

3.14 UTILITIES AND SERVICE SYSTEMS

This section evaluates the availability of existing utility and infrastructure systems (water, wastewater, stormwater, solid waste, electricity, natural gas, and telecommunications) to serve the New Zoo Project and the impact of the Project on these systems. The analysis is based on documents obtained from the City of Elk Grove and the Sacramento Regional County Sanitation District (Regional San), Sacramento Area Sewer District (SacSewer), Sacramento County Water Agency (SCWA), a water supply assessment (WSA) (Appendix I), representatives from the City, and Sacramento Municipal Utility District (SMUD).

The Sacramento Metropolitan Utility District (SMUD) submitted a comment in response to the notice of preparation (NOP), requesting to be involved in discussing potential issues related to transmission and distribution line easements, utility line routing, electrical load needs and requirements, energy efficiency, climate change, and the potential need to relocate SMUD infrastructure around the Project area. As noted in this EIR, SMUD currently provides electricity to the Project site from existing underground 12-kilovolt (kV) facilities that would remain and are connected to SMUD's existing underground 12-kV facilities along Kammerer Road and Lotz Parkway. The City would include SMUD in future discussion regarding transmission and distribution line easements for the Project. Impacts related to utilities and energy efficiency impacts are discussed in the impact analysis below and in Section 3.5, "Energy." Project impacts related to greenhouse gas emissions are included in Section 3.7, "Greenhouse Gas Emissions and Climate Change."

3.14.1 Regulatory Setting

DOMESTIC WATER

Federal

Safe Drinking Water Act

As mandated by the Safe Drinking Water Act (Public Law 93-523), passed in 1974, the U.S. 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 alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA's 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.

The California Water Code

Division 6, Part 2.10 (1995) of the California Water Code (Water Code) requires coordination between land use lead agencies and public water purveyors. The purpose of this coordination is to ensure that prudent water supply planning has been conducted and that planned water supplies are adequate to meet both existing demands and demands of planned development.

Water Code Sections 10910–10915 (inclusive) require land use lead agencies to (1) identify the responsible public water purveyor for a proposed development project and (2) request a water supply assessment (WSA) from the responsible purveyor. The objective of a WSA is to demonstrate the sufficiency of a purveyor's water supplies to satisfy the water demands of a proposed development project while still meeting the current and projected water demands of existing customers. Water Code Sections 10910–10915 delineate specific information that must be included in a WSA.

California Safe Drinking Water Act

The SWRCB-DDW is responsible for implementing the federal Safe Drinking Water Act (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 was passed in 1976 to build on and strengthen the federal SDWA. The act authorized the California Department of Health Services to protect the public from contaminants in drinking water by establishing maximum contaminant levels that are at least as stringent as those developed by EPA, as required by the federal SDWA.

Local

Sacramento County Water Agency

SCWA encompasses seven water service areas and provides retail water service to approximately 59,000 residential and commercial customers in Sacramento County. SCWA also wholesales water to Elk Grove Water District and works with neighboring water suppliers and land use agencies to ensure long-term water system reliability (SCWA 2021). SCWA's service area boundary and seven service areas include the following: Metro Air Park, Northgate 880, Arden Park Vista, Southwest Tract, Zone 40, Hood Water Maintenance District (Hood), and East Walnut Grove (Walnut Grove). Within Zone 40 there are further subdivisions into the North Service Area (NSA), Central Service Area (CSA), and South Service Area (SSA) (SCWA 2021).

Planning activities are generally determined by growth decisions made by local land use authorities (the cities of Elk Grove and Rancho Cordova and the County of Sacramento) and are focused on identifying and developing long-term water supplies for these development areas. Meeting these long-term needs is accomplished through the development of water supply master plans for Zones 40 and 50, the Zone 40 Water System Infrastructure Plan, and the Zone 41 Urban Water Management Plan. Planning is also responsible for reviewing and conditioning development proposals to ensure compliance with the latest water supply planning requirements and development of Water Supply Assessments and Written (SCWA 2021).

Ensuring an adequate supply of water is available to serve the existing and future needs for SCWA's residential and Commercial, Institutional, and Industrial (CII) customers is a critical component of successful operations. The SCWA UWMP draws on local, regional, and statewide inputs to synthesize information from numerous sources into a reliable water management action plan designed to be referred by SCWA's Board, Management, and Staff.

Sacramento County Water Agency Zone 40 Water Supply Master Plan

The purpose of the 2005 Sacramento County Water Agency Zone 40 Water Supply Master Plan (WSMP) is to address those changes made since the development of the 1987 Plan and to further define SCWA's conjunctive use program of groundwater, surface water, and recycled water supplies, as well as a financing program for the

construction of surface water diversion and treatment facilities; water conveyance pipelines; groundwater extraction, treatment, storage, and distribution facilities; and recycled water storage and distribution facilities within Zone 40. 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 2019).

Sacramento County Water Agency Zone 40 Water Supply Infrastructure Plan

The purpose of the 2016 Sacramento County Water Agency Zone 40 Water Supply Infrastructure Plan (WSIP) Update is to identify and size the water system facilities needed to supply Zone 40 through buildout and determine when the facilities are needed and develops the associated capital costs. 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 2019). It also identifies recommended infrastructure types, locations, and timing to meet future demand through buildout.

