Dry Year	<b>Supply</b>					
	Surface water <sup>2</sup>	25,600	22,700	24,200	26,400	28,800
	Groundwater	70,000	70,000	70,000	70,000	70,000
	Recycled water	1,700	1,700	1,700	1,700	1,700
	Remediated groundwater	8,900	8,900	8,900	8,900	8,900
	<b>Total Supply</b>	<b>106,200</b>	<b>103,300</b>	<b>104,800</b>	<b>107,000</b>	<b>109,400</b>
	<b>Total Demand</b>	<b>45,500</b>	<b>53,900</b>	<b>62,800</b>	<b>71,800</b>	<b>80,900</b>
Difference (Supply minus Demand)	60,700	49,400	42,000	35,200	28,500	
Multiple-Dry Year 1	<b>Supply</b>					
	Surface water <sup>2</sup>	134,900	134,900	134,900	134,900	134,900
	Groundwater	40,000	40,000	40,000	40,000	40,000
	Recycled water	1,700	1,700	1,700	1,700	1,700
	Remediated groundwater	8,900	8,900	8,900	8,900	8,550
	<b>Total Supply</b>	<b>185,500</b>	<b>185,500</b>	<b>185,500</b>	<b>185,500</b>	<b>185,500</b>
	<b>Total Demand</b>	<b>45,500</b>	<b>53,900</b>	<b>62,800</b>	<b>71,800</b>	<b>80,900</b>
Difference (Supply minus Demand)	140,000	131,600	122,700	113,700	104,600	
Multiple-Dry Year 2	<b>Supply</b>					
	Surface water <sup>2</sup>	33,600	29,300	31,500	34,700	38,400
	Groundwater	70,000	70,000	70,000	70,000	70,000
	Recycled water	1,700	1,700	1,700	1,700	1,700
	Remediated groundwater	8,900	8,900	8,900	8,900	8,900
	<b>Total Supply</b>	<b>114,200</b>	<b>109,900</b>	<b>112,100</b>	<b>115,300</b>	<b>119,000</b>
	<b>Total Demand</b>	<b>45,500</b>	<b>53,900</b>	<b>62,800</b>	<b>71,800</b>	<b>80,900</b>
Difference (Supply minus Demand)	68,700	56,000	49,300	43,500	38,100	
Multiple-Dry Year 3	<b>Supply</b>					
	Surface water <sup>2</sup>	25,600	22,700	24,200	26,400	28,800
	Groundwater	70,000	70,000	70,000	70,000	70,000
	Recycled water	1,700	1,700	1,700	1,700	1,700
	Remediated groundwater	8,900	8,900	8,900	8,900	8,900
	<b>Total Supply</b>	<b>106,200</b>	<b>103,300</b>	<b>104,800</b>	<b>107,000</b>	<b>109,400</b>
	<b>Total Demand</b>	<b>45,500</b>	<b>53,900</b>	<b>62,800</b>	<b>71,800</b>	<b>80,900</b>
Difference (Supply minus Demand)	60,700	49,400	42,000	35,200	28,500	

21,600Notes: afy = acre-feet per year

<sup>1</sup> Water supplies and demands within SCWA Zone 40 would be the same during normal, single-dry, and multiple-dry years; however, the year-to-year mix of surface and groundwater would be adjusted as necessary to meet the demands as part of its conjunctive use water supply program.

Surface water supplies consist of Central Valley Project water (Fazio, SMUD 1, and SMUD 2), appropriative water, City of Sacramento Place of Use water, and other supplies.

Source: Brown and Caldwell 2020; Data compiled by AECOM 2020

## **WASTEWATER COLLECTION, AND CONVEYANCE, TREATMENT FACILITIES**

The Project site is not currently served by a municipal wastewater service provider. Rather, wastewater service is currently provided by on-site septic systems. Future development within the Project site will require municipal wastewater collection and treatment services through extension of SASD and SRCSD infrastructure.

