

## **4.5 PUBLIC SERVICES AND UTILITIES**

This section provides an overview of existing utilities and public services for the City of Elk Grove and the proposed project area, including water supply, wastewater service, solid waste management, electrical service, natural gas service, fire protection, and police protection. Impacts are evaluated in relation to increased demand for utilities and public services associated with the proposed project and actions needed to provide the services that could potentially lead to physical environmental effects.

### **4.5.1 EXISTING SETTING**

#### **WATER SUPPLY**

The Sacramento County Water Agency (SCWA) owns and operates water supply, transmission, and distribution facilities in the project area. The proposed project site is located within SCWA's 2030 Study Area of Zone 40. SCWA is developing a water supply master plan (WSMP) for Zone 40, which identifies the facilities and financing mechanisms needed to implement a phased water supply program to meet water needs within the 2030 Study Area of Zone 40 through the year 2030. The WSMP is a program of conjunctive use of local groundwater, surface water, and remediated water supplies. It includes financing the construction of a water treatment plant, surface-water diversion structure, water conveyance pipelines, and groundwater treatment and distribution facilities. These facilities would be used for the production, conservation, transmission, distribution, and wholesale and retail sale of surface water and groundwater in the 2030 Study Area of Zone 40.

#### **WASTEWATER COLLECTION AND TREATMENT**

Wastewater treatment for the project area is provided by the Sacramento Regional County Sanitation District (SRCSD). SRCSD owns and operates the regional wastewater conveyance system and the Sacramento Regional Wastewater Treatment Plant (SRWTP), located at 8521 Laguna Station Road, approximately seven miles from the project area. The SRCSD is a publicly owned wastewater agency serving over one million people in the major Sacramento Metropolitan Area through its three contributing agencies: the City of Folsom, the City of Sacramento, and Sacramento Area Sewer District (formerly CSD-1). The SRCSD is permitted to treat 181 million gallons per day (mgd) average dry weather flow. Wastewater is treated through a primary and secondary treatment using an activated sludge process.

The main Sacramento Area Sewer District collection system includes over 2,400 miles of sewer pipelines ranging in size from four to seventy-five inches in diameter. The collection system pipelines are categorized and based on size, function and hydraulic capacity. Trunk sewers are pipes that function as conveyance facilities to transport the collected wastewater flows to the SRCSD interceptor system.

The collection system within the area of the potential project sites includes trunks, which are designed to carry flows from 1 to 10 mgd, and laterals, which are designed to carry flows of less than 1 mgd. The existing Elk Grove trunk line extends southeast from the SRWTP influent diversion structure to Laguna Boulevard, then parallel to SR 99 along E. Stockton Boulevard extending close to the southern City boundary. For Site 4, lateral lines extend under the existing roadway network northeast from the E. Stockton Boulevard trunk line to the project site. For Site 2, a trunk line extends from the E. Stockton Boulevard trunk line northeast under Grant Line Road, passing directly in front of the site.

#### **Solid Waste**

The majority of the municipal solid waste generated by the residents and businesses in Elk Grove is currently transported by franchised, commercial haulers and private self-haul vehicles to the privately-owned and operated (by Allied Waste) Elder Creek transfer station located in south Sacramento. Residents of Elk Grove are allowed

one self-haul trip each year to this facility. Residents are also allowed to self-haul household hazardous wastes to collection facilities owned by the County and by the City of Sacramento.

The California Integrated Waste Management Act (CIWMA) of 1989, also commonly known as AB 939, requires local agencies to implement source reduction, recycling, and composting (see discussion under “Regulatory Setting” below). The countywide Integrated Waste Management Plan requires recycling programs that are expected to result in a 50% diversion away from landfills, thereby extending the life of landfills. The City of Elk Grove achieved a 51 percent diversion rate for 2004, a 59 percent diversion rate for 2005 and a 61 percent diversion rate for 2006.

**ELECTRICAL SERVICE**

Sacramento Municipal Utility District (SMUD) generates, transmits, and distributes electric power to a 900-square-mile territory that includes Sacramento County (including the City of Elk Grove) and a small portion of Placer County. SMUD serves a population of 589,599 customers (522,228 residential and 67,361 commercial) with 2,226 employees, 473 miles of transmission lines (110 kilovolts [kV] or more), and 9,784 miles of distribution lines (typically 12 kV) (SMUD 2007a, 2008a).