Sacramento Central Groundwater Authority

The Sacramento Central Groundwater Authority (SCGA) manages groundwater in the Central Basin portion of the South American Subbasin. SCGA was formed in 2006 through a joint powers agreement signed by the Cities of Elk Grove, Folsom, Rancho Cordova, and Sacramento and Sacramento County. Among its many purposes, 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 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 well and agricultural well owners from declining groundwater levels resulting from increased groundwater pumping attributable 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 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.

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 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.

City of Elk Grove General Plan

The following City General Plan (2019) policies are applicable to the Project. The reader is referred to Section 3.9, "Hydrology and Water Quality," for a discussion of groundwater and water quality General Plan policies.

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

City of Elk Grove Municipal Code

Municipal Code Chapter 14.10: Water Efficient Landscape Requirements

Elk Grove Municipal Code (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.

WASTEWATER AND STORMWATER

Federal

Clean Water Act

The Clean Water Act (CWA) employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. Those portions of the CWA that relate to wastewater and stormwater discharges are discussed below.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established under the CWA to regulate municipal and industrial discharges to surface waters of the US. NPDES permit regulations have been established for broad categories of discharges including point source waste discharges and nonpoint sources (nonpoint source discharges are further discussed in Section 3.9, "Hydrology and Water Quality"). Each NPDES permit identifies limits on allowable concentrations and mass loadings of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that EPA must consider in setting effluent limits for priority pollutants.

NPDES permits cover various industrial and municipal discharges, including discharges from storm sewer systems in larger cities, stormwater generated by industrial activity, runoff from construction sites disturbing more than 1 acre, and mining operations. Point source dischargers must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). So-called "indirect" point source dischargers are not required to obtain NPDES permits. "Indirect" dischargers send their wastewater into a public sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering any surface water.

The CWA was amended in 1987 with Section 402(p) requiring NPDES permits for nonpoint source (i.e., stormwater) pollutants in discharges. Stormwater sources are diffuse and originate over a wide area rather than from a definable point. The goal of the NPDES stormwater regulations is to improve the water quality of stormwater discharged to receiving waters to the "maximum extent practicable" using structural and nonstructural best management practices (BMPs). BMPs can include educational measures (e.g., workshops informing the public of what impacts can result when household chemicals are dumped into storm drains), regulatory measures (e.g., local authority of drainage-facility design), public-policy measures (e.g., labeling storm-drain inlets as to impacts of dumping on receiving waters) and structural measures (e.g., filter strips, grass swales, and detention ponds).

The City of Elk Grove is a MS4 co-permittee with the Cities of Citrus Heights, Folsom, Galt, Rancho Cordova, and Sacramento and the County of Sacramento. NPDES permits are issued for 5-year terms. The current region-wide permit (Order No. R5-2016-0040) adopted by the Central Valley Regional Water Quality Control Board (RWQCB) in June 2019 allows each permittee to discharge urban runoff from MS4s in its respective municipal jurisdiction and requires Phase I MS4 permittees to enroll under the region-wide permit as their current individual permits expire. Regional MS4 permit activities are managed jointly by the Sacramento Stormwater Quality Partnership, which consists of the seven jurisdictions covered by the permit.

State

NPDES Permit for the Sacramento Regional Water Treatment Plant

In April 2016, the Central Valley RWQCB issued WDR Order No. R5-2016-0020 (NPDES No. CA 0077682) to the Regional San for its Sacramento Regional Wastewater Treatment Plant (SRWWTP), which treats wastewater from its service area before discharging it to the Sacramento River. The original permit for the SRWWTP was issued in October 1974. This is an NPDES self-monitoring permit that outlines performance standards for the effluent into the Sacramento River. The water quality objectives established in the Central Valley RWQCB Basin Plan are protected, in part, by NPDES Permit No. CA 0077682.

The quality of the effluent that can be discharged to waterways within the Sacramento area 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.

Local

Sacramento Area Sewer District Standards and Specifications

The Sacramento Area Sewer District's (SacSewer) Standards and Specifications establish minimum standards for the SacSewer public sewer collection system. These standards apply to planning, design, construction, and rehabilitation of the public sewer collection system that SacSewer operates and maintains, require SacSewer's approval, or are installed within existing or new public rights-of-way or easements. The standards ensure SacSewer assets are consistently designed and constructed. The Standards and Specifications were approved by the SacSewer Board of Directors on March 13, 2019.

Sacramento Regional County Sanitation District

Regional San 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. The district owns, operates, and is responsible for the collection, trunk, and interceptor sewer systems throughout the county, as well as the Sacramento Regional Wastewater Treatment Plant (SRWTP) located west of Elk Grove.

Regional San sets forth requirements for use of its wastewater collection and treatment system, provides for the enforcement of these requirements, establishes penalties for violations, and establishes the rates and fees for users of the district's sewer facilities.

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 2023).

City of Elk Grove General Plan

The following City General Plan (2019) policy is applicable to the Project:

- ▶ **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.

