3.10 UTILITIES AND SERVICE SYSTEMS

This section describes current conditions relative to utilities and service systems in Elk Grove. It also includes a description of capacities, analysis of environmental impacts, and recommendations for mitigation measures for any significant or potentially significant impacts that could result from implementation of the Project. The primary source of information used for this analysis is the General Plan EIR (City of Elk Grove 2018, 2019), as well as applicable updated regulatory and environmental setting conditions.

No comments pertaining to utilities and service systems were received in response to the notice of preparation (NOP).

3.10.1 Regulatory Setting

WATER

FEDERAL

Safe Drinking Water Act

As mandated by the Safe Drinking Water Act (Public Law 93-523), passed in 1974, the US Environmental Protection Agency (EPA) regulates contaminants of concern to domestic water supply. Such contaminants are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA primary and secondary maximum contaminant levels (MCLs). MCLs and the process for setting these standards are reviewed every 3 years. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting drinking water MCLs. EPA has delegated responsibility for California's drinking water program to the State Water Resources Control Board Division of Drinking Water (SWRCB-DDW). SWRCB-DDW is accountable to EPA for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by EPA.

STATE

Urban Water Management Plan

In 1983, the California Legislature enacted the Urban Water Management Planning Act (UWMPA) (California Water Code Sections 10610–10656). The UWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that provides more than 3,000 acre-feet (af) of water annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. This effort includes the adoption of an urban water management plan (UWMP) by every urban water supplier and an update of the plan every 5 years on or before December 31 of every year ending in a five or zero. The UWMPA has been amended several times since 1983, with the most recent amendment occurring with SB 318 in 2004. With the passage of SB 610 in 2001, additional information is required to be included as part of an urban water management plan if groundwater is identified as a source of water available to the supplier. An urban water supplier is required to include in the plan a description of all water supply projects and programs that may be undertaken to meet total projected water use. The UWMPA and SB 610 are interrelated; the UWMP is typically relied upon to meet the requirements of SB 610.

California Safe Drinking Water Act

The SWRCB-DDW is responsible for implementing the federal SDWA and its updates, as well as California statutes and regulations related to drinking water. State primary and secondary drinking-water standards are promulgated in California Code of Regulations (CCR) Title 22, Sections 64431–64501.

The California Safe Drinking Water Act (CA SDWA) was passed in 1976 to build on and strengthen the federal SDWA. The CA SDWA authorizes DHS to protect the public from contaminants in drinking water by establishing MCLs that are at least as stringent as those developed by EPA, as required by the federal SDWA.

Groundwater Management Act

The Groundwater Management Act was first introduced in 1992 as Assembly Bill (AB) 3030 and has since been modified by Senate Bill (SB) 1938 in 2002, AB 359 in 2011, and the Sustainable Groundwater Management Act (SGMA) (SB 1168, SB 1319, and AB 1739) in 2014. The intent of the acts is to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions and to provide a methodology for developing a groundwater management plan.

SGMA became law on January 1, 2015 and applies to all groundwater basins in the State (Water Code Section 10720.3). By enacting the SGMA, the legislature intended to provide local agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater within their jurisdiction (Water Code Section 10720.1).

NPDES Permit for the Sacramento Regional Water Treatment Plant

The quality of the effluent that can be discharged to waterways in the Sacramento area by the Sacramento Regional Wastewater Treatment Plant (SRWTP) is established by the Central Valley RWQCB through waste discharge requirements (WDRs) that implement the NPDES permit. WDRs are updated at least every 5 years. A new permit must be issued in the event of a major change or expansion of the facility. In April 2016, the Central Valley RWQCB issued Order No. R5-2016-0020, NPDES No. CA 0077682, to Sacramento Regional County Sanitation District (Regional San) for its Sacramento Regional Wastewater Treatment Plant (SRWTP), which treats wastewater from its service area before discharging the treated effluent to the Sacramento River. The water quality objectives established in the Central Valley RWQCB Basin Plan are protected, in part, by Order No. R5-2016-0020, NPDES No. CA 0077682. Currently, the SRWTP is permitted for a discharge of up to 181 million gallons per day (mgd) of treated effluent to the Sacramento River.

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 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 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

Sacramento Central Groundwater Authority

The Sacramento Central Groundwater Authority (SCGA) manages groundwater in the Central Basin portion of the South American Subbasin. The SCGA was formed in 2006 through a joint powers agreement signed by the Cities of Elk Grove, Folsom, Rancho Cordova, and Sacramento and the County of Sacramento. 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 for facilitating a conjunctive use program. The framework for maintaining groundwater resources in the Central Basin is the Sacramento County Water Agency (SCWA) Groundwater Management Plan, which 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 wells and agricultural well owners from declining groundwater levels resulting from increased groundwater pumping due to new development in the basin (SCWA 2016a).

Water Forum Agreement

The Water Forum is made up of a diverse group of businesses, agricultural leaders, environmentalists, citizen groups, water managers, and local governments from Sacramento, Placer, and El Dorado counties. These stakeholders came together in 2000 to form an agreement for water management with the goals of providing a reliable and safe water supply for the region's economic health through the year 2030 and preserving the fishery, wildlife, recreation, and aesthetic values of the lower American River. The Water Forum Agreement was formalized through a Memorandum of Understanding whereby all signatories agreed to carry out the actions specified for them. SCGA relied on the negotiated volume of groundwater production referred to in the Water Forum Agreement as the basis for the groundwater yield thresholds.

Sacramento County Water Agency 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 Sacramento County Water Agency. 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. 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, cited in City of Elk Grove 2018). The existing City limits are within the boundaries of the Zone 40 WSMP, but the West and South Study Areas are not located in the buildout area identified in this plan.