In 2006, SMUD generated approximately 10,829 gigawatt hours of electricity within its service area (CEC 2008a). SMUD also has long-term contracts with other generators to provide an additional 1,189 MW of electricity for distribution per day (City of Elk Grove 2003b:4.12–66). Throughout the year, SMUD buys and sells energy and capacity on a short-term basis to meet load requirements and reduce costs. In July 2006, SMUD experienced a record peak electricity daily demand of 3,299 MW (SMUD 2008a). Table 4.5-1 shows historic electrical consumption and forecasts of future consumption.

<b>Table 4.5-1 SMUD Service Area Electrical Consumption and Forecasts</b>	
<b>Year</b>	<b>Consumption (Gigawatt Hours) 1</b>
1990	8,358
2000	9,491
2005	10,523
2008	11,174
2013	12,053
2016	12,555

Source: CEC 2007:148  
<sup>1</sup> Gigawatt equals one billion watts.

The existing electric facilities in the Elk Grove vicinity include 12- to 69-kV distribution lines and bulk and distribution substations at various locations throughout the City. SMUD’s Systems Plan is updated annually and is based on the latest summer peak information. The information is used to determine which projects are needed over the next five years in order to continue reliable service (City of Elk Grove 2003b:4.12–66). Existing 12 kV lines extend to both of the project sites.

**Energy Conservation**

SMUD has created two separate programs to grow renewable energy supplies for its customers: a green pricing program called Greenergy and a Renewables Portfolio Standard (RPS) program. Accounting for SMUD’s

renewable energy supply is done separately for these two programs and aggregated as SMUD’s total, non-large hydro-renewable energy supply.

SMUD has had the green pricing program called “Greenergy” since 1997. Greenergy allows customer choice in selecting renewable energy supply for 100% or 50% of their electricity based on a simple monthly fee of \$6.00 or \$3.00, respectively. Commercial Greenergy customers pay \$0.1 per kWh for 100% renewables and \$0.5 per kWh for 50% renewable energy. In 2006, there were about 36,000 participating customers in the Greenergy program, of which approximately were 34,000 residential customers. (SMUD 2008b.)

SMUD’s RPS program was approved by SMUD’s elected board one year before the state RPS program was approved by the legislature and governor. To meet its annual renewables goals, SMUD both contracts for renewable electricity from independent power producers and builds and owns renewable energy power plants. SMUD has renewable energy supply goals of 23% for 2011 (20% RPS + 3% Greenergy in 2011). The final supply numbers compiled for 2006 show that SMUD provided about 13% of retail sales of eligible, non-large hydro-renewable electricity supply. (SMUD 2007b:2.)

SMUD has supported several new renewables projects that have begun providing electricity to the grid since 2002. The SMUD-owned Solano wind project installed wind turbines generating 39 MW in 2002, and an additional 63 megawatts of wind turbines were installed in 2007. This wind project is expected to have turbines generating over 200 combined megawatts installed by 2011. SMUD also recently signed a Power Purchase Agreement (PPA) contract for the second phase of the Kiefer landfill gas-to-electricity project, which is online now and providing an additional 5.7 MW. SMUD also signed a PPA several years ago for a California wind project that came online in phases from 2003 to 2007, and it now provides a total of 75 MW. (SMUD 2007b:3.)

SMUD received approval from the California Energy Commission (CEC) to build the first phase of the 500-MW Cosumnes Power Plant (CPP), which will provide the utility with 1,000 MW of power to ensure SMUD’s long-range plans to meet the growing power needs of Sacramento County. The gas-fired plant, which came on line in 2006, provides enough power to meet the annual needs of 450,000 single-family homes (SMUD 2006).

## NATURAL GAS SERVICE

Natural gas service in the City is provided by Pacific Gas and Electric Company (PG&E) through portions of PG&E’s 46,000 miles of natural gas distribution pipelines. In 2006, PG&E delivered approximately 4,899 million therms (MM therms) of natural gas throughout its service area (CEC 2008b). Table 4.5-2 shows historic natural gas consumption and forecasts of future consumption.

Year	Consumption (MM Therms)
1990	5,275
2000	5,291
2005	4,724
2008	4,895
2018	5,144

Source: CEC 2007:204

Natural gas facilities in Elk Grove consist of 4.5-inch to 16-inch pipelines delivering service to customers not utilizing propane tanks. Natural gas lines in the city are typically co-located with other utilities in trenches to

reduce construction costs and environmental impacts. All construction and maintenance activities for natural gas facilities are the responsibility of PG&E. (City of Elk Grove 2003b:4.12-66.)