City of Elk Grove Municipal Code

Municipal Code Chapter 15.12: Stormwater Management and Discharge Control

EGMC Chapter 15.12 provides authority to the City for inspection and enforcement related to control of illegal and industrial discharges to the City storm drainage system and local receiving waters. It also addresses the requirement for best management practices (BMPs) and regulations to reduce pollutants in the City's stormwater.

SOLID WASTE

Federal

No federal plans, policies, regulations, or laws are applicable to solid waste for the New Zoo Project.

State

California Integrated Waste Management Act

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

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

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.

City of Elk Grove General Plan

The following City General Plan (2019) policies are applicable to the Project:

- ▶ **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.

City of Elk Grove Municipal Code

Municipal Code Title 30: Solid Waste Management

EGMC Chapter 30 defines the City's requirements for solid waste management. Chapter 30.50 identifies requirements for commercial hauling such as required qualifications, vehicle specifications, and transportation specifications. EGMC Chapter 30.70 identifies requirements related to debris reduction, reuse, and recycling for new construction and demolition projects in the City. Specifically, EGMC 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.

Commercial Refuse Hauler Fee

Elk Grove Municipal Code (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.

Construction and Demolition Debris Reduction, Reuse, and Recycling

Elk Grove Municipal Code (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.

Space Allocation and Enclosure Design Guidelines for Trash and Recycling

Elk Grove Municipal Code (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.

ENERGY

Refer to Section 3.5, "Energy," for plans, policies, regulations, or laws that are applicable to energy for the New Zoo Project.

3.14.2 Environmental Setting

WATER SUPPLY

This subsection provides information on water supplies that would be used by and may be available during construction and operation of the New Zoo. SCWA prepared a Water Supply Assessment (WSA) for the Project in accordance with Water Code Sections 10910-10915 (Appendix I). The following discussion summarizes the information in the Project WSA. This subsection also discusses the availability and adequacy of existing and planned water treatment and conveyance infrastructure. 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. The service area is divided into eight systems, the largest of which are the Mather Sunrise and Laguna Vineyard systems. The City of Elk Grove, 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 2016b). There are eight water and drainage zones and each zone encompasses a unique geographic area of benefit to achieve the desired objectives. The Project site is in Zone 40 South Service Area, which comprises the Mather Sunrise and Laguna Vineyard public water systems. The Laguna Vineyard water system consists of both the Zone 40 Central Service Area and South Service Area.

The Project is accounted for in the current SCWA UWMP, which describes SCWA’s existing and projected water demands through 2045 (SCWA 2021). Therefore, the UWMP serves as the base document for the Project’s WSA. The water demand growth shown in the UWMP is based on the estimated gallons per capita per day (GPCD) target and the projected population growth. Establishing a GPCD target is a requirement for the UWMP in accordance with the Water Conservation Act of 2009 (SB x7-7) so that each purveyor achieves a 20 percent reduction in water use by 2020. The target for SCWA is determined to be 229 gallons per capita per day in the 2020 UWMP, which is less than the SCWA’s established target.

With the population projection and the established GPCD target, the UWMP estimates the water demands for SCWA’s service areas in 5-year increments until 2045 (see Table 3.14-1).

Table 3.14-1 Water Demands for SCWA Service Areas in Five-Year Increments – Normal Year (afy)

	2025	2030	2035	2040	2045
SERVICE AREA					
Zone 40	46,235	54,494	62,006	68,143	74,388
Arden Park Vista	3,454	3,394	3,315	3,237	3,217
Northgate 880	1,365	1,365	1,365	1,365	1,365
Metro Air Park	1,193	2,325	3,457	4,590	5,715
Hood	31	31	31	31	31
East Walnut Grove	56	56	56	56	56
Southwest Tract	24	24	24	24	24
Total Potable Water Use	52,358	61,690	70,254	77,446	84,796
Non-Potable Water Use	1,420	1,890	2,360	2,830	3,300
Total Water Use	53,778	63,580	72,614	80,276	88,096

Note: afy = acre-feet per year.

Source: SCWA 2021.

The water demands for single dry and multiple dry water years are listed in Table 3.14-2. 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. 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 3.14-2 SCWA Zone 40 Water Demands in Five-Year Increments in Normal, Single Dry, and Multiple Dry Years (afy)

Water Year	2025	2030	2035	2040	2045
Normal Year (see Table 5-3 of UWMP)	46,235	54,494	62,006	68,143	74,388
Single Dry Year (see Table 5-3 of UWMP)	48,547	57,219	65,106	71,551	78,107
Multiple Dry Year 1 (see Table 5-4 of UWMP)	48,547	57,219	65,106	71,551	78,107
Multiple Dry Year 2 (see Table 5-4 of UWMP)	48,547	57,219	65,106	71,551	78,107
Multiple Dry Year 3 (see Table 5-4 of UWMP)	48,547	57,219	65,106	71,551	78,107

Note: afy = acre-feet per year.

Source: SCWA 2021.