### **Sacramento Area Sewer District**

SASD provides local wastewater collection and conveyance services and infrastructure throughout the Sacramento region. There are two existing points of connection to the existing SASD system immediately adjacent to the Project site (see Exhibit 2-5 in Chapter 2):

- ▶ A 12-inch pipeline is on the north side of Grant Line Road near the end of Waterman Court. The 12-inch pipeline extends west for approximately 550-feet before becoming a 15-inch pipeline. The 15-inch pipeline continues west in Grant Line Road for approximately 2,300 feet before tying into a 27-inch trunk line just east of State Route 99.
- ▶ An 18-inch pipeline is stubbed beneath the Union Pacific Railroad along the western border of the Project site approximately 2,000 feet south of Grant Line Road. The 18-inch pipeline travels below the railroad easement for approximately 110 feet where it then becomes a 21-inch pipeline near East Stockton Boulevard.

### **Sacramento Regional County Sanitation District**

SRCSD is responsible for collection by interceptors (sanitary sewers that are designed to carry flows in excess of 10 million gallons per day [mgd]) and for wastewater treatment in Sacramento County. This District owns, operates, and is responsible for the collection, trunk, and interceptor sewer systems throughout Sacramento County, as well as the Sacramento Regional Wastewater Treatment Plant (SRWTP) located west of Elk Grove.

SRCSD has completed an Interceptor Sequencing Study that will aid in planning and implementing regional conveyance projects and assisting contributing agencies in coordination of collection system facilities. The southeastern portion of the Project site is within the SRCSD service area and the on-site wastewater facilities to serve the Project site have been planned for in the SRCSD Interceptor Sequencing Study. The Interceptor Sequencing Study identifies the southeastern portion of the Project site as located within the SRCSD service area. The remainder of the Project site is outside of the SRCSD service area but within the SRCSD SOI.

### ***Sacramento Regional Wastewater Treatment Plant***

Wastewater flows collected from SRCSD interceptors are ultimately transported into the SRWTP. The SRWTP is located west of Elk Grove and is owned and managed by SRCSD. Currently, the SRWTP has a National Pollutant Discharge Elimination System (NPDES) permit issued by the Central Valley Regional Water Quality Control Board (RWQCB) for discharge of up to 181 mgd average dry-weather flow of treated effluent into the Sacramento River. The SRWTP has the potential for expansion to 218 mgd. As of 2019, the SRWTP receives and treats an average of 115 mgd each day and the SRWTP discharge constituents are below permitted discharge limits specified in the NPDES permit (SRCSD 2019).

## Recycle Water

The SRCSD currently owns and operates a 5-mgd Water Reclamation Facility (WRF) that has been producing Title 22 tertiary recycled water since 2003. The WRF is located within the SRWTP property. The SRCSD uses a portion of the recycled water at the SRWTP and the remainder is wholesaled to SCWA. SCWA retails the recycled water, primarily for landscape use, to select customers in the City in the Laguna West area. SRCSD is planning for increased delivery of recycled water to other areas of the City, including the East Franklin, Laguna Ridge, and the Southeast Policy Area, as well as potential agricultural customers south of the City. However, SRCSD does not have any planned facilities that could provide recycled water to the Project site or vicinity. Additionally, the SRCSD is not a water purveyor and potential use of recycled water in the Project site must be coordinated between the key stakeholders (e.g., land use jurisdictions, water purveyors, users, and the recycled water producers).

## SOLID WASTE

The Integrated Waste Department manages the City of Elk Grove's residential solid waste franchise and plans, coordinates, promotes and implements citywide solid waste reduction, recycling, composting, and public education activities. In 2018, the City disposed of a total of 103,973 tons of solid waste (CalRecycle 2018).

Residential solid waste services in Elk Grove are provided by Republic Services (formally known as Allied Waste) under an exclusive franchise agreement. Commercial solid waste is collected by private franchised haulers and disposed of at various facilities, most of which have more than 70 percent capacity remaining, including Altamont Landfill & Resource Recovery, Recology Hay Road, Bakersfield Metropolitan Sanitary Landfill, Foothill Sanitary Landfill, Forward Landfill, Inc., Keller Canyon Landfill, L and D Landfill, North County Landfill, Potrero Hills Landfill, and Sacramento County Landfill (Kiefer) (City of Elk Grove 2020).