Sacramento County Water Agency Zone 40 2016 Water Supply Infrastructure Plan

In 2006, SCWA prepared the Water Supply Infrastructure Plan (WSIP), which identified the water supply infrastructure needs necessary to support buildout of Zone 40. 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 (includes water demand factors, growth projections, and estimates of projected water demand and supply (SCWA 2016b, cited in City of Elk Grove 2018). It also identifies recommended infrastructure types, locations, and timing to meet future demand through buildout. The West and South Study Areas are not located within the buildout area of the 2016 WSIP.

South American Subbasin Groundwater Sustainability Plan

The Groundwater Sustainability Agencies that consists of the SCGA, Omochumne-Hartnell Water District (OHWD), Sloughhouse Resource Conservation District, North Delta GSAs, Reclamation District 551 (RD 551), and Sacramento County adopted the 2021 *South American Subbasin Groundwater Sustainability Plan* (SASb GSP) in compliance with SGMA. The SASb GSP identifies that the long-term average annual sustainable groundwater yield of the South American Subbasin is 235,000 AFY. Project and management actions that would contribute to the achievement of the sustainability goal of the SASb GSP include the following:

• Existing projects that include diversification of water supplies (Freeport Regional Water Project, Vineyard Surface Water Treatment Plant, and conjunctive use improvements).

▶ Near-term planned project that include the Sacramento Regional County Sanitation District Harvest Water project, OHWD Groundwater Recharge Project, Regional Conjunctive Use Program, and Sacramento Area Flood Control Agency Flood-MAR. (Northern Delta Groundwater Sustainability Agency et al. 2021: 4-1 – 4-22)

The SASb GSP is currently under review by the California Department of Water Resources.

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).

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

EGMC 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.

Construction and Demolition Debris Reduction, Reuse, and Recycling

EGMC 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.

Commercial Refuse Hauler Fee

EGMC 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 General Plan

The following policies and standards are applicable to the Project.

- ▶ 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.
 - 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 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 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.

City of Elk Grove Municipal Code

EGMC Chapter 14.10: Water Efficient Landscape Requirements

EGMC Chapter 14.10 identifies water management practices and water waste prevention for existing landscapes. It specifies requirements for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction and rehabilitated projects.

EGMC Title 30: Solid Waste Management

EGMC Chapter 30.50 identifies requirements for commercial hauling such as required qualifications, vehicle specifications, and transportation specifications. Chapter 30.70 identifies requirements related to debris reduction, reuse, and recycling for new construction and demolition projects in the City. Specifically, Chapter 30.70 identifies requirements to recycle or divert no less than 65 percent of construction material and complete a waste management plan. Chapter 30.90 identifies space allocation and enclosure design guidelines for trash and recycling. For example, guidelines are provided for location and dimension of commercial trash and recycling enclosures.

3.10.2 Environmental Setting

WATER SUPPLY

This subsection provides information on water supplies that would be used by and may be available to proposed new development proposed under the Project. The Update of VMT Standards involves updated language and information regarding VMT thresholds and guidelines, and would not require any water supply for implementation. The VMT thresholds are not discussed further in this section. This subsection also discusses the availability and adequacy of existing and planned water treatment and conveyance infrastructure.

There are three water service providers in the Elk Grove Planning Area: SCWA; Elk Grove Water District (EGWD), which is a department of the Florin Resource Conservation District; and the OHWD. 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.

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 2022). 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 boundary is the Cosumnes River. 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 City 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 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 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. There is not a specific actual delivery identified for portions of the City served by Zone 40 supply. Zone 40 groundwater supplies consist of a total existing capacity of 68.17 million gallons per day (MGD) with an anticipated expansion of 63.83 MGD (EGWD 2021).

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.

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: 6-2). The City is not located in the POU.

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 2021).

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.

The South American Subbasin is not in critical overdraft oradjudicated. The Groundwater Sustainability Agencies that consist of the Sacramento Central Groundwater Authority (SCGA), Omochumne-Hartnell Water District (OHWD), Sloughhouse Resource Conservation District, North Delta GSAs, Reclamation District 551 (RD 551), and Sacramento County adopted the 2021 *South American Subbasin Groundwater Sustainability Plan* (SASb GSP) in compliance with SGMA. The SASb GSP identifies that the long-term average annual sustainable groundwater yield of the South American Subbasin is 235,000 AFY. Project and management actions that would contribute to the achievement of the sustainability goal of the SASb GSP include the following:

- ► Existing projects that include diversification of water supplies (Freeport Regional Water Project, Vineyard Surface Water Treatment Plant, and conjunctive use improvements).
- ▶ Near-term planned projects that include the Sacramento Regional County Sanitation District Harvest Water project, OHWD Groundwater Recharge Project, Regional Conjunctive Use Program, and Sacramento Area Flood Control Agency Flood-MAR. (Northern Delta Groundwater Sustainability Agency et al. 2021: 4-1 4-22).

The GSP estimate for the long-term sustainable average annual yield of 235,000 AFY factors SCWA's groundwater needs, as documented in SCWA's Water Supply Assessment provided in Appendix H (SCWA 2023).

Other Water Supply Sources Recycled Water

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: 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: 6–14).

SCWA Water Supply and Demand

The SCWA 2020 UWMP (2021) provides estimates of existing and future water supply availability and demand for the areas it serves. In 2020, retail deliveries within Zone 40 were approximately 31,000 AFY (SCWA 2021). The projected reasonably available water supply volume for SCWA's water systems through 2045, during a normal climate year considering facility capacity constraints, is presented in Table 3.10-1. 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 2021, Table 5-3). The projected annual availability of each water supply is constrained by available water infrastructure capacity (SCWA 2016a: 6-17; 2021).