The Project's water demands, as part of the Zone 40 water demand, will ultimately be met by conjunctive use of groundwater and surface water and a small portion of recycled water, as described in the WSMP and UWMP. Water demands do not change between normal and dry year conditions because water supplies are assured during these water year conditions (see Appendix I). SCWA currently exercises, and will continue to exercise, its rights as a groundwater appropriator to extract groundwater from the groundwater basin (Central Basin) underlying Zone 40 for delivery to its customers. As described in Section 3.14.1, "Regulatory Setting," SCGA prepared a Groundwater Sustainability Plan for submittal to DWR by January 31, 2022.

SCWA has a remediated groundwater supply of 8,900 acre-feet per year (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. This remediated groundwater supply is diverted by SCWA from the Sacramento River at Freeport along with SCWA's surface water supplies.

A greater proportion of groundwater is used in the Central Service Area and South Service Area of Zone 40. There is also some groundwater pumping in other SCWA service areas outside of Zone 40. The UWMP identifies SCWA's groundwater availability until 2045, as shown in Table 3.14-3.

Table 3.14-3 SCWA Projected Groundwater Supply Availability (afy)

	2025	2030	2035	2040	2045
Groundwater	41,000	46,000	56,000	56,000	56,000
Remediated Groundwater	8,900	8,900	8,900	8,900	8,900
Total	49,900	54,900	64,900	64,900	64,900

Note: afy = acre-feet per year.

Source: SCWA 2021.

Surface Water

The SCWA conjunctive use program includes the delivery of surface water within the Zone 40 boundaries as part of a comprehensive program to maintain the long-term, regional balance of the groundwater basin. The UWMP uses the terms "purchased water" and "surface water" to describe surface water supply. DWR defines purchased water as water purchased from other suppliers, including non-self-supplied surface water. Surface water is defined by DWR as self-supplied water that is drawn from streams, lakes, and reservoirs.

Purchased Water

SCWA has two sources of purchased surface water supplies, as described below.

Central Valley Project

The Central Valley Project water supply consists of the CVP contracts held by SCWA. One contract, referred to as the SMUD contract, is for 30,000 afy. Most of the CVP water is diverted at the Freeport diversion on the Sacramento River and treated at the Vineyard surface water treatment plant. Occasionally, some of the CVP supplies are diverted from the Sacramento River and treated at the City's Sacramento River surface water treatment plant and delivered to SCWA at the Franklin Intertie.

SCWA entered into a contract in April 1999 with the U.S. Bureau of Reclamation (Reclamation) for 15,000 afy of CVP supplies pursuant to Public Law 101-514. This contract is often referred to as "Fazio Water" in recognition of the efforts by Congressman Vic Fazio to secure this contract. The 15,000 afy is available for SCWA through the Freeport diversion or Franklin Intertie.

SCWA's total CVP supply is subject to reductions in dry years. The water supply allocations are defined by Reclamation on a year-to-year basis and are expressed as a percentage of either the contract amount or the amount of average use. For the 21-year period from 1995 to 2015, the lowest allocation was in 2015 when it reduced to health and safety levels of 55 gallons per capita per day. Due to SCWA's abundant groundwater supplies, SCWA took no CVP water with that allocation.

The water supply allocations are based on a draft policy that defines water shortage terms and conditions. Reclamation initiated the development of a Municipal and Industrial (M&I) Water Shortage Policy in 1992, with several proposals prepared through 2001. The 2001 draft water shortage policy states that Reclamation would reduce M&I water to a contractor once irrigation water allocations are reduced below 75 percent of the contract amount. Reclamation has a provision in the draft policy for a minimum M&I shortage allocation of 75 percent that is applied to the last 3 years of historical use with certain adjustments, although the actual allocation in 2014 was 75 percent, and in 2015 the allocation was 25 percent of the use during the previous three unconstrained years ultimately ending with health and safety levels. In 2010, Reclamation convened several workshops that will lead to the development of an Environmental Impact Statement that could potentially modify the existing policy or develop a new policy. This process has not been completed.

City of Sacramento's American River Place of Use Water Supply

A portion of Zone 40 lies within the City of Sacramento's American River Place of Use (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. A connection would be constructed to supply the portion of Zone 40 in the POU area, with the timing based on when the supply is actually needed.

The City of Sacramento's diversions from the American River at the Fairbairn Water Treatment Plant are reduced when American River flows are less than the Hodge Flow Criteria, which would likely result in no POU water being available for SCWA in these circumstances. The City of Sacramento may decide to divert water during these restricted times at its Sacramento River diversion, although additional infrastructure might need to be constructed by the City of Sacramento to be able to convey this water to SCWA. It might be possible for SCWA to divert the POU water at the Freeport diversion. Given the uncertainty of the availability of POU water during dry periods, a supply allocation of zero percent is assumed for dry years and 100 percent for normal climate years.

Surface Water Rights

SCWA has an appropriative water supply that is self-supplied surface water drawn from the Sacramento River. In February 2008, SWRCB approved 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 and the City of Sacramento’s diversion structure. Since SCWA’s demands are low in the winter months, it is possible that not all of this supply could be used without the ability to store the water.

Contract documents, agreements, and applications for appropriative water and CVP water supplies are available for review. Table 3.14-4 shows all the surface water entitlements, water rights, and water services contracts to meet the buildout water demand.