### 3.15.2 REGULATORY FRAMEWORK

#### California Green Building Standards Code

The standards included in the 2019 California Green Building Standards Code (CALGreen Code) (Title 24, Part 11 of the California Code of Regulations) became effective on January 1, 2020. The CALGreen Code was developed to enhance the design and construction of buildings, and the use of sustainable construction practices, through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental air quality (California Building Standards Commission 2019). The most significant efficiency improvements to the residential standards in the 2019 CALGreen Code include improvements for attics, walls, water heating, and lighting and standards for residential plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) to reduce indoor demand for potable water.

Chapters 4 and 5 of the 2019 CALGreen Code requires residential and nonresidential developments to comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance, whichever is more stringent. Both chapters require all residential and nonresidential construction contractors to reduce construction waste and demolition debris by 65 percent. Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials will be sorted on-site or mixed; and identifying diversion facilities where the materials

collected will be taken. The code also specifies that the amount of materials diverted should be calculated by weight or volume, but not by both. In addition, the 2019 CALGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

## **City of Elk Grove General Plan**

The City's General Plan (City of Elk Grove 2019) contains the following policies related to utilities and service systems that are applicable to the proposed Project.

### ***Services, Health, and Safety***

#### Urban Infrastructure

- ▶ **Policy INF-1-1:** Water supply and delivery systems shall be available in time to meet the demand created by new development.
  - **Standard INF-1-1a:** 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-2-1:** Sewage conveyance and treatment capacity shall be available in time to meet the demand created by new development.
  - **Standard INF-2-1a:** 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-2-1b:** The following shall be required for all subdivisions to the extent permitted by State law:
  - Sewage/wastewater treatment capacity shall be available at the time of tentative map approval.
  - The agency providing sewer service to the subdivision shall demonstrate prior to the approval of the Final Map by the City that sufficient capacity shall be available to accommodate the subdivision plus existing development, and other approved projects using the same conveyance lines, and projects which have received sewage treatment capacity commitments.
  - Onsite and offsite sewage conveyance systems required to serve the subdivision shall be in place prior to the approval of the Final Map, or their financing shall be assured to the satisfaction of the City, consistent with the requirements of the Subdivision Map Act.
  - Sewage conveyance systems within the subdivision shall be in place and connected to the sewage disposal system prior to the issuance of any building permits. Model homes may be exempted from this policy as determined appropriate by the City, and subject to approval by the City.

#### Community Infrastructure and Facilities

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

#### Infrastructure Financing and Phasing

- ▶ **Policy IFP-1-3:** Require secure financing for all components of the transportation system through the use of special taxes, assessment districts, developer dedications, or other appropriate mechanisms in order to provide for the completion of required major public facilities at their full planned widths or capacities consistent with this General Plan and any applicable service master plan. For the purposes of this policy, “major” facilities shall include the following:
  - All wells, water transmission lines, treatment facilities, and storage tanks needed to serve the project.
  - All sewer trunk and interceptor lines and treatment plants or treatment plant capacity
- ▶ **Policy IFP-1-4:** Use financial capacity to secure financing for major facilities as identified in Policy IFP-1-3 if necessary, including, but not limited to:
  - Issuing bonds
  - Using City funds directly, with repayment from future development fees

- Fee programs
  - Developer financing
- ▶ **Policy IFP-1-6:** Fee programs and/or other finance mechanisms shall be reviewed regularly to ensure that sufficient funding will be available to construct all required facilities.
  - ▶ **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/or constructed concurrent with or prior to completion of new development.
    - **Standard IFP-1-8a:** 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.
  - ▶ **Policy IFP-1-10:** Except when prohibited by state law, the City will endeavor to ensure that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.

### 3.15.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

#### THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact related to utilities and service systems if it would:

- ▶ require or result in the relocation or construction of new or expanded water, wastewater treatment facilities, or storm water drainage, electrical power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects;
- ▶ not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- ▶ 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;
- ▶ generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals; or

- ▶ not comply with federal, State, or local management and reduction statutes and regulations related to solid waste.