Table 3.10-1 SCWA's Zone 40 Reasonably Available Volume of Water Supplies Compared to Demand (Normal Year)

Supply-Demand	2025	2030	2035	2040	2045
Normal Year	•				-
Supply total	159,096	164,096	174,096	174,096	174,096
Demand total	46,235	54,494	62,006	68,143	74,388
Surplus	112,861	109,602	112,090	105,953	99,708

Source: SCWA 2021, Table 5-3.

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 2020 UWMP (SCWA 2021: Table 3-31) provides projections of "reasonably available" groundwater volume, based on groundwater supply capacity, with safe yield not quantified. As shown in Table 3.10-2, the reasonably available groundwater volume would remain the same for normal, singledry, and multiple-dry year scenarios, ranging from 41,000 AFY in 2025, increasing to 46,000 AFY in 2030, and 56,000 AFY in 2035, 2040, and 2045. 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 2021: Table 3-31). The SASb GSP identifies that the long-term sustainable groundwater yield of the South American Subbasin is 235,000 AFY.

Table 3.10-2 Zone 40 Projected Groundwater Production through 2045 (acre-feet per year)

Total S	Supply	2025	2030	2035	2040	2045
	Normal	41,000	46,000	56,000	56,000	56,000
	Single Dry Year	41,000	46,000	56,000	56,000	56,000
	Year 1	41,000	46,000	56,000	56,000	56,000
Year ght	Year 2	41,000	46,000	56,000	56,000	56,000
Multi-Year Drought	Year 3	41,000	46,000	56,000	56,000	56,000
Μ	Year 4	41,000	46,000	56,000	56,000	56,000
	Year 5	41,000	46,000	56,000	56,000	56,000

Source: SCWA 2021, Table 3-31.

A comparison of supply and demand for single-dry and multiple-dry year scenarios for SCWA's water supply use is presented in Table 3.10-3. 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.² The demands are the same as the normal year demands, but as explained for the single-dry year scenario, the second through fifth year demands might be lower if demand reduction mandates are imposed by the State (SCWA 2021: Tables 5-3 and 5-4).

Table 3.10-3 SCWA's Zone 40 Projected Supply-Demand Comparison for Single-Dry and Multiple-Dry Year Scenarios

Supply-Demand	2025	2030	2035	2040	2045		
Single-Dry Year							
Supply total	87,199	92,676	103,926	105,176	107,676		
Demand total	48,547	57,219	65,106	71,551	78,107		
Surplus	38,652	35,457	38,820	33,625	29,569		
Multiple-Dry Year – First Year							
Supply total	111,954	118,386	132,136	135,886	143,386		
Demand total	48,547	57,219	65,106	71,551	78,107		
Surplus	63,407	61,167	67,030	64,335	65,279		

Supply-Demand	2025	2030	2035	2040	2045
Multiple-Dry Year – Second Year			<u> </u>	-	<u> </u>
Supply total	99,576	105,531	118,031	120,531	125,531
Demand total	48,547	57,219	65,106	71,551	78,107
Surplus	51,029	48,312	52,925	48,980	47,424
Multiple-Dry Year – Third Year	•			•	
Supply total	87,199	92,676	103,926	105,176	107,676
Demand total	48,547	57,219	65,106	71,551	78,107
Surplus	38,652	35,457	38,820	33,625	29,569
Multiple-Dry Year – Fourth Year	r				
Supply total	95,054	100,531	111,781	113,031	115,531
Demand total	48,547	57,219	65,106	71,551	78,107
Surplus	46,507	43,312	46,675	41,480	37,424
Multiple-Dry Year – Fifth Year					
Supply total	107,431	113,386	125,886	128,386	133,386
Demand total	48,547	57,219	65,106	71,551	78,107
Surplus	58,884	56,167	60,780	56,835	55,279

Source: SCWA 2021, Tables 5-3 and 5-4.

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 though 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 related to the City 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 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).

Planned Facilities

Currently the SCWA is not planning to develop any additional water supply sources in its service area. However, SCWA's planned potable projects include improvements to its treatment and delivery systems, specifically the Vineyard Water Treatment Plants (Phase 2), which would provide an additional 50 mgd of capacity to the SCWA system to deliver water throughout the Zone 40 area (SCWA 2021).

Elk Grove Water District

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 in the City limits. 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 2021, p. 3-1). The EGWD provides water service to approximately 12,890 residential, commercial/institutional, irrigation, and industrial service connections (EGWD 2021: 2-1).

The EGWD covers approximately 3 percent of the entire Central Basin. Considering 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 current needs and anticipated future demand (EGWD 2016: Table 4-5, Table 4-6, p. 3-10 and p. 4-10). The EGWD assumed most growth would be in Service Area 2, which would consist of approximately 2,900 new residential accounts, including single-family and multi-family, and an anticipated future water use forecast of 1,400 acre-feet per year of new residential and non-residential use by 2045, for a total of 8,180 acre-feet per year for both existing and projected new future water use (EGWD 2021). EGWD is located within the South American Subbasin of the Sacramento Valley Groundwater Basin that has a GSP. The GSP for the South American Subbasin estimates a long-term sustainable average annual yield of 235,000 AFY and provided for SCWA's groundwater needs (SASb GSAs 2021).

Anticipated development because of the proposed Project within the Elk Grove Old Town Specific Planning Area is located within the EGWD's service area (EGWD 2021: 2-2).

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 City, 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). As noted under the discussion of the SASb GSP, groundwater modeling identify a potential -100 to -6,200 acre-foot per year impact to groundwater storage when climate change was factored future groundwater storage.

WASTEWATER

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 2022). Regional San is in the process of merging with the Sacramento Area Sewer District, though the merger is not expected to be completed for several years.

Sacramento Area Sewer District

The Sacramento Area Sewer District (SacSewer) serves as one contributing agency to Regional San. The SacSewer 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. SacSewer owns, operates, and maintains a network of 4,500 miles of main line and lower lateral pipes within a 270 square-mile area (SacSewer 2022).