Table 3.14-4 Surface Water Supply Entitlements, Water Rights, and Water Service Contracts to Meet SCWA Buildout Water Demand

Water Supply Sources	Description	Wholesaler Supplied (Yes/No)	Status of Contract, Permit, and Agreement	Quantity (afy)
Purchased Water	Wholesaler – (City of Sacramento) to serve portion of Zone 40 in City of Sacramento’s American River POU	Yes	Planned	9,300
Purchased Water	Supplier-produced surface water to serve Zone 40: U.S. Bureau of Reclamation – CVP Supply (SMUD and Fazio Water)	Yes	Existing	45,000
Surface Water	Supplier-produced surface water to serve Zone 40: Appropriative Water – SWRCB Permit 21209	No	Existing	71,000
Total	—	—	—	125,300

Note: afy = acre-feet per year.

Source: SCWA 2021.

Table 3.14-5 presents the quantities of surface water supply pursuant to these water rights and contract entitlements in 5-year increments from 2025 to 2045. The projected volume takes into consideration facility constraints and hydrological constraints.

Table 3.14-5 Projected Reasonably Available Surface Water Supply in Five-Year Increments (afy)

Water Supply	Description	2025	2030	2035	2040	2045
Purchased Water	Wholesaler – (City of Sacramento) to serve portion of Zone 40 in City of Sacramento’s American River POU	0	0	0	0	0
Purchased Water	Supplier-produced surface water to serve Zone 40: U.S. Bureau of Reclamation – CVP Supply (SMUD and Fazio Water)	21,300	21,300	21,300	21,300	21,300
Surface Water	Supplier-produced surface water to serve Zone 40: Appropriative Water – SWRCB Permit 21209	4,000	4,000	4,000	4,000	4,000
TOTAL		25,300	25,300	25,300	25,300	25,300

Note: afy = acre-feet per year.

Source: SCWA 2021.

WATER SUPPLY INFRASTRUCTURE

The Project site receives water supply through a 24-inch-diameter pipeline within Kammerer Road. Other water distribution infrastructure in the area are provided along Lotz Parkway and B Drive.

STORMWATER

The Project site is currently undeveloped and stormwater from the Project site flows into the Shed C channel (Kimley Horn 2023). The Project would include the addition of drainage and water quality improvements to the site as shown in Figure 2-11, in Section 2, “Project Description.” To manage these flows and address impacts from hydromodification, two new stormwater retention basins would be constructed in the southern parking lot and a

series of retention basins in the northern parking lot. Additionally, a new stormwater detention basin would be constructed at the north end of B Drive south of Shed C channel.

WASTEWATER

Sacramento Regional County Sanitation District and SacSewer

Regional San provides wastewater treatment for the City of Elk Grove. The district serves approximately 1.4 million residents and industrial and commercial customers, and it owns and operates the regional wastewater conveyance system. Regional San manages wastewater treatment, major conveyance, and wastewater disposal. The treatment plant, operated by Regional San, is located on 900 acres of a 3,550-acre site between I-5 and Franklin Boulevard, north of Laguna Boulevard. The remaining 2,650 acres serve as a “bufferland” between the SRWTP and nearby residential areas. The SRWTP has 169 miles of pipeline and treats an average of 181 million gallons of wastewater per day. Wastewater is treated by accelerated physical and natural biological processes before it is discharged to the Sacramento River (Regional San 2023).

The SRWTP 2020 Master Plan describes a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements in the Regional San service area through the year 2020. The Master Plan uses Sacramento Area Council of Governments (SACOG) population projections multiplied by per capita flow and load values to determine future facility needs (Regional San 2008). The SRWTP’s reliable capacity is currently limited, based on hydraulic considerations, to an equivalent 207 mgd average dry weather flow (ADWF). This existing capacity falls short of the projected 218 mgd ADWF in 2020.

The SRWTP has been master planned to accommodate 350 mgd ADWF (Regional San 2008). In addition, Regional San has prepared a long-range master plan for the large-diameter interceptors that transport wastewater to the SRWTP. The master plan includes interceptor upgrades and expansions to accommodate anticipated growth through 2035 (Regional San 2008). Regional San currently treats an average of 130 mgd. Some water is recycled for local use and the remainder is discharged to the Sacramento River.

In spring 2023, Regional San completed the EchoWater Project, an expansion and upgrade of the existing SRWTP. The new tertiary treatment process removes 99 percent of ammonia and 89 percent of nitrogen from the wastewater. The facility is being renovated to meet the new treatment requirements set by the Central Valley RWQCB and the State Water Resources Control Board. It will also improve the quality of water discharged into the Sacramento River. With this upgrade, the treatment plant has been renamed the EchoWater Resource Recovery Facility (Regional San 2023).

SacSewer serves as one contributing agency to Regional San. 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 107 pump stations and approximately 80 miles of pressurized force main pipes (SacSewer 2023). SacSewer trunk sewer pipes function as conveyance facilities to transport the collected wastewater flows to the Regional San interceptor system. The Project site is served by the Laguna Ride Trunk Shed that is located west of Highway 99, east of Bruceville Road, north of Kammerer Road, and south of Elk Grove Boulevard (SacSewer 2020). The SouthEast Policy Area Lift Station supports the site and runs a force main from the pump north to the Laguna Interceptor that runs along Laguna Boulevard.