## **FIRE AND EMERGENCY MEDICAL RESPONSE**

In November of 2006, a merger between the Elk Grove Community Services District and the Galt Fire Protection District resulted in the creation of the Cosumnes Community Services District (CCSD). This change expanded the delivery of community services district fire protection and emergency medical services to the cities of Elk Grove, Galt, and unincorporated south Sacramento County areas—approximately 157 square miles (CCSD 2007). The CCSD provides emergency services such as fire suppression, emergency medical services, technical rescue, arson, and explosion investigations. CCSD currently has eight fully staffed stations, of which six are located in Elk Grove:

- ▶ Fire Station 45 is located at 229 5th Street in central Galt.
- ▶ Fire Station 46 is located at 1050 Walnut Avenue in northeast Galt.
- ▶ Fire Station 71 is located at 8760 Elk Grove Boulevard. This station maintains a minimum of five personnel, 24 hours a day; one four person engine, one two person medic, and one battalion chief.
- ▶ Fire Station 72, located at 10035 Atkins Drive in the East Franklin Specific Plan area. Currently, staff at this station includes five personnel, 24 hours a day. Primary equipment at this station includes one three person engine and one two person medic.
- ▶ Fire Station 73 is located at 9607 Bond Road. This station provides fire, emergency medical and ambulance transport services. This station also maintains a minimum of five personnel, 24 hours a day. Primary equipment at this station includes one three person engine and one two person medic.
- ▶ Fire Station 74 is located at 6501 Laguna Park Drive. This station provides fire, rescue, emergency medical, and ambulance transport services. Minimum staffing at this station includes six personnel, 24 hours a day. Primary equipment at this station includes one four-person truck, one three-person engine and one two person medic.
- ▶ Fire Station 75 is located at 2300 Maritime Drive, approximately 9.5 miles northwest of the project site. This station provides fire and emergency medical services. Minimum staff at this station includes one three person engine.
- ▶ Fire Station 76 is located at 8545 Sheldon Road. This station provides fire and emergency medical service. Staff at this station includes three personnel, 24 hours a day. Primary equipment located at this station includes one three person engine.

The nearest fire station to the project site is Fire Station 71 approximately 3 miles to the northwest. The CCSD Fire Department is planning to construct Fire Station 70 to maintain service levels within the district. This station is currently planned to be located on Bruceville Road south of Kammerer Road. Fire Station 70 would be located approximately 3 miles to the west of the potential project sites.

The CCSD is staffed with more than 150 sworn personnel and eight engine companies, one ladder truck company, six ambulances, and a command vehicle each day on a 24-hour basis. Additionally, there are eight grass engines and other specialty apparatus, including one heavy foam unit, a heavy rescue engine, a technical rescue trailer, a mass decontamination trailer, a mass casualty incident trailer, and a swift water rescue boat, also staffed using these personnel as seasons and emergency circumstances dictate.

The CCSD provides Advanced Life Support (ALS) and Basic Life Support (BLS) and ambulance transport services in the CCSD service boundaries, as well as the nearby communities of Wilton, Herald, and Courtland. All medical units are staffed with one paramedic and an emergency medical technician (EMT). The CCSD Fire Department operates three full-time medic units from Fire Stations 73, 74, and 75 in central Elk Grove, Laguna, and east Elk Grove, respectively. An additional medic unit is stationed at Fire Station 72 in Franklin and staffed by the station's engine company when needed. In addition to ambulance units, the EMS Division introduced a medic bike team in 1998 that is deployed at large-scale community events to provide rapid medical responses in heavily congested areas.

During 2006, the CCSD responded to more than 13,011 calls (Foster 2007). The CCSD Fire Department has a response standard goal of 5 minutes or less, 80% of the time. This means the first responding unit will arrive on-scene within 5 minutes of dispatch at least 80% of the time.

The CCSD receives its funding through several sources. The district receives its funding through property taxes, ambulance transport fees, fire prevention fees, development impact fees, Mello-Roos fees, and grants. The current development impact fee for fire services in Zone 3, where the project site is located, is \$0.40 per square foot for industrial uses (CCSD 2007, City of Elk Grove 2008).

## **LAW ENFORCEMENT SERVICES**

The City of Elk Grove Police Department (EGPD) was formed in conjunction with the City's incorporation in July 2000. The City created its own police department on October 28, 2006, which operates as a full service law enforcement agency contracted through the County Sheriff's Department. The service boundaries of the EGPD are contiguous with the City limits. The EGPD provides all law enforcement services including responding to all crime-related events, handling all traffic-related issues, and providing community services to the citizens of Elk Grove. All traffic accidents occurring on freeways that pass through Elk Grove (SR 99 and I 5) are handled by the California Highway Patrol (CHP).