SacSewer 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 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. Wastewater is treated by accelerated physical and natural biological processes before it is discharged to the Sacramento River (Regional San 2022).

An upgrade of the SRWTP is currently under way. The upgrade, known as the EchoWater Project, is required to be built by 2023 to meet new water quality requirements that were issued by the Central Valley RWQCB as part of Regional San's 2010 NPDES permit. The requirements are designed primarily to help protect the Delta ecosystem downstream by removing most of the ammonia and nitrates and improving the removal of pathogens from wastewater discharge. The upgrade will include deployment of new treatment technologies and facilities and will increase the quality of effluent discharged into the Sacramento River and ensure that the SRWTP discharge constituents are below permitted discharge limits specified in the NPDES permit. Flows to the SRWTP have decreased because of water conservation efforts over the last 15 years. Further, adequate capacity for wastewater is anticipated well into the future. Flows in 2021 were approximately 124 million gallons per day (mgd), compared to the current permitted capacity of 181 mgd. It is not anticipated that Regional San will need to consider further improvements to the SRWTP until after 2050. The SRWTP has also been master planned to accommodate additional growth beyond the planning year to 350 mgd ADWF of treatment capacity (Regional San 2008: 15; 2022).

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 includes primarily agriculture and rural residential land uses, are generally served by individual septic systems.

SOLID WASTE

Republic Services, formerly known as Allied Waste, provides residential solid waste services in the City under an exclusive franchise agreement. Solid waste generated by commercial and multifamily residential developments is served by registered commercial haulers or county-authorized recyclers (City of Elk Grove 2018).

Landfill Capacity

Solid waste generated in the City is taken to a variety of landfills. Table 3.10-4 shows landfills used by the City and the permitted and remaining capacities of those landfills. As shown in Table 3.10-4, half of the landfills serving City waste haulers have over 80 percent remaining capacity (CalRecycle 2022).

Table 3.10-4 Disposal Facilities and Remaining Capacities

Site Name	Remaining Capacity	Percentage of Remaining Capacity (%)	Remaining Capacity Date	Total Capacity
Altamont Landfill & Resource Recovery	65,400,000	52.6	6/30/2016	124,400,000
Foothill Sanitary Landfill	125,000,000	90.6	6/10/2010	138,000,000
Sacramento County Landfill (Kiefer)	112,900,000	96.2	9/12/2005	117,400,000
L and D Landfill	3,115,900	15.2	7/2/2020	20,500,000
Bakersfield Metropolitan (Bena) SLF	32,808,260	61.9	7/1/2013	53,000,000
North County Landfill & Recycling Center	35,400,000	85.9	12/31/2009	41,200,000
Recology Hay Road	30,433,000	82.3	7/28/2010	37,000,000

Site Name	Remaining Capacity	Percentage of Remaining Capacity (%)	Remaining Capacity Date	Total Capacity
Keller Canyon Landfill	63,408,410	84.5	11/16/2004	75,018,280
Forward Landfill, Inc.	24,720,669	41.8	1/31/2020	59,160,000
Potrero Hills Landfill	13,872,000	16.7	1/1/2006	83,100,000

Source: CalRecycle 2022.

3.10.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

This section analyzes utility and service system impacts that may occur from the proposed amendments to the General Plan associated with the Project. The evaluation of utility and service impacts is based on review of published information and reports, and consultation with utility service providers. The analysis considers the impact analysis provided in the General Plan EIR, and focused review of the extent of land use and density change associated with the Project. The analysis is focused on whether the Project would result in impacts on utilities and service systems not previously considered in the General Plan EIR. Energy impacts are addressed in Section 3.4, "Energy."

Off-site infrastructure impacts are not evaluated in this Draft SEIR because approval of the Project would not trigger the construction of infrastructure improvements.

Water Demand

Table 5.14-4 of the General Plan EIR shows the water demand factors for each General Plan land use designation and calculates the water demand for each land use based on acreage. Using the water demand factors for each existing and proposed land use, this Draft SEIR calculates the difference in water demand that would occur with implementation of the land use changes because of the Project.

Wastewater Treatment and Disposal

For purposes of this analysis, as is standard practice in the industry, the estimated additional wastewater that would be generated by the Project is assumed to be equal to the additional water demand.

THRESHOLDS OF SIGNIFICANCE

A utilities and service systems impact is considered significant if implementation of the Project would do any of the following:

- require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- ▶ 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 that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments;
- generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure;
- negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals;
- conflict with federal, state, and local management and reduction statutes and regulations related to solid waste;
 and/or
- conflict with or obstruct implementation of a sustainable groundwater management plan.

ISSUES NOT DISCUSSED FURTHER

Impacts to Water Supply and Treatment

The VMT Standards Update will revise VMT thresholds that are consistent with the City's most recent VMT model. The proposed VMT Standards Update would not result in development, infrastructure improvements, or the demand for water. There would be no impact to water supply and treatment, and this impact is not discussed further.

Impacts to Wastewater

The VMT Standards Update will revise VMT thresholds that are consistent with the City's most recent VMT model. The proposed VMT Standards Update would not result in development, infrastructure improvements, or produce wastewater. There would be no impact to wastewater, and this impact is not discussed further.

Impacts to Solid Waste

The VMT Standards Update will revise VMT thresholds that are consistent with the City's most recent VMT model. The proposed VMT Standards Update would not result in development, infrastructure improvements, or produce solid waste. There would be no impact to solid waste, and this impact is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.10-1: Adverse Impacts on Sufficient Water Supply, Infrastructure, and Treatment

General Plan Impact 5.12.1.1 identified significant and unavoidable water supply impacts because of the anticipated new water demand as a result of proposed development located outside of City limits but within the Study Areas. Implementation of the Project could generate additional demand for water supplies from increased development. Development facilitated by the Project would result in 3.12 mgd of water demand. However, the additional demand is minor compared with existing and projected water demand and water supplies. Therefore, the additional water demand resulting from the Project would not result in a new or substantially more severe water supply impacts than was addressed in the General Plan EIR. Project impacts would remain **significant and unavoidable**.