Of note, in 2024 SacSewer will be merged into Regional San, with the combined agency referred to as SacSewer. Following the merger, the new, combined SacSewer will be responsible for collection, conveyance, and treatment of sanitary sewer flows from the Project.

Existing Wastewater Infrastructure

The SacSewer currently serves the Project site through a series of sewer mains, collectors, and a trunk line that connects to an 8-inch and 12-inch force main to a Regional San interceptor, depicted in Figure 2-11 in Chapter 2, “Project Description.”

SOLID WASTE COLLECTION AND DISPOSAL

Solid waste generated by commercial developments is served by registered commercial haulers, county-authorized recyclers, and hazardous waste materials handlers. Solid waste generated in the City is taken to a variety of landfills (City of Elk Grove 2019). Table 3.14-6 shows landfills used by the City and the permitted and remaining capacities of those landfills. As shown, most of the landfills serving City waste haulers have over 80 percent remaining capacity. In addition to these facilities, the City operates the Special Waste Collection Center located in the City (9255 Disposal Lane) that collects household hazardous waste.

Table 3.14-6 Disposal Facilities and Remaining Capacities

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

Sources: CalRecycle 2023b, 2023c, 2023d, 2023e, 2023f, 2023g, 2023h, 2023i, 2023j, 2023k.

ENERGY

Electricity

SMUD provides all electric services in Elk Grove. SMUD is an independent operator of power and generates, transmits, and distributes electricity to an approximately 900-square-mile area with 10,473 miles of power lines located mostly in Sacramento County and small portions of Placer and Yolo counties. SMUD currently provides electricity to the Project site from existing underground 12-kilovolt (kV) facilities that would remain and are connected to SMUD's existing underground 12-kV facilities along Kammerer Road and Lotz Parkway.

The Project would include solar panels on several roofs of proposed buildings that would generate additional electricity for the site. At minimum, a 20-kilowatt (kW) solar array would be installed on the proposed retail building and a 14-kw array would be installed on the proposed office building.

Natural Gas

Natural gas is supplied to the Project site by PG&E through local transmission lines that are supplied via a large natural gas transmission pipeline located within Kammerer Road. However, the Project would be all electric and would not use natural gas as an energy source.

TELECOMMUNICATIONS

Telecommunication (e.g., phone and internet) facilities are provided to the Project site through existing underground infrastructure facilities along the New Zoo's frontage roads, Kammerer Road and Lotz Parkway.

3.14.3 Impacts and Mitigation Measures

ANALYSIS METHODOLOGY

Water Demand

State CEQA Guidelines Section 15155 requires preparation of a WSA when a project is of sufficient size to be defined as a "water-demand project." The evaluation of utility extension and service impacts is based on review of the WSA (Appendix I), published information and reports, and consultation with the City, the New Zoo, and utility service providers. The impact analysis considers whether capacity would be adequate to serve the Project and whether infrastructure impacts would be required that could result in physical environmental impacts. In determining the level of significance, the analysis assumes that the Project would comply with relevant federal, state, and local ordinances and regulations. The reader is referred to Section 3.5, "Energy," for the estimated energy demands of the Project and to Section 3.9, "Hydrology and Water Quality," for further analysis of water quality, groundwater, and flooding impacts.

Wastewater Treatment and Disposal

Impacts related to wastewater conveyance and treatment capacity were evaluated by estimating the increase in wastewater generated by the Project and by determining whether the existing wastewater treatment and conveyance infrastructure would have capacity adequate to accommodate the increase. Regional San treats an average of 130 million gallons of wastewater per day and has been master planned to accommodate 350 mgd ADWF (Regional San 2008). In determining the level of significance, the analysis assumes that the Project would comply with relevant federal, state, and local ordinances and regulations.

Solid Waste

Evaluation of potential solid waste impacts is based on the estimated solid waste generation of construction and operation, as well as evaluation of existing and future capacity at landfills serving the project area. There is substantial remaining capacity in the landfills in the area serving local waste haulers, with an average remaining capacity of more than 70 percent. In determining the level of significance, the analysis assumes that the Project would comply with relevant federal, state, and local ordinances and regulations.

THRESHOLDS OF SIGNIFICANCE

A utilities and service systems impact would be significant if implementation of the Project would:

- ▶ require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- ▶ result in insufficient 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 inadequate 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
- ▶ fail to comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

IMPACTS NOT DISCUSSED FURTHER

Relocation or Construction of Utility Infrastructure

As discussed in Chapter 2, "Project Description," with the exception of electrical and wastewater improvements, infrastructure improvements for the Project (water supply, stormwater, natural gas, and telecommunications) would be limited to on-site improvements. Draft EIR Sections 3.1 through 3.15 address the environmental impacts of the construction of on- and off-site infrastructure improvements and describe mitigation measures to address identified significant impacts. No further analysis of Project infrastructure improvements is necessary. This issue is not addressed further in this Draft EIR.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.14-1: Result in Insufficient Water Supplies

As described in the WSA prepared by SCWA for the Project, sufficient water would be available to meet the demands of the Project during normal, single, and multiple dry years. This impact would be **less than significant**.

