

M. UTILITIES AND INFRASTRUCTURE

This section describes existing utility systems in the vicinity of the Plan Area, lists General Plan and Draft Specific Plan policies relevant to these systems, evaluates potential impacts resulting from implementation of the Draft Specific Plan, and identifies mitigation measures to reduce the significance of potential impacts. The analysis examines water supply, wastewater, storm drainage, field utilities (water and wastewater) and street maintenance, solid waste, energy supply, and telecommunications.

1. Setting

The existing conditions of utilities and infrastructure that relate to the Plan Area are discussed in this section.

a. Water System. The City of Benicia operates and manages its own water system. The City provides treated water to approximately 9,182 customers within the City for residential, commercial, industrial, and irrigation uses. The City also provides untreated water to the Benicia Valero Refinery for industrial uses.

This section describes existing water service and supply in the City of Benicia and is based on information from the City of Benicia *Urban Water Management Plan*,¹ unless otherwise noted.

(1) Water Supply. The City’s water supply comes primarily from contracts and agreements held through the State Water Project (Sacramento Delta) and the Solano Water Project (Lake Berryessa). Approximately 80 percent of the City’s water comes from the Sacramento River Delta and approximately 20 percent comes from Lake Berryessa. These and other sources of the City’s water supply are shown in Table IV.M-1 and are discussed below. In total, the City has existing entitlements for 35,675 to 36,175 acre-feet of water per year.

State Water Project. The City receives State Water Project (SWP) water through an agreement with the Solano County Water Agency (SCWA). SCWA contracts with the California Department of Water Resources (DWR) for the SWP water, and, in turn contracts with cities in Solano County to provide this supply. The City’s current contract amount is 17,200 acre-feet/year; however, under certain entitlement agreements, the City has agreed to reduce this amount to 16,075 acre-feet/year. The SWP contract runs through 2035 and is renewable.

Water Rights Settlement. The “Area of Origin” Water Rights Settlement with DWR

Table IV.M-1: Water Supply Sources

Source	Contract or Water Rights (acre-feet/year)
State Water Project (SWP)	16,075
Water Rights Settlement	10,500
Lake Herman	500-1,000 (average annual yield)
Vallejo Agreement (Solano Project)	1,100
Total	28,175–28,675^a

^a The City may also recover a total of 7,500 acre-feet from the Mojave Banking and Water Exchange during dry years.

Source: Benicia, City of, 2005. *Urban Water Management Plan, Final Report*. December.

¹ Benicia, City of, 2005. *Urban Water Management Plan, Final Report*. December.

provides the City with 10,500 acre-feet/year of water from the Sacramento River that is not designated as SWP water. This is a permanent allocation of water supply. The Settlement Agreement runs through 2035 and is renewable under the same terms as the SWP.

Lake Herman. Lake Herman is located in the hills between the cities of Benicia and Vallejo and has a storage capacity of 1,800 acre-feet. The average yield of the Lake Herman watershed is 500 to 1,000 acre-feet/year, with no yield in dry years. The lake primarily serves as terminal storage for excess supply delivered to the City through the North Bay Aqueduct (NBA).

Vallejo Agreement (Solano Project Water). The City currently has an active water purchase agreement with the City of Vallejo. The agreement was first executed in 1962 and has been amended twice. The second amendment extended the agreement to 2025 and it is assumed that the agreement will be renewed. The agreement allows the City to purchase up to 1,100 acre-feet/year of Vallejo's allotment of Solano Project Water from Lake Berryessa.

Mojave Banking and Water Exchange. As a member of the SCWA, the City participated in a banking and water exchange program with the Mojave Water Agency. According to the agreement, SCWA (or its members) can exchange two units of SWP water for a future return of one unit of SWP water to be provided at the Delta by Mojave. The City has delivered a total of 15,000 acre-feet to Mojave and can recover a total of 7,500 acre-feet.

(2) **Water Treatment Facilities.** The City of Benicia owns and operates its own Water Treatment Plant (WTP) located near Lake Herman Road. Untreated water from the City's supply sources is conveyed to the WTP. The treatment plant currently has a capacity of 12 million gallons per day (mgd). Incoming raw water is subject to primary and secondary levels of treatment. Primary treatment includes coagulation, flocculation, and sedimentation. Secondary treatment includes filtration and chlorinated disinfection. Treated water is stored in reservoirs at the WTP site for delivery to the distribution system.