## **IMPACT ANALYSIS**

### **Impact 3.15-1: Require or Result in the Relocation of or the Construction of New or Expanded Utilities and Service Systems Facilities, the Construction of Which Could Cause Significant Environmental Effects.**

The proposed Project would require the construction of new or expanded electrical, natural gas, water, and wastewater facilities. The following discussion identifies future on-site and off-site utilities and service systems required to serve the proposed Project and the potential for construction of new or expanded systems to cause significant environmental effects. Impacts related to stormwater management facilities are addressed in Section 3.10, “Hydrology and Water Quality.”

#### **Electrical and Natural Gas**

The City of Elk Grove is served by Sacramento Municipal Utility District’s (SMUD’s) aboveground and underground electric transmission and distribution lines. The Project site would include extension of electricity services by SMUD, and electricity could be served from the 69-kilovolt line on Grant Line Road. Additional facilities, such as substation/s, transformers, and distribution equipment could be required to serve future uses. SMUD’s power line would be connected to a utility transformer and metering/distribution equipment in the site’s service yard and the City would connect service feeders that would extend throughout the site. SMUD would require 12.5-foot overhead/underground public utility easements along all streets and a 25-foot easement along Grant Line Road for the existing 69kV line. There is an existing 12kV overhead line along Waterman Road and Grant Line Road; an existing and proposed 12kV line along Mosher Road; a proposed second 69kV circuit along Grant Line Road on an existing pole line; and proposed 12kV underground lines along Grant Line Road and Waterman Road. As required by the City’s General Plan Policy IFP-1-8, infrastructure required to serve new development shall be constructed concurrent with, or prior to such development.

Pacific Gas and Electric Company (PG&E) currently provides natural gas service within the City of Elk Grove; however, the natural gas lines do not currently serve the Project site according to the Gas Transmission Pipeline Systems Map (PG&E 2017). The existing grid network of gas lines would have to be extended to serve the increased demand for natural gas generated by development on the Project site.

Extension of off-site electrical and natural gas infrastructure are the responsibility of SMUD and PG&E, respectively. SMUD and PG&E would conduct project-level CEQA or National Environmental Policy Act (NEPA) analysis, if necessary, to analyze specific impacts and identify any required mitigation measures for construction and operation of new off-site facilities to serve the Project site.

On-site electrical transmission infrastructure and natural gas lines would be installed underground and would generally follow the alignment of the internal roadway network.

The 2019 SOIA EIR included the following Mitigation Measure, which remains applicable to the Project:

## Mitigation Measures

Mitigation Measure 3.15-1: Prepare Utility Service Plans that Demonstrate Adequate Electrical and Natural Gas Supplies and Infrastructure are Available before the Annexation of Territory within the SOIA (2019 SOIA EIR Mitigation Measure 3.16-2)

The City of Elk Grove shall require utility service plans that identify the projected electrical and natural gas demands and that appropriate infrastructure sizing and locations to serve future development will be provided within the annexation territory. The utility service plans shall demonstrate that SMUD will have adequate electrical supplies and infrastructure and PG&E will have adequate natural gas supplies and infrastructure available for the amount of future development proposed within the annexation territory. If SMUD or PG&E must construct or expand facilities, environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of mitigation measures. Such measures should include those necessary to avoid or reduce environmental impacts associated with, but not limited to, air quality, noise, traffic, biological resources, cultural resources, GHG emissions, hydrology and water quality, and others that apply to specific construction or expansion of natural gas and electric facilities projects.