LEA Community Plan Area

Implementation of the Project would not, in and of itself, construct new residential, commercial, and industrial development in the City. However, the Project would promote the construction of additional housing, commercial, and industrial development in the LEA Community Plan Area through the proposed land use changes.

Implementation of the Project would increase the number of dwelling units in the City by up to 1,851 units, including in the LEA Community Plan Area, over development anticipated in the adopted General Plan through amendments to General Plan land uses for the overall Project (LEA Community Plan Area and other land use designation changes). Table 5.12-4 of the General Plan EIR shows the water demand factors for each General Plan land use designation and calculates the water demand for each land use based on acreage. Using the water demand factors for each existing and proposed land use, Table 3.10-5 shows the new water demand that would occur with implementation of the land use changes as proposed by the Project. As shown below, the Project would result in a water demand of approximately 3,505 AFY.

Table 3.10-5 Anticipated Water Demand under the General Plan Amendments

General Location	Project Area	Acreage	Proposed General Plan Designation	Demand Factor	Proposed General Plan Designation Water Demand (AF/year)
North of Kammerer Road	Northern portion of LEA	17.5	CC	2.02	35
		53.7	EC	2.02	108
	Community	47.3	ER	1.37	65

General Location	Project Area	Acreage	Proposed General Plan Designation	Demand Factor	Proposed General Plan Designation Water Demand (AF/year)
	Plan Area & Old	79.9	HDR	3.33	266
	Town Policy Area	354.7	LDR	2.44	865
	Alea	53.1	LI	2.02	107
		122.8	MDR	2.89	354
		114.7	P/OS	2.80	321
		32.2	PS	0.81	26
		113.0	RMC	0.81	92
		8.8	RMU	2.44	21
		42.7	T-3	2.44	214
		71.8	T-3R	2.44	175
		57.3	T-4	2.89	165
		13.7	T-5	3.33	4646
		20.8	VCMU	2.15	45
		39.8	Tribal Trust	NA	NA
		63.7	Zoo ¹	NA	223
Subtotal					2,906
	South and West	6.64	P/OS	2.80	19
	Study Areas & southern	105.03	T-3	2.44	256
South of Kammerer Road	portion of LEA	96.73	T-3R	2.44	236
	Community	24.13	T-4	2.89	70
	Plan Area	5.46	T-5	3.33	18
Subtotal					599
Total					3,505

¹ Table conservatively assumes operation of the New Zoo in Elk Grove, which is a separate City project.

Calculated by Ascent using water demand factors shown in the LEA WSA (SCWA 2023).

The General Plan EIR noted that water demand and supply projections associated with the development within the existing City limits under the prior General Plan were accounted for in SCWA's 2015 UWMP (City of Elk Grove 2018:5.12-21). However, the updated 2020 UWMP estimates demands associated with the current General Plan through 2045. Therefore, almost all the new and unplanned demand under the General Plan would be the result of future development in the Study Areas.

General Plan EIR Table 5.12-3 presented SCWA's projected supply and demand comparison for single-dry and multiple-dry year scenarios. For 2020, SCWA estimates a water demand of 52,241 AFY with projected surpluses ranging from 22,959 AFY to 35,659 AFY. For 2040, SCWA estimates a water demand of 86,047 AFY with surpluses ranging from 4,752 AFY to 18,853 AFY. The 2020 UWMP estimates a water demand in 2040 of 68,143 AFY for Zone 40, which includes the LEA Community Planning Area within the City limits (SCWA 2023).

As calculated in Table 3.10-5 above, the Project would require a total water demand of approximately 3,505 AFY. The Water Supply Assessment (WSA) prepared for the LEA Community Plan Area determined that the LEACP Study Area (LEA Community Plan Area within the City limits) would have a water demand of approximately 3,669 AFY (SCWA 2023). However, the LEACP Study Area includes the Southeast Policy Area (as revised), South Pointe Policy Area, and portions of the Lent Ranch Special Plan Area. Because the WSA includes developments outside the LEA Community

Plan Area the estimated AFY in the WSA exceeds that for the Project (see Appendix H). This analysis conservatively assumes all new water demand for the proposed land use changes and does not account for the difference between water demand for existing and proposed land uses. As identified in Table 3.10-5, approximately 2,906 AFY of this demand would occur within the existing City boundaries (north of Kammerer Road) currently serviced by SCWA and EGWD. Water would be supplied for the project through a combination of groundwater and surface water, with a small portion of recycled water. Initial water demands for the project would be met with groundwater. Surface water would be provided from existing entitlements diverted from the Sacramento River and treated at the Vineyard Surface Water Treatment Plant. Therefore, SCWA surplus water supplies would be adequate to accommodate project demand while still meeting the current and projected water demands of existing customers in the next 20 years (SCWA 2023). Project water demands outside of the City boundaries (south of Kammerer Road) are estimated at 599 AFY and would occur outside of the existing service boundary of SCWA. This would increase anticipated water demands of the Study Areas identified in the General Plan EIR.

Any subsequent development described in the Project would be subject to the Elk Grove General Plan policies and actions that assist in the provision of water treatment facilities and water supply. General Plan 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. This policy would ensure that water treatment and infrastructure is not compromised by proposed development identified for the Project. Additionally, the Project is not expected to alter how water infrastructure is anticipated to be extended in the LEA Community Plan Area. Water deliveries to the LEA Community Planning Area would be made through connecting to the existing water supply pipeline mains surrounding the LEA Community Planning Area and infrastructure internal to the development as shown in Section 2.0, "Project Description" (SCWA 2023). Therefore, Project would not result in new or substantially more severe impacts than was addressed in the General Plan EIR.