The EGPD currently operates out of three facilities. The main building is the 12,500-square-foot facility located in the City Hall complex at 8380 Laguna Palms Way, approximately 4.2 miles northwest of the project site. This facility accommodates the administrative functions of the Department including administration; detectives; and K-9 divisions (Brown 2007).

Another 31,000-square-foot facility is located at 8400 Laguna Palms Way, approximately 4.2 miles from the project site. This facility houses records, property and evidence, communications, professional standards, traffic, information technology, and fleet. A total of 112 employees are staffed in this facility.

In addition, an approximately 8,069-square-foot facility is located at 10190 Iron Rock Way. The facility serves as a staging area for the EGPD's fleet and provides shower and equipment storage for sworn personnel. This facility includes 103 parking spaces for patrol vehicles, with no regular on-site staff assigned to this building.

The EGPD provides the full range of public safety services for the City. Patrol personnel handle calls for service from residents, businesses and visitors. The Patrol Division is the primary enforcement division responsible for policing enforcement of local ordinances, penal codes, vehicle codes, and policing of city streets and neighborhoods. The patrol division responds to all emergency calls for service involving criminal activity such as assaults in progress, burglar alarms, thefts (burglary/robbery), domestic violence incidents, sexual assaults, traffic collisions involving injury, hit-and-runs, and Driving under the Influence (DUI). Patrol also arrests suspects based on probable cause and/or warrant, and completes arrest packages and transport arrestees to the county jail. Officers in the Patrol Division complete crime reports, collect evidence, and appear at and testify in court proceedings.

The EGPD uses Community Services Officers (CSOs) to respond to a variety of Level II type calls. Although CSOs do not have the police powers vested in Penal Code 830, they are available for taking reports, following up on crime related issues from residences and businesses, and enforcement of certain local ordinances in the City. The role of the CSO is relieving the sworn officer of certain lower level calls for service, and they are deployed to augment the EGPD's ability to deliver police services in an efficient manner.

The EGPD has a total staff of 191 including 125 sworn police officers, and 66 non-sworn management, administrative and technical positions. The Elk Grove Communications Center answers an average of 186,000 emergency and non-emergency calls annually. There are no adopted standards relative to sworn police officers per population amounts; however, the current average response time city-wide is 14 minutes. The department strives to maintain a 1 per 1,000 ratio of officers to residents and the current staffing ratio is 0.92 to 1,000 (Brown 2007).

The department has established a beat concept for patrolling communities in the City. The beat concept includes patrolling through logical, geographically divided areas to facilitate officer response to calls for service. This approach increases officer/neighborhood interaction, and enhances department accountability through continued contact and familiarity with neighborhood issues and concerns. The proposed project sites are located within Beat 5 and would have an appropriate number of public safety personnel deployed to the area as development occurs (City of Elk Grove Police Department 2008).

All services, programs and administration for the EGPD are funded primarily through the City's general fund and are augmented with grants from various state and federal agencies. Two additional funding sources are available to the Department. The City has a development impact fee program called the Capital Facilities Fee (CFF) that has a police facility/equipment component. Monies in this fee program were designed to fund new development's fair share of certain police facilities and equipment. The proposed project would be subject to this development impact fee as well as other fees at the time of building permit issuance. Additionally, there are two police services Mello-Roos Community Facility Districts (CFDs) serving the City of Elk Grove. These CFDs fund a portion of the public safety services required as a result of new development, and specifically police protection operation services through a special tax appearing on the property tax bills.

## **4.5.2 REGULATORY SETTING**

### **STATE**

#### **California Integrated Waste Management Act**

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the California Legislature passed the California Integrated Waste Management Act (CIWMA) of 1989 (AB 939), effective January 1990. According to the CIWMA, all cities and counties were required to divert 25% of all solid waste from landfill facilities by January 1, 1995, and 50% by January 1, 2000. Each city is required to develop solid waste plans demonstrating integration of the CIWMA plan with the county plan. The plans must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal.