## Water System Facilities

Future development within the Project site would receive domestic water service through construction of on-site water distribution system that connects to existing off-site SCWA infrastructure. An *Elk Grove Multi-Sport Complex & Sphere of Influence Annexation Water Master Plan* (Water Master Plan) was prepared to identify on-site backbone water distribution system to meet the proposed Project's water demand and fire flow requirements (Wood Rogers 2020a). The on-site water distribution infrastructure layout has been designed to comply with SCWA requirements and would consist of a 16-inch transmission main that extends north from Waterman Road along western boundary of the City-owned parcel and 8-inch, 12-inch, and 14-inch transmission pipelines constructed within road rights-of-way. The on-site water distribution system would connect to SCWA's existing 16-inch and 24-inch transmission pipelines located in Grant Line Road at two proposed points of connection: one at the intersection of Waterman Road, and one at the intersection of Mosher Road (see Exhibit 2-4 in Chapter 2). Impact 3.15-2 identifies the proposed Project's water demand and addresses the availability of SCWA water supplies to serve the proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years. See Appendix B for a detailed discussion of proposed water distribution systems improvements.

The City outlines specific requirements to ensure water systems are available to meet demands created by new development. These requirements include preparing an infrastructure plan that identifies backbone infrastructure necessary to serve proposed development (Policy LU-3-27 of the City General Plan) and demonstrating on-site and off-site water supply infrastructure provides sufficient capacity to serve proposed development (Policy INF-1-1 and Standard INF-1-1a of the City General Plan). New development is required to contribute its fair share portion for funding new infrastructure facilities (Policies IFP-1-3 and IFP-1-7 of the City General Plan). In addition, infrastructure improvements would be financed and/or constructed concurrent with or prior to the completion of new development (Policy IFP-1-8 and Standard IFP-1-8a of the City General Plan).

The Water Master Plan fulfills the requirements identified in Mitigation Measure 3.15-1a of the 2019 SOIA EIR that requires the City of Elk Grove to prepare a Plan for Services that that depicts the locations and appropriate

sizes of all on-site water system facilities to accommodate the amount of development identified for the annexation territory. The amended WSMP fulfills the requirements identified in Mitigation Measure 3.15-1 of the 2019 SOIA EIR that requires evaluation of SCWA's off-site water supply infrastructure to serve the Project site. Furthermore, compliance with City General Plan policies and standards identified above would also ensure implementation of Mitigation Measure 3.15-1 of the 2019 SOIA EIR.

The amended WSMP evaluated the capacity for SCWA's existing off-site water supply infrastructure to serve the Project site. The WSMP determined that the existing Grant Line Road transmission main and Elk Grove GWTP and East Park GWTP have capacity to meet the demands of the proposed Project (Brown and Caldwell 2020). Although not required to serve the Project site, an additional 16-inch transmission pipeline along Grant Line Road would provide additional water supply capacity to the Project site from the future the Bond Road GWTP (Brown and Caldwell 2020). The proposed Grant Line Road transmission main and Bond Road GWTP are proposed for construction as part of SCWA's Phase 3 capital improvement plan (Brown and Caldwell 2020). The WSMP estimates Phase 3 capital improvements would be implemented beyond 2036.

The 2019 SOIA EIR also included Mitigation Measure 3.15-1b, which provided for the City to coordinate with SCWA on the use of non-potable water supplies in the Project area to ensure there are no cross connection or contamination issues. No non-potable water supplies are planned in the Project; therefore, this mitigation measure has been fulfilled.

## **Wastewater Collection and Conveyance Facilities**

Future development within the Project site would receive municipal wastewater service through construction of on-site wastewater collection and conveyance facilities that connect to existing off-site SASD infrastructure with capacity to serve the Project site.

*An Elk Grove Multi-Sport Complex & Sphere of Influence Annexation Level II Sewer Study (Level II Sewer Study)* was prepared in accordance with SASD's design standards and minimum sewer study requirements to identify on-site backbone wastewater collection and conveyance facilities to serve the Project site (Wood Rogers 2020). The on-site wastewater collection and conveyance system would consist of 8-inch, 12-inch, and 13-inch gravity sewers constructed within road rights-of-way that would convey wastewater flows to a 12-inch pipeline on the north side of Grant Line Road or to an 18-inch pipeline stubbed beneath the Union Pacific Railroad on the western border of the Project site (see Exhibit 2-5 in Chapter 2). SASD conducted an analysis and confirmed that the existing off-site conveyance system has adequate capacity to accommodate peak wet-weather flows generated by the project site at full build-out (Wood Rogers 2020b). Impact 3.15-3 addresses the adequacy of the SRWTP to treat the proposed Project's wastewater flows in addition to SRWTP's existing commitments. See Appendix C for a detailed discussion of proposed wastewater collection and conveyance improvements.