Portions of the LEA Community Plan Area have been previously analyzed in certified CEQA documents for the following projects: Southeast Policy Area Strategic Plan, Laguna Ridge Specific Plan, SouthPoint Policy Area/Sterling Meadows, and Lent Ranch Marketplace Special Planning Area. The Laguna Ridge Specific Plan adopted Mitigation Measure MM 4.6.1.1a requires demonstration of adequate water supplies and infrastructure consistent with the Laguna Ridge Specific Plan Water Study, while Laguna Ridge Specific Plan adopted Mitigation Measure MM 4.6.1.1b requires the use of water conservation measures in landscaping and building design. As identified above, a WSA has been prepared that identifies adequate water supplies and infrastructure facilities for the LEA Community Plan Area. The Elk Grove Municipal Code includes requirements for water conservation in project design, such as Municipal Code Chapter 14.10 that identifies water management practices and water waste prevention for existing landscapes. It specifies requirements for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction and rehabilitated projects. Therefore, no additional mitigation is required in the LEA Community Plan Area for water supply provision.

The General Plan EIR concluded that no additional feasible mitigation was available beyond compliance with General Plan policies and implementation of Mitigation Measure 5.12.1.1 (which, as discussed above, is only applicable to Study Area lands outside of the existing City boundaries) and concluded that Impact 5.12.1.1 was significant and unavoidable. While additional water demand from implementation of the Project would add to identified significant and unavoidable water supply impacts associated with General Plan Study Areas, it would not result in a substantially more severe impacts regarding water supply than was addressed in the General Plan EIR. Project impacts would therefore remain significant and unavoidable.

General Plan Land Use Designation Amendments

Increased water demand because of the increased population growth and housing development anticipated from proposed land use amendments within the Old Town Policy Area is included in the overall population and development growth associated with the Project. EGWD currently supplies water to the Old Town Policy Area and would not require any changes to the City's service area boundary. As shown in Table 3.10-5, the Project would require a total water demand of approximately 3,505 AFY. Only a minor portion of the 2,906 AFY water demand would be needed in the Old Town Policy Area. EGWD has 9,168 AFY of groundwater available within its service areas. 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 current needs and anticipated future demand (EGWD 2016: Table 4-5, Table 4-6, p. 3-10 and p. 4-10). The additional water demand from implementation of the proposed General Plan land use designation amendments for the Old Town Policy Area would not result in a new or substantially more severe impacts regarding water supply than was addressed in the General Plan EIR. Project impacts would therefore remain **significant and unavoidable**.

Grant Line Road Precise Roadway Study

Development of Grant Line Road would not result in additional water demand. **No impact** would occur. Implementation of the Grant Line Road Precise Roadway Study would not result in a new or substantially more severe impacts regarding water supply than was addressed in the General Plan EIR.

South and West Study Areas

Increased water demand because of the increased population growth and housing development proposed under the South and West Study Areas are included in the overall population and development growth associated with the Project. The South and West Study Areas are not within SCWA's current service area. Development south of Kammerer Road would require additional water demand and infrastructure not accounted for in SCWAs UWMP. As shown in Table 3.10-5, the projected water demand for the Project area located outside of SCWA's service area (south of Kammerer Road) are estimated to be approximately 599 AFY. This analysis conservatively assumes all new water demand south of Kammerer Road and does not account for the difference between water demand for existing and proposed land uses. General Plan EIR Impact 5.12.1.1 evaluated the sufficiency of water supplies to serve up to approximately 48,000 new homes in South and West Study Areas, and noted that implementation of the General Plan would increase demand for domestic water supply, which could result in the need for additional water supplies. General Plan 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.

Mitigation Measure 5.12.1.1 was incorporated to reduce potential effects from additional water supply from SCWA, which is only applicable to Study Area lands in the City's Planning Area that would be annexed into the City. Since the South and West Study Areas would be annexed into the City, this measure would apply to all anticipated new housing developments in both of these Study Areas as a result of the Project. While additional water demand from implementation of the Project would add to identified significant and unavoidable water supply impacts associated with General Plan Study Areas, it would not result in a substantially more severe impacts regarding water supply than was addressed in the General Plan EIR. Project impacts would remain significant and unavoidable.

Mitigation Measures

No additional mitigation is required beyond compliance General Plan Policy INF-1-1 and Mitigation Measure 5.12.1.1.

Impact 3.10-2: Adverse Impacts on Wastewater Treatment Capacity

General Plan EIR Impact 5.12.2.1 evaluated whether implementation of the General Plan would increase demand for wastewater treatment. General Plan EIR Impact 5.12.2.2 evaluated whether implementation of the General Plan would require the construction of new or expanded wastewater infrastructure, which could result in impacts to the physical environmental effects. The analyses both concluded that while the General Plan would increase demand for wastewater treatment, facility plans would have sufficient capacity to serve the additional wastewater; the impacts were found to be less than significant. Development facilitated by the Project could generate approximately 3.12 mgd of wastewater that would increase wastewater generation anticipated under the adopted General Plan. The SRWTP has adequate capacity to accommodate additional growth. Therefore, the additional wastewater services resulting from the provision of new development and an increase in residents as part of the Project would not result in a new or substantially more severe impacts than was addressed in the General Plan EIR. Project impacts would remain less than significant.

LEA Community Plan Area

As discussed in Impact 3.10-1 and shown in Table 3.10-5 above, development facilitated by the Project north of Kammerer Road would result in a water demand of 2,960 AFY. Based on this water demand, development facilitated by the Project (LEA Community Plan Area and other General Plan land use designation changes) could result in approximately 2.79 mgd of wastewater generated.