#### **California Building Energy Efficiency Standards**

The proposed project would be required to comply with changes to Title 24 of the California Code of Regulations regarding energy efficiency that became effective on October 1, 2005. These new energy efficiency standards were developed in response to the state's energy crisis as well as AB 970 (Chapter 329, Statutes of 2000), the California Energy and Reliability Act of 2000. The goals of the recent changes to Title 24 are to improve the energy efficiency of residential and nonresidential buildings, minimize impacts during peak energy-usage periods, and reduce impacts on overall state energy needs.

Implementation of these standards is expected to reduce the growth in electricity use by 478 gigawatt-hours per year (GWh/y) and reduce the growth in natural gas use by 8.8 million therms per year. The savings attributable to new nonresidential buildings are 163.2 GWh/y of electricity savings and 0.5 million therms. Additional savings result from the application of the standards on building alterations. In particular, requirements for cool roofs, lighting, and air distribution ducts are expected to save about 175 GWh/y of electricity.

## California Occupational Safety and Health Administration

In accordance with California Code of Regulations Title 8 Sections 1270 “Fire Prevention” and 6773 “Fire Protection and Fire Equipment,” the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance and use of all fire fighting and emergency medical equipment.

## LOCAL

### City of Elk Grove General Plan

The following policies from the Public Facilities and Finance Element of the City General Plan (2003, as amended 2007) are applicable to the proposed project:

- ▶ **Policy PF-1:** *Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.*
- ▶ **Policy PF-2:** *The City shall coordinate with outside service agencies—including water and sewer providers, the Elk Grove Community Services District, and the Elk Grove Unified School District—during the review of plans and development projects.*
- ▶ **Policy PF-3:** *Water supply and delivery systems shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City’s satisfaction.*
- ▶ **Policy PF-3-Action 1:** *The following shall be required for all development projects, excluding subdivisions:*
  - *An assured water supply and delivery system shall be available at the time of project approval. The water agency providing service to the project may provide several alternative methods of supply and/or delivery, provided that each is capable individually of providing water to the project.*
  - *All required water infrastructure for the project shall be in place at the time of project approval, or shall be assured through the use of bonds or other sureties to the City’s satisfaction. Water infrastructure may be phased to coincide with the phased development of large-scale projects.*
- ▶ **Policy PF-7:** *The City shall require that water flow and pressure be provided at sufficient levels to meet domestic, commercial, industrial, and firefighting needs.*
- ▶ **Policy PF-8:** *Sewage conveyance and treatment capacity shall be available in time to meet the demand created by new development, or shall be assured through the use of bonds or other sureties to the City’s satisfaction.*

- ▶ **PF-8-Action 1:** *The following shall be required for all development projects, excluding subdivisions:*
  - *Sewer/wastewater treatment capacity shall be available at the time of project approval.*
  - *All required sewer/wastewater infrastructure for the project shall be in place at the time of project approval, or shall be assured through the use of bonds or other sureties to the City's satisfaction.*
- ▶ **Policy PF-19:** *Public facilities should be phased in a logical manner which avoids "leapfrog" development and encourages the orderly development of roadways, water and sewer, and other public facilities. The City shall not provide public financing or assistance for projects that do not comply with the planned phasing of public facilities. Interim facilities may be used only if specifically approved by the City Council.*
- ▶ **Policy PF-20:** *The City shall require secure financing for all components of the transportation system through the use of special taxes, assessment districts, developer dedications, or other appropriate mechanisms in order to provide for the completion of required major public facilities at their full planned widths or capacities in one phase. For the purposes of this policy, "major" facilities shall include the following:*
  - *Any roadway of a collector size or above, including any roadway shown on the Circulation Plan in this General Plan.*
  - *All wells, water transmission lines, treatment facilities, and storage tanks needed to serve the project.*
  - *All sewer trunk and interceptor lines and treatment plants or treatment plant capacity.*
- ▶ **Policy PF-21:** *New development shall fund its fair share portion of its impacts to all public facilities and infrastructure as provided for in state law.*

The following policies from the Safety Element of the City General Plan (2003, as amended 2007) are applicable to the proposed project:

- ▶ **Policy SA-1:** *The City will seek to maintain acceptable levels of risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards in Elk Grove.*
- ▶ **Policy SA-30:** *Design neighborhoods and buildings in a manner that prevents crime and provides security and safety for people and property when feasible.*
- ▶ **Policy SA-31:** *Encourage the use of Crime Prevention through Environmental Design (CPTED) principles in the design of development projects and buildings. These basic principles include:*