The City outlines specific requirements to ensure wastewater facilities are available to meet demands created by new development. These requirements include preparing an infrastructure plan that identifies backbone infrastructure necessary to serve proposed development (Policy LU-3-27 of the City General Plan) and demonstrating on-site and off-site wastewater infrastructure provides sufficient capacity to serve proposed development (Policy INF-2-1 and Standards INF-2-1a and INF-2-1b of the City General Plan). New development is required to contribute its fair share portion for funding new infrastructure facilities (Policies IFP-1-3 and IFP-1-7 of the City General Plan). In addition, infrastructure improvements would be financed and/or constructed

concurrent with or prior to the completion of new development (Policy IFP-1-8 and Standard IFP-1-8a of the City General Plan).

The Level II Sewer Study fulfills the requirements identified in Mitigation Measure 3.15-2 of the 2019 SOIA EIR, which required the City of Elk Grove to prepare a Plan for Services that depicts the locations and appropriate sizes of wastewater collection and conveyance facilities and demonstrates that SASD wastewater collection and conveyance facilities will have sufficient capacity to accommodate the amount of development identified for the annexation territory. Compliance with City General Plan policies and standards identified above would also ensure implementation of Mitigation Measure 3.15-2 of the 2019 SOIA EIR.

## Conclusion

Environmental impacts related to constructing the infrastructure to serve the future development are analyzed throughout the various environmental topic specific sections of this EIR. The placement of these utilities has been considered in the other sections of this EIR, such as Section 3.4 of this EIR, “Air Quality,” Section 3.5, “Biological Resources,” Section 3.6, “Cultural and Tribal Cultural Resources,” and other sections that specifically analyze the potential for future development. Where necessary, these sections include mitigation measures that would reduce or avoid the impacts of developing infrastructure on the physical environment. There is no additional significant impact related to construction of new or expanded utilities and service systems within the Project site beyond which is comprehensively analyzed throughout this EIR. Therefore, as with the 2019 SOIA EIR, this impact is considered **less than significant**.

Impacts resulting from off-site infrastructure improvements could include, but are not limited to, short-term impacts on air quality and greenhouse gas emissions associated with construction, potential impacts on special-status plants and wildlife or sensitive habitats; potential disturbance of known or unknown cultural or paleontological resources; short-term increases in erosion and stormwater runoff; and short-term increases in construction noise levels.

### Impact 3.15-2: Increased Demand for Water Supplies.

Water supply for the Project site would be provided by the SCWA’s Zone 40. The Water Supply Master Plan calculated water demands for the proposed Project. In determining the demand assumptions to use for the proposed Project, a number of factors have been considered, including the proposed rezoning and the range of land uses (e.g., warehousing and distribution, manufacturing, retail, office) that are assumed, as well as the potential for a sports complex use for the City-owned property (which could occur through the City’s conditional use permit process). Generally, parks and sports facilities are the most intensive water user of those permitted uses within the industrial land use designation. Therefore, in order to analyze the most conservative scenario, the Water Master Plan assumed the City-owned property would be developed as a sports complex.

SCWA’s Zone 40 water-demand factors were applied to the acreage for each future land use designation that generates water use within the Project site (Wood Rogers 2020a, Brown and Caldwell 2020). As shown on

Table 3.15-4, the estimated water demand assuming development of the sports complex, commercial, industrial, and mixed uses has been conservatively estimated as 1,383 afy.<sup>1,2</sup>

Land Use Category	Unit Water Demand Factors (af/ac/yr)	Land Use (acres)	Water Demand (afy)
Mixed Use	2.15	118.9	256
Regional Commercial	2.02	57.9	117
Light Industrial	2.02	74.4	150
Heavy Industrial	2.02	143.2	289
Parks and Open Space	2.80	169.0	473
Right of Way	0.18	8.2	1.5
<b>Subtotal</b>	--	<b>571.5</b>	<b>1,287</b>
Water System Losses (7.5%)	--	--	97
<b>Total Demand</b>	--	--	<b>1,383</b>