As noted above, flows to the SRWTP have decreased because of water conservation efforts over the last 15 years. Further, adequate capacity for wastewater is anticipated well into the future. Flows in 2021 were approximately 124 mgd, compared to the more current permitted capacity of 181 mgd (Regional San 2022). It is not anticipated that Regional San will need to consider further improvements to the SRWTP until after 2050. The SRWTP has been master planned to accommodate additional growth beyond the planning horizon to 350 mgd ADWF of treatment capacity (Regional San 2008:15).

Planned facility expansion 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: 14). As a result, additional wastewater generation associated with the Project would not exceed capacity of the treatment plant.

Portions of the LEA Community Plan Area have been previously analyzed in certified CEQA documents for the following projects: Southeast Policy Area Strategic Plan, Laguna Ridge Specific Plan, SouthPoint Policy Area/Sterling Meadows, and Lent Ranch Marketplace Special Planning Area. The Laguna Ridge Specific Plan adopted Mitigation Measure MM 4.6.2.1 requires demonstration of a permanent wastewater system consistent with the Preliminary Sewer Master Plan for the Laguna Ridge Specific Plan. As identified above, there is adequate wastewater capacity for the LEA Community Plan Area. Therefore, no additional mitigation is required in the LEA Community Plan Area for wastewater service.

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, these impacts are considered throughout this Draft SEIR. The additional demand from implementation of the Project would not result in a new or substantially more severe impacts regarding wastewater treatment capacity within the LEA Community Plan Area than was addressed in the General Plan EIR. This impact would remain less than significant.

General Plan Land Use Designation Amendments

Increased water demand or generation of wastewater as a result of development anticipated from proposed land use amendments within the Old Town Policy Area is included in the overall population and development growth associated with the Project. Additionally, the Old Town Policy Area is located within SacSewer and Regional San's wastewater service area and would not require any changes to the service area boundary. Additionally, the SRWTP has been master planned to accommodate additional growth, including development that is anticipated in the Old Town Policy Area because of proposed land use amendments. Therefore, the additional wastewater services resulting from the provision of new housing as part of the Project would not result in a new or substantially more severe impacts. This impact would be remain less than significant.

Grant Line Road Precise Roadway Study

Development of Grant Line Road would not result in additional generation of wastewater. **No impact** would occur. Development facilitated by the Precise Roadway Study would not result in a new or substantially more severe impacts.

South and West Study Areas

Increased generation of wastewater in the South and West Study Areas are included in the overall population and development growth associated with the Project. The South and West Study Areas, which are located outside of City limits and the SRWPT boundary, would be subject to General Plan policies and mitigation measures identified in the

General Plan EIR to reduce effects associated with wastewater generation once these areas are annexed into the City, prior to development. As shown in Table 3.10-5, the projected water demand for the area south of Kammerer Road would equate to approximately 0.012 mgd of wastewater. This analysis conservatively assumes all new wastewater generation south of Kammerer Road and does not account for the difference between wastewater for existing and proposed land uses. The South and West Study Areas are not within SRWTP's current service area. Development south of Kammerer Road would require additional wastewater treatment and infrastructure not accounted for by SRWTP. However, the additional 0.012 mgd of wastewater for the Project would be minor compared to existing wastewater treatment. SRWTP has been master planned to accommodate additional growth, including development that is anticipated in the South and West Study Areas. Therefore, the additional wastewater services resulting from the provision of new housing as part of the Project would not result in a new or substantially more severe impacts. This impact would remain less than significant.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.10-3: Adverse Impacts on Landfill Capacity and Compliance with Applicable Solid Waste Regulations

General Plan EIR Impact 5.12.3.1 concluded that increased demand for solid waste services associated with implementation of the General Plan would not result in significant environmental impacts. Implementation of the Project could result in increased solid waste generation associated with proposed residential, commercial, and industrial development that would require redesignation of General Plan land uses. There is substantial remaining capacity in the landfills serving local waste haulers, with an average remaining capacity of more than 70 percent. All future development projects associated with the Project 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. Therefore, the additional solid waste services resulting from the Project would not result in a new or substantially more severe impacts than was addressed in the General Plan EIR. Project impacts would remain less than significant.

LEA Community Plan Area

General Plan EIR Impact 5.12.3.1 evaluated the increased demand for solid waste collection and landfill capacity that would occur under the General Plan, which resulted in 331,223 tons per year. As discussed in the General Plan EIR, based on CalRecycle data, the City achieved a per capita disposal rate in 2016 of 2.8 pounds per capita per day, which is lower that the State's disposal rate target for the City of 5.9 pounds per capita per day (City of Elk Grove 2018: 5.12-36). Based on disposal rate factors considered in the General Plan EIR, the analysis concluded that implementation of the General Plan 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. Thus, the impact was concluded to be less than significant.

Implementation of the Project would result in the construction of additional development in the LEA Community Plan Area. This could result in an additional 1,851 additional residential units beyond the number assumed in the General Plan EIR, which could result in approximately 5,979 additional residents. Using the most recent solid waste disposal rate of 1.11 tons per resident per year (equivalent to 6.7 pounds per day), buildout anticipated under the Project would generate approximately 6,632 tons of additional solid waste per year beyond the amount of solid waste assumed in the General Plan EIR (CalRecycle 2019). This represents an increase of approximately 2 percent beyond the total solid waste generated as discussed in the General Plan EIR and would result in a minor increase compared to anticipated solid waste generation.

Future construction located within the LEA Community Plan Area because of the Project would also generate construction debris. However, the City's construction diversion rate was estimated at over 50 percent in 2018 (City of Elk Grove 2018). Thus, implementation of the City's existing recycling programs and associated regulation would substantially reduce the volume of generated waste that would be disposed of in landfills. In addition, EGMC Section

30.70.030(C) 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.