#### ***Natural Surveillance***

*A design concept directed primarily at keeping intruders easily observable. Promoted by features that maximize visibility of people, parking areas and building entrances: doors and windows that look out on to streets and parking areas; pedestrian-friendly sidewalks and streets; front porches; adequate nighttime lighting.*

#### ***Territorial Reinforcement***

*Physical design can create or extend a sphere of influence. Users then develop a sense of territorial control while potential offenders, perceiving this control, are discouraged. Promoted by features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments, and "CPTED" fences.*

### ***Natural Access Control***

*A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating in offenders a perception of risk. Gained by designing streets, sidewalks, building entrances and neighborhood gateways to clearly indicate public routes and discouraging access to private areas with structural elements.*

### ***Target Hardening***

*Accomplished by features that prohibit entry or access: window locks, dead bolts for doors, interior door hinges.*

- ▶ **Policy SA-32:** *Cooperate with the Elk Grove Community Services District (EGCSD) Fire Department to reduce fire hazards, assist in fire suppression, and promote fire safety in Elk Grove.*
  - **SA-32-Action 1:** *Review new development for adequate water supply and pressure, fire hydrants, and access to structures by fire fighting equipment and personnel.*
  - **SA-32-Action 2:** *Review projects for compliance with the Fire Code as part of the building permit process.*
  - **SA-32-Action 4:** *Require, where appropriate, on-site fire suppression systems for all new commercial and industrial development to reduce the dependence on fire department equipment and personnel.*

The following policy from the Conservation and Air Quality Element of the City General Plan (2003, as amended 2007) are applicable to the proposed project:

- ▶ **Policy CAQ-27:** *The City shall promote energy conservation measures in new development to reduce on-site emissions and power plant emissions. The City shall seek to reduce the energy impacts from new residential and commercial projects through investigation and implementation of energy efficiency measures during all phased of design and development.*

## **Emergency Response and Evacuation Plans**

In 1991, the State of California passed legislation authorizing the State's Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction handles emergency disasters. By December 1996, each jurisdiction incorporated by 1993 must demonstrate to OES that it is in compliance with SEMS through a number of measures, including having an up-to-date emergency management plan.

The City of Elk Grove Emergency Operations Plan (EOP) was prepared in May 2004 and establishes an Emergency Management Organization and assigns functions and tasks consistent with SEMS (EGCSD 2004). It provides for the integration and coordination of planning efforts of multiple jurisdictions. This plan was reviewed and approved by representatives from each City of Elk Grove department, local special districts with emergency services responsibilities in the city, and the Sacramento Operational Area Office of Emergency Services. The content is based on guidance approved and provided by the State of California and the Federal Emergency Management Agency. The intent of the EOP is to provide direction on how to respond to an emergency from the initial onset, through an extended response, and into the cost recovery process.

## **Fire Codes and Guidelines**

An important requirement for fire suppression is adequate fire flow, which is the amount of water, expressed in gallons per minute, available to control a given fire and the length of time that this flow is available. The

availability of sufficient water flows and pressure is a basic requirement of California Building Code. The total fire flow needed to extinguish a structural fire is based on a variety of factors, including building design, internal square footage, construction materials, dominant use, height, number of floors, and distance to adjacent buildings. CCSD has statutory responsibility under the California Fire Code to ensure an adequate fire flow is maintained for all existing structures and new construction. It is the standard agreed to by the SCWA and CCSD that commercial areas will be provided with a minimum fire flow of 3,000 gpm at 20 pounds per square inch (psi). Static water supply is maintained at approximately 50 psi and not allowed to drop below 40 psi. These figures are maintained in excess of peak day demands and include reserve capacities. Requirements are determined for each project at the design stage, based on the Uniform Fire Code (UFC).

### **4.5.3 IMPACTS AND MITIGATION MEASURES**

#### **METHOD OF ANALYSIS**

Impacts on utilities and service systems that would result from project implementation were identified by comparing existing service capacity and facilities against future demand associated with project implementation. Where possible, a quantitative comparison was used to determine impacts of the project on future demands. Evaluation of potential utility and service systems impacts were based on a review of documents pertaining to the potential project sites and surrounding area, including the Elk Grove General Plan (2003, as amended 2007), and the City of Elk Grove General Plan Existing Conditions Report (2003). Additional information was obtained through consultation with appropriate agencies as well as field review of the potential project sites and surroundings.