Notes: af/ac/yr = acre-feet per acre per year; afy = acre-feet per year.  
 Source: Brown and Caldwell 2020, Wood Rogers 2020a, adapted by AECOM in 2020

The amended WSMP indicates that water supplies and demands within SCWA Zone 40 would be the same during normal, single-dry, and multiple-dry years; however, the year-to-year mix of surface and groundwater would be adjusted, as necessary, to meet the demands as part of its conjunctive use water supply program. As shown in Table 3.15-3, SCWA would have water supplies that exceed demands within Zone 40 from 2020 to 2040 in all water years, excluding the proposed Project’s water supply demand.

As discussed above, SCWA has amended its WSMP to include service for the proposed Project (Brown and Caldwell 2020). The water supply demands for the proposed Project (1,383 afy) were added to water demand projections contained in the amended WSMP and shown in Table 3.15-3. As shown in Tables 8-12, 8-13, and 8-14 of the amended WSMP, water supply is projected to be sufficient to meet demands of the proposed Project and existing and planned development in Zone 40 in normal, single-dry, and multiple dry years (Appendix B).

The City outlines specific requirements to ensure water supplies are available to meet demands created by new development. These requirements include demonstrating water supplies are available to accommodate new development plus existing development, and other approved projects in the same service area, and other projects that have received commitments for water service (Policy INF-1-1 and Standard INF-1-1a of the City General Plan).

The amended WSMP fulfills the requirements identified in Mitigation Measure 3.15-1 of the 2019 SOIA EIR, which requires demonstration that SCWA water supplies are adequate to serve the amount of future development identified in the annexation territory in addition to existing and planned development under normal, single-dry, and multiple-dry years. Furthermore, compliance with City General Plan policies and standards identified above

<sup>1</sup> This water supply demand does not reflect 2019 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requirements to reduce indoor demand for potable water by 20 percent and to reduce landscape water usage by 50 percent or water conservation measures that may be implemented by future development.

<sup>2</sup> The water supply demand for development of the City-owned property with industrial land uses is estimated as 1,333 afy (Brown and Caldwell).

would also ensure implementation of Mitigation Measure 3.15-1 of the 2019 SOIA EIR. Therefore, as with the 2019 SOIA EIR, the impact is considered **less than significant**.

**Impact 3.15-3: Increased Demand for Wastewater Treatment Facilities.**

Buildout of the proposed Project would result in new residential, commercial, and industrial development and parks and open space that would generate additional wastewater that increases demand for wastewater treatment at the SRWTP. The Level II Sewer Study assumes sewage conveyance for an estimated total of 3,429 Equivalent Single-Family Dwelling Units (ESDs), based on the SASD standard assumption of 6 ESDs per acre and 1,860 gallon per day (gpd) per acre. The Level II Sewer Study conservatively includes gross acreages and does not deduct for areas that would be in future public road rights-of-way (note, existing right-of-way for Grant Line Road has been deducted). As shown on Table 3.15-5, buildout of the proposed Project would generate an estimated 1.05 mgd of average dry-weather flow and, as calculated in the Level II Sewer Study, 2.74 mgd of peak wet-weather flow (Wood Rogers 2020b).

Land Use	Acreage	Flow Rate (gallon per day per acre)	Average Dry Weather Flow (mgd)
Mixed Use	118.9	1,860	0.12
Regional Commercial	20.0	1,860	0.22
Light Industrial	216.2	1,860	0.40
Heavy Industrial	143.2	1,860	0.27
Parks and Open Space	65.1	1,860	0.04
Right of Way	8.2	0	0
<b>Total</b>	<b>571.5</b>	<b>--</b>	<b>1.05</b>

Notes:  
 mgd = million gallons per day  
 Source: Wood Rogers 2020b

The SRWTP has a design capacity of 181 mgd with the potential to expand to 218 mgd. As of 2019, the SRWTP receives and treats an average of 115 mgd each day. When proposed Project -related wastewater flows (1.05 mgd) are combined with the current average dry-weather flows (115 mgd), implementation of the proposed Project would not result in an increase in wastewater flows that exceed the current disposal capacity of 181 mgd average dry-weather flow. The SRCSD anticipates conservation measures implemented throughout the service area would result in the existing 181 mgd average dry-weather flow capacity to be adequate for at least 40 more years (SRCSD 2014:6-2). Therefore, the SRWTP would have adequate capacity to treat wastewater flows generated by future development within the Project site in addition its existing commitments. As with the 2019 SOIA EIR, this impact is considered a **less than significant**.