Construction

Construction of the proposed Project would require water for dust control, equipment cleaning, soil excavation and export, and recompaction and grading activities. Water use would vary during construction, depending on the phase (e.g., demolition, excavation, building construction). Temporary construction-related water use would be substantially less than existing water consumption at the Project site and could be accommodated by the existing water infrastructure on-site. The intensity of potential water use would vary with the activity conducted and with the concentration of water needed. In general, activities involving construction-related water use are small and have a negligible impact on water supplies. Project construction could result in a temporary increase in water use; however, impacts on water supply would be minimized through implementation of applicable federal, State, and local regulations, the intent of which is to meet the demands of the Project during normal, single, and multiple dry years. With proper implementation, construction of the New Zoo would use minimal water and would reduce the potential for construction activities to adversely affect water supplies. Therefore, the temporary construction-related impact associated with water demand and water infrastructure would be **less than significant**.

Operation

Project implementation would result in water demand for the New Zoo associated with visitation, visitor-serving facilities (e.g., food and beverage stalls, drinking fountains, restrooms), animals and exhibits, new pathways and structures, and landscaped areas. Based on the anticipated amount of growth to occur as part of the Project, the New Zoo's water supply demand at full buildout would be approximately 162 afy (EXP 2023). This operational water demand would be less than the water demand estimated in the WSA of approximately 240 afy (assuming system loss) (SCWA 2023). The term system loss refers to the unintentional waste of drinking water that occurs in various ways in a supply system. Most often they are caused by leaks at different points in the water supply system, by illegal connections, and by inaccurate readings resulting from very old meters. Water demand for the New Zoo would be met by SCWA's conjunctive use program, which is a sustainable water supply program that provides a reliable water supply while stabilizing the groundwater basin (SCWA 2023).

SCWA determined that it has identified water supplies sufficient to meet the water demands of the Project over the next 20 years during normal, single dry, and multiple dry years. SCWA made this determination based on the information in the WSA and on the following specific facts:

- ▶ SCWA's conjunctive use program is a sustainable water supply program that provides a 100-percent reliable water supply while protecting environmental values and stabilizing the groundwater basin underlying Zone 40.

- ▶ SCWA's conjunctive use program was extensively analyzed and documented in the WSMP, the Final EIR for the 2002 WSMP (certified in February 2006), the Final EIR for the Water Forum Agreement (certified in 1999), and the Water Forum Agreement. All these documents have been subjected to thorough technical peer review and public scrutiny.
- ▶ A financing plan for SCWA's conjunctive use program for constructing facilities required for delivering groundwater and surface water to the Project has been approved by the SCWA Board through its adoption of the WSMP, bond feasibility reports, and the SCWA Code.

The UWMP demonstrates that SCWA's total projected water supplies during normal, single dry, and multiple dry water years would meet the proposed water demands through 2045, as shown in Table 3.14-7.

Table 3.14-7 Zone 40 Water Supply Sufficiency Analysis in Five-Year Increments (afy)

Water Year	2025	2030	2035	2040	2045
Normal Year (see Table 5-3, UWMP)					
Total Supply	159,096	164,096	174,096	174,096	174,096
Total Demand	46,235	54,494	62,006	68,143	74,388
Sufficiency (Supply Minus Demand)	112,861	109,602	112,090	105,953	99,708
Single Dry Year (see Table 5-3, UWMP)					
Total Supply	87,199	92,676	103,926	105,176	107,676
Total Demand	48,547	57,219	65,106	71,551	78,107
Sufficiency (Supply Minus Demand)	38,652	35,457	38,820	33,625	29,569
Multiple Dry Year (1) (see Table 5-4, UWMP)					
Total Supply	111,954	118,386	132,136	135,886	143,386
Total Demand	48,547	57,219	65,106	71,551	78,107
Sufficiency (Supply Minus Demand)	63,407	61,167	67,030	64,335	65,279
Multiple Dry Year (2) (see Table 5-4, UWMP)					
Total Supply	99,576	105,531	118,031	120,531	125,531
Total Demand	48,547	57,219	65,106	71,551	78,107
Sufficiency (Supply Minus Demand)	51,029	51,029	52,925	48,980	47,424
Multiple Dry Year (3) (see Table 5-4, UWMP)					
Total Supply	87,199	92,676	103,926	105,176	107,676
Total Demand	48,547	57,219	65,106	71,551	78,107
Sufficiency (Supply Minus Demand)	38,652	35,457	38,820	33,625	29,569

Note: afy = acre-feet per year.

Source: SCWA 2021.

The WSA documents all required information specifically delineated in Water Code Sections 10910–10915. It demonstrates that SCWA's water supplies would be sufficient to satisfy the water demands of the currently proposed Project while still meeting the current and projected water demands of existing customers in the next 20 years. If there are significant changes to land uses for the proposed Project in the future, this WSA may need to be revisited and updated accordingly. The impact related to water supply would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.14-2: Result in Impacts on Available Wastewater Treatment Capacity

The Project's wastewater generation of approximately 0.17 mgd ADWF would be an increase over the Project site's existing wastewater treatment volumes. However, the SRWTP has been master planned to accommodate 350 mgd ADWF. Therefore, the Project's wastewater generation could be accommodated within the existing and planned treatment capacity of the SRWTP. This impact would be **less than significant**.