#### **THRESHOLDS OF SIGNIFICANCE**

For the purpose of this analysis, the following applicable thresholds of significance have been used to determine whether implementing the proposed project would result in a significant impact. These thresholds of significance are based on the State CEQA Guidelines (except where noted below). A public utilities impact is considered significant if implementation of the proposed project would do any of the following:

- ▶ create demand for electrical or natural gas service that is substantial in relation to the existing demands;
- ▶ exceed wastewater treatment requirements of the applicable RWQCB;
- ▶ require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- ▶ 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 beyond the capacity of existing landfills;
- ▶ violate federal, state, or local statutes and regulations related to solid waste; or
- ▶ result in inefficient, wasteful, and unnecessary consumption of energy (based on Appendix F of the State CEQA Guidelines).

A public service impact is considered significant if implementation of the proposed project would do any of the following:

- ▶ result in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for:
  - fire protection,
  - police protection,
  - schools,
  - parks, and
  - other public facilities;
- ▶ create circumstances where existing services and facilities could not meet established performance standards (i.e., response times, provider per resident ratios); or
- ▶ result in the increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Increased demands on schools and parks are typically driven by new housing developments, which bring new residents to a community. The proposed project does not include any components that would increase the demands on local schools or parks/recreational facilities. In addition, the proposed project is intended to provide convenient, cost-effective and environmentally sound waste management services to the citizens of Elk Grove. By achieving this objective, the proposed project would not be expected to have adverse solid waste impacts. Therefore, the project's impacts on schools, parks, recreation and solid waste are not evaluated further in this EIR.

## IMPACTS AND MITIGATION MEASURES

**IMPACT 4.5-1** **Increased Demand for Water Supply, Treatment, and Conveyance Facilities.** *Implementation of the proposed project would not put substantial demands on the available water supply. Therefore, existing and projected water supplies are adequate to serve the project. This impact is considered **less than significant**.*

Both of the potential project sites are located in developed industrial areas with established water service, which is provided to the area by SCWA. The project's primary water requirement would be associated with fire flow demand. The water conveyance system within the Grant Line Road industrial lands are designed to meet the fire flow demands of the industrial users during emergency events. In addition, the CCSD has statutory responsibility under the California Fire Code to ensure an adequate fire flow is maintained for all existing structures and new construction. This is achieved through CCSD review during the facility design stage, based on the Uniform Fire Code requirements. Therefore, the fire flow requirements of the proposed project would not be expected to adversely affect the water system within the City.

The potable water demands associated with the proposed project would generally be limited to the restroom/sanitary needs within the facility for up to 100 employees and facility visitors, and the proposed truck washing station. The use of water is strongly discouraged in waste processing operations in order to limit water contamination. When water comes in contact with waste materials, it must be treated as contact water. Contact water cannot be discharged into storm water drainage systems and must be disposed of within a sanitary sewer system or be collected and transported off of the site to an appropriate disposal facility. Therefore, water use in the operations is generally limited to a ceiling misting system that is used to control dust generated from waste processing operations within the building and equipment washing. Because only a relatively light mist is necessary to moisten the waste materials and control dust within the building, the misting system does not typically require a substantial water supply. Because the proposed project's water supply demands would be

negligible, implementation of the proposed project would not be expected to adversely affect the existing water treatment and conveyance facilities. Therefore, this is considered a **less-than-significant** impact.

#### Mitigation Measure 4.5-1 Increased Demand for Water Supply, Treatment, and Conveyance Facilities

No mitigation is necessary.

**IMPACT 4.5-2** Demand for Wastewater Treatment and Conveyance Facilities. *Implementation of the project would not substantially increase the demand for wastewater treatment and conveyance facilities. Existing and planned wastewater treatment and conveyance facilities would be adequate to serve the project. This impact is considered less than significant.*

As noted above in Impact 4.5-1, implementation of the proposed project would not generate a substantial demand on water supplies. Therefore, the project would not be expected to generate substantial wastewater. Wastewater would primarily be generated from the proposed restroom facilities, which would be designed to accommodate the demands of up to 100 employees and facility visitors, and from equipment washing. Both of the potential project sites are located in developed industrial areas with established wastewater service. For Site 4, a lateral sewer line extends to Iron Rock Way adjacent to the site from the E. Stockton Boulevard trunk line. For Site 2, a trunk line extends under Grant Line Road directly adjacent to the site. These sewer lines have been designed to accommodate the planned industrial development within the Grant Line Road industrial area. As stated in their comment letter on the project's Notice of Preparation (Appendix A), the Sacramento Area Sewer District does not have any specific concern related to the development of these sites and they anticipate the project will result in less-than-significant impacts on sewage facilities, assuming that the project complies with all required policies, ordinances and conditions of approval. Therefore, the proposed project's wastewater demands would not be expected to exceed the wastewater treatment system's capacities and would not be expected to require or result in the construction of new wastewater treatment facilities or expansion of existing facilities. This is considered a **less-than-significant** impact.