**Impact 3.15-4: Increased Generation of Solid Waste and Compliance with Solid Waste Statutes and Regulations.**

Future development within the Project site could result in site clearing and the generation of various construction-period wastes, including scrap lumber, scrap finishing materials, various scrap metals, and other recyclable and nonrecyclable construction-related wastes. The 2019 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requires all construction contractors to reduce construction waste and demolition debris by



65 percent. Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials will be sorted on-site or mixed; and identifying diversion facilities where the materials collected will be taken. The Code also specifies that the amount of materials diverted should be calculated by weight or volume, but not by both (California Building Standards Commission 2019). In addition, the 2016 CALGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

The City provides recycling programs, such as curbside recycling of paper, plastics, and bottles, to reduce the volume of solid waste transported to landfills. City General Plan Policy CIF-1-3 encourages business to minimize waste in their daily operations. In addition, the Space Allocation and Enclosure Design Guidelines for Trash and Recycling (City Municipal Code Title 30, Chapter 30.90) reduces wastes by requiring businesses and multi-family residential uses to provide integrated collection areas with recycling components.

Residential solid waste in the City of Elk Grove is collected and hauled by Republic Services. Waste generated by proposed nonresidential uses could be hauled by any of a number of permitted haulers as selected by the individual developer, and wastes would be hauled to a variety of permitted landfills. Solid waste is collected by private franchised haulers and disposed of at various facilities, most of which have more than 70 percent capacity remaining, including Altamont Landfill & Resource Recovery, Recology Hay Road, Bakersfield Metropolitan Sanitary Landfill, Foothill Sanitary Landfill, Forward Landfill, Inc., Keller Canyon Landfill, L and D Landfill, North County Landfill, Potrero Hills Landfill, and Sacramento County Landfill (Kiefer) (City of Elk Grove 2020). The area of the Project site identified for development of mixed uses could generate approximately 3.8 tpd of solid waste.<sup>2</sup> Future development of commercial and industrial uses could generate approximately 58.8 tpd of solid waste.<sup>3</sup> Combined, these landfills have a large volume of landfill capacity (150 million cubic yards) available to serve future development. The closure dates of the Kiefer Landfill and L and D Landfill are anticipated to be approximately January 1, 2064 and January 1, 2031, respectively.

Future development would comply with all federal, State, and local solid waste statutes and regulations, including Compliance with the CalGreen Code; the City's the Construction and Demolition Debris Reduction, Reuse, and Recycling Ordinance; Space Allocation and Enclosure Design Guidelines; Assembly Bill 1826 (mandatory commercial organics recycling); and other City recycling programs. The Kiefer Landfill, L and D Landfill, and Yolo County Central Landfill have sufficient landfill capacity available to accommodate solid-waste disposal needs for future development within the Project site. Therefore, as with the 2019 SOIA EIR, impacts related to sufficient landfill capacity and compliance with applicable statutes and regulations related to solid waste are considered **less than significant**.

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<sup>2</sup> Based on CalRecycle's estimated 2018 annual per capita disposal rate of 3.3 pounds per resident per day, the estimated total population for the proposed project (2,304 persons) would generate approximately 7,600 pound per day of solid waste, which equates to 3.8 tpd (CalRecycle 2020).

<sup>3</sup> Based on CalRecycle's estimated 2018 annual per capita disposal rate of 15.1 pounds per employee per day and an estimated 7,788 employees for the proposed project, approximately 117,600 pound per day of solid waste would be generated per day, which equates to 58.8 tpd (CalRecycle 2020).

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