The Project is estimated to generate approximately 0.17 mgd ADWF. Phases 1A and 1B would cumulatively create approximately 0.04 mgd ADWF of wastewater, and Phase 1C and Phases 2–4 would cumulatively generate 0.13 mgd ADWF. The Project's wastewater generation would be an increase over existing wastewater treatment volumes, given that the property is currently vacant.

Regional San treats an average of 130 million gallons of wastewater per day and has been master planned to accommodate 350 mgd ADWF (Regional San 2008). The Project would represent less than 0.1 percent of SRWTP's capacity. In addition, it is not anticipated that Regional San will need to consider further improvements to the SRWTP until after 2050 (Regional San 2008). Therefore, the Project's wastewater generation could be accommodated within the existing and planned treatment capacity of the SRWTP. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.14-3: Result in Impacts on Solid Waste Facilities and Compliance with Regulations Related to Solid Waste

The Project would include uses that would increase the generation of municipal solid waste. Waste generated at the Project site could be accommodated by several permitted haulers, and wastes would be hauled to a permitted landfill for disposal as selected by the hauler. There is substantial remaining capacity in the landfills in the area serving local waste haulers, with an average remaining capacity of more than 70 percent. Therefore, because the Project 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, this impact would be **less than significant**.

The Project would include uses that would increase the generation of operational solid waste generation at the New Zoo, including trash and recycling, related to visitor attendance, employment, and animal exhibits. The resulting increased demand for waste disposal has the potential to result in the need for additional landfill capacity to meet solid waste disposal needs. To determine whether there would be sufficient landfill capacity to accommodate waste generated under the Project, the projected waste generated was estimated based on CalRecycle solid waste assumptions and projected visitors and employees. Using assumptions included in the Elk Grove General Plan EIR, new jobs from the Project are assumed to generate 11.4 pounds of waste per employee per day. Because the Project is a unique land use as a zoo, there are no available waste generation rates for visitors. The Project site is not a commercial, industrial, or residential land use and related waste generation rates would not apply. It is anticipated that with the proposed use the Project would generate greater solid waste than assumed for park or recreational facilities. The Project would have visitors coming and going throughout the day during hours of operation. Therefore, waste generation rates for educational facilities were assumed to be most applicable to represent Project visitors.

Visitors to the New Zoo are assumed to generate 0.5 pound of waste per person per day (CalRecycle 2023a). As shown in Table 3.14-8, projected solid waste generation associated with the Project would be 1,021 tons per year.

Table 3.14-8 Projected Solid Waste Generation

Projection	Disposal Rate	Annual Disposal Rate	Project Waste Generation
4,408 daily visitors ¹	0.5 lb/visitor/day	0.09 ton per visitor	397 tons per year
300 employees	11.4 lb/employee/day	2.08 tons per employee	624 tons per year
Total Projected Solid Waste Generation			1,021 tons per year

¹ Assumes the New Zoo would be open 363 days a year with 1.6 million annual visitors.

Source: Compiled by Ascent Environmental in 2023.

Municipal solid waste, recyclable materials, and compostable food waste would be separated on-site and collected by a contracted waste hauler. Waste generated at the Project site could be hauled by several permitted haulers, and wastes would be hauled to a Sacramento County landfill (Kiefer Landfill) located approximately 13 miles northeast of the Project site for disposal. As shown in Table 3.14-6, there is substantial remaining capacity in the landfills serving local waste haulers, with an average remaining capacity of more than 80 percent. Therefore, the Project would be served by solid waste management companies and landfills with capacity sufficient to serve the future development. In addition, the New Zoo's animal exhibits would result in operational solid waste generation at the New Zoo associated with animal bedding and waste. Waste from animals could be used to create a composted blend of select animal manures mixed with bedding materials, such as straw and wood chips from various exhibits. Two compostable animal waste and five non-compostable animal waste low boys or hoppers would be located on the site, as shown in Figure 2-10, in Section 2, "Project Description." Animal waste not composted on site and bedding would be picked up by waste haulers every one to two days. Two collector areas at the northeast and northwest portions of the site would include a 20 yard dumpster for animal waste compost and three hoppers for trash, recycling, and compost pickup.

The Project would also include facilities that create waste related to veterinarian equipment and medical materials. As noted in Section 3.8, "Hazards and Hazardous Materials," the New Zoo's care quarter buildings would house the veterinarian facilities for daily and preventive medical procedures on the animal residents. The Sacramento County Environmental Management Department would ensure that the Medical Waste Program provides health and safety protection for members of the public and health care facility personnel by minimizing or eliminating exposure to biohazardous wastes containing pathogenic organisms and sharps that were used on animals. The reader is referred to Section 3.8, "Hazards and Hazardous Materials," for further discussion of the handling of hazardous waste.

The Project would be required to comply with all applicable solid waste regulations, such as the California Integrated Waste Management Act, CalRecycle Model Ordinance, City of Elk Grove Source Reduction and Recycling Element, and EGMC Chapters 30.50, 30.70, and 30.9, which would be ensured through the development review process. Therefore, because the Project 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, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

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