#### Mitigation Measure 4.5-2 Demand for Wastewater Treatment and Conveyance Facilities

No mitigation is necessary.

**IMPACT 4.5-3** Increased Demand for Energy. *Implementation of the proposed project would not substantially increase the demand for energy. Therefore, this impact is considered less than significant.*

Implementation of the proposed project would require the use of electricity and natural gas to meet the facility's energy requirements. The electrical demands would primarily be driven by the energy requirements of the processing equipment including conveyer systems and other sorting equipment, as well as interior and exterior lighting. The facility's electrical demands would be relatively low when compared to other industrial operations. The facility would also require natural gas, primarily to meet the facility's heating requirements. Existing electrical and natural gas infrastructure is in place at both of the project sites and is sized to meet the industrial demands associated with the zoning of the sites. Therefore, the need for the expansion of service capacity or new service extensions would not be anticipated with project implementation.

The proposed project is intended to improve the operational efficiency of waste processing operations by reducing the travel distance for waste collection vehicles operating within the City. The increased energy usage associated with facility operations would be offset to a degree by the reduction in vehicle miles traveled by waste collection vehicles. Therefore, implementation of the proposed project would not result in substantial increases in energy demand and this impact would be considered **less than significant**.

### Mitigation Measure 4.5-3 Increased Demand for Energy

No mitigation is necessary.

**IMPACT 4.5-4** **Increased Demand for Fire Protection Services.** *Implementation of the proposed project would not substantially increase the demand for fire protection services. The City's existing fire protection services are adequate to serve the project. Therefore, this impact is considered **less than significant**.*

The proposed project is consistent with the land use and zoning designations at both of the potential project sites and is located within an established industrial area. Construction and operation of the facility would not increase the demand for fire protection services or emergency medical services above the level anticipated for the potential project sites within the Elk Grove General Plan. In addition, the proposed project would be required to comply with State regulatory requirements for the proposed facility, as specified in the California Code of Regulations (CCR) Titles 14, 22, and 27, as well as the CCSD Fire Department requirements. To reduce the danger of fire, implementation of fire protection standards in accordance with the regulatory requirements specified in the Uniform Fire Code and in CCR Titles 14, 22, and 27, would be required, including: (1) a 48-hour time limit for storage of waste materials on site; (2) load checking to reduce the possibility of hazardous wastes entering the facility; and (3) establishment of an emergency response plan. Also, the project would be required to pay the current development impact fee for fire services in Zone 3.

Both sites have fire hydrants located on the site. The nearest fire station to the project sites is Fire Station 71, located approximately 3 miles to the northwest. In addition, the CCSD Fire Department is planning to construct Fire Station 70 on Bruceville Road south of Kammerer Road in order to maintain service levels in the local area. Because the proposed project would be required to implement State-mandated fire protection standards associated with facility operations, would be located within developed industrial areas with fire hydrants on the site, would be located near existing and planned fire stations, and would be required to pay development impact fees for fire services, the project's fire protection and emergency medical service impacts would be considered **less than significant**.

### Mitigation Measure 4.5-4 Increased Demand for Fire Protection Services

No mitigation is necessary.

**IMPACT 4.5-5** **Increased Demand for Police Protection Services.** *Implementation of the proposed project would not generate additional residents and would not include uses that would substantially increase the demands on local law enforcement. Therefore, this impact is considered **less than significant**.*

Implementation of the proposed project would not generate new residences in the project area that would increase the demand for police protection services. The proposed transfer station operations would be located within an existing industrial area, for both potential project sites, that is currently patrolled by the Elk Grove Police Department. The proposed waste processing operations are not anticipated to generate significant demands on law enforcement because they would not be considered a magnet for criminal activity. In addition, the proposed project would be required to pay the Capital Facilities Fee at the time of building permit issuance. This fee program is intended to fund the police facilities and equipment that are necessary to meet the demands of new development. Due to the low demand for law enforcement services associated with waste processing operations and the required contribution to the Capital Facilities Fee, the project's impacts on law enforcement services would be considered **less than significant**.

### Mitigation Measure 4.5-5 Increased Demand for Police Protection Services

No mitigation is necessary.