Waste generated by proposed buildout within the LEA Community Plan Area would 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 3.10-4, there is substantial remaining capacity in the landfills serving local waste haulers, with an average remaining capacity of more than 70 percent. Therefore, proposed development within the LEA Community Plan Area would be served by solid waste management companies and landfills with sufficient capacity to serve the future development.

In addition, all future development projects within the LEA Community Plan 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 new residential development within the LEA Community Plan Area would not generate solid waste in excess of State or local standards or in excess of the capacity of the local infrastructure, negatively affect the provisions of solid waste services, or affect the attainment of solid waste reduction goals. The additional demand from buildout of the Project would not result in a new or substantially more severe impacts regarding solid waste than was addressed in the General Plan EIR. This impact would remain less than significant.

General Plan Land Use Designation Amendments

Increased solid waste because of the increased population growth and housing development anticipated from proposed land use amendments within the Old Town is included in the overall population and development growth associated with the Project. Additionally, the Old Town is located within the City's solid waste service area and would not require any changes to the City's service area boundary. As discussed above under the LEA Community Plan, impacts to the City's solid waste services and landfills would be reduced by compliance to the City's Space Allocation and Enclosure Design Guidelines for Trash and Recycling and existing General Plan policies. Impact would remain less than significant. Development planned under the General Plan land use designations would not result in a new or substantially more severe impacts regarding water supply than was addressed in the General Plan EIR.

Grant Line Road Precise Roadway Study

Development of Grant Line Road would result in additional solid waste during the construction phase of the Project. However, the volume of waste generated during construction would be minimal and within the current landfill capacity. Development of the Grant Line Road would not induce population growth, and a as result no additional solid waste would be generated during operation of Grant Line Road. Therefore, the construction solid waste generated because of the construction of Grant Line Road would not result in a new or substantially more severe impacts than was addressed in the General Plan EIR. Impacts would remain less than significant.

South and West Study Areas

Increased solid waste because of the increased population growth and development anticipated in the South and West Study Areas is included in the overall population and development growth associated with the Project. The South and West Study Areas, which are located outside of City limits, would be subject to General Plan policies and mitigation measures identified in the General Plan EIR to reduce effects associated with solid waste. However, solid waste services would be added to the South and West Study Areas upon annexation to the City. Although, anticipated solid waste generated in the South and West Study Areas would be similar to what was analyzed in the General Plan EIR, as a result of comparable development intensity and population growth proposed by the Project. As a result, the impact would remain less than significant. Development within the South and West Study Areas would not result in a new or substantially more severe impacts regarding water supply than was addressed in the General Plan EIR.

Mitigation Measures

No additional mitigation is required beyond compliance with the City's existing recycling programs and associated regulations, we well as EGMC Section 30.70.030(C).

Impact 3.10-4: Adverse Impacts on Groundwater Resources and Conflicts with a Groundwater Sustainability Plan

While General Plan Impact 5.9.7 did not address conflicts with a groundwater sustainability plan, it did identify significant and unavoidable groundwater impacts because of the anticipated new water demand from the General Plan may exceed the annual sustainable yield of the groundwater from the Central Basin portion of the South American subbasin because of proposed development located outside of City limits but within the Study Areas. Implementation of the Project would generate additional demand for water supplies from increased development that could add to groundwater resource impacts identified in the General Plan EIR. Future development and water service providers would participate management actions that implement South American Subbasin Groundwater Sustainability Plan and maintain groundwater production at or below the long-term average annual sustainable yield of 235,000 AFY. The Project's additional water demand is minor compared with existing and projected water demand and is not expected to result in the exceedance of the long-term average annual sustainable yield. The Project would also be subject to applicable management actions to meet the groundwater sustainability goal of the South American Subbasin Groundwater Sustainability Plan. Therefore, the additional water demand resulting from the Project would not result in a new or substantially more severe groundwater impacts than was addressed in the General Plan EIR. The Project would also not result in conflicts with the South American Subbasin Groundwater Sustainability Plan. Project impacts would remain significant and unavoidable.

As described in Impact 3.10-1, subsequent development of the proposed General Plan land use amendments (LEA Community Plan, Old Town Policy Area, and South and West Study Areas) would increase water demands beyond what was previously evaluated in the General Plan EIR Impact 5.12.1.1. Water supplies for the LEA Community Plan Area would be provided by SCWA, which uses both surface water and groundwater, with minimal recycled water, to meet domestic water needs. The Project's increase in water demands could also result in additional groundwater production beyond what was addressed in General Plan EIR Impact 5.9.7. The SASb GSP identifies the long-term average annual sustainable yield of groundwater to be 235,000 AFY. While the Project may increase groundwater use beyond what was evaluated in the General Plan EIR, it is not expected that the water demand would exceed the long-term average annual sustainable yield when factoring total water demand (3,505 AFY) and SCWA's anticipated groundwater use of 56,000 AFY in 2035, 2040, and 2045 under dry year conditions. SCWA has identified a system of sixteen separate well fields throughout Zone 40, with two future wells located in the LEA Community Planning Area (SCWA 2023). A distributed groundwater extraction strategy was selected by SCWA to minimize drawdown effects of pumping by spreading extraction over a wide geographic area. In addition, water service providers for the Project would participate and/or implement projects and management actions that have been identified in the GSP to the achievement of groundwater sustainability. The Grant Line Road Precise Roadway Study would refine the roadway configuration of Grant Line Road and would not alter planned land uses in a manner that would alter groundwater use.

Therefore, the additional water demand resulting from the Project would not result in a new or substantially more severe groundwater impacts than was addressed in the General Plan EIR. The Project would also not result in conflicts with the SASb GSP. Project impacts would remain **significant and unavoidable**.

Mitigation Measures

No additional feasible mitigation available beyond compliance with existing laws, proposed General Policies, and General Plan Mitigation Measure MM 5.12.1.1.

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