During the winter months, particularly after heavy rains, raw water from the Sacramento River conveyed through the aqueduct is very turbid with high total organic compound concentrations and low alkalinity. The WTP has not been able to treat this water effectively unless it is blended with Lake Berryessa water. The WTP was recently modified to increase its reliability, flexibility, and redundancy so that it can effectively treat 12 mgd throughout the year. The recent modifications provide additional sedimentation facilities, provide more flexibility to operate the filters, meet disinfection requirements, comply with future water quality regulations, and restore treated water storage capacity for more flexibility.

(3) **Recycled Water.** The City and the Benicia Valero Refinery partnered on a project to supply recycled water to the refinery. The project would have diverted a large fraction of the City's treated wastewater to the refinery for industrial uses on a year-round basis. However, construction of the recycled water facilities has been put on hold due to cost increases.

(4) **Water Conveyance System.** The City's raw (untreated) water supply comes primarily from two surface water bodies: Lake Berryessa and the Sacramento Delta. Water from these sources is conveyed to the WTP where it is treated and then conveyed to customers throughout the City.

Raw Water Conveyance. State Water Project water is conveyed to the City through the North Bay Aqueduct (NBA) from the Sacramento River. The NBA, which is operated remotely by DWR, is an underground pipeline that runs from Barker Slough in the Delta to Cordelia Forebay, just outside of Vallejo. The size of the underground pipeline varies from 72 inches at Barker Slough to 54 inches at Cordelia Forebay. From the Cordelia Forebay, water is pumped to Napa County, Vallejo and Benicia. The pump station has a total capacity of 20.7 mgd. A 30-inch line extends from the Cordelia Forebay and connects to the City's 36-inch raw water transmission line.

When raw water from the NBA is unavailable or of poor quality due to high turbidity and organic content, the City obtains its water from the City of Vallejo. This water is conveyed from Lake Berryessa through the Putah South Canal Terminal Reservoir. During these periods, the City operates the Cordelia Pump Station to take water from the Canal and deliver it to the City's WTP through a 24-inch diameter pipeline. The City's portion of the Cordelia Pump Station has a capacity of 10.8 mgd and is manually operated by the City during these periods.

Surplus flow not needed at the WTP is diverted by gravity to Lake Herman through a 24-inch diameter pipeline, then into a 30-inch pipeline that drains to Lake Herman. During emergencies, when water from the NBA or the Putah South canal is not available, the City pumps water from Lake Herman back to the WTP through the Lake Herman Pump Station. The pump station's capacity is 9.6 mgd.

Treated Water Conveyance. The treated water distribution system consists of three main pressure zones. The zones are served by five storage reservoirs, three pumping stations, and eight active pressure-reducing valve (PRV) stations. The water distribution pipeline system is composed of 4-inch to 30-inch diameter pipelines.

Plan Area Water Conveyance. Existing water lines within the Plan Area are shown in the Draft Specific Plan. Water lines within the Plan Area are located beneath streets. These lines generally range between 4 to 14 inches in size.

b. Wastewater (Sanitary Sewer) System. The City of Benicia provides wastewater collection, treatment, and disposal services. This section describes the existing wastewater treatment facilities and collection system within the City.

(1) Wastewater Treatment Facilities. The City of Benicia Wastewater Treatment Plant (WWTP) is located near the Plan Area at the intersection of East 5th Street and East G Street. The WWTP has a design capacity of 4.5 mgd. Current average dry weather flow is approximately 3 mgd. The WWTP provides secondary level treatment for domestic, commercial, and industrial wastewater. Untreated wastewater enters the WWTP from two main gravity sewer pipelines and a third wet weather gravity interceptor pipeline. Wastewater entering the WWTP is screened to remove larger objects and is then subject to primary sedimentation, solids treatment, and secondary sedimentation to remove small particles and contaminants. The effluent is then disinfected and dechlorinated prior to discharge to the Carquinez Strait.

(2) Collection System. Facilities for conveying wastewater from the City to the WWTP consist of 150 miles of gravity pipelines and force mains, and 24 lift stations. The majority of the

collection system pipelines range in size from 4 to 30 inches in diameter, with approximately 50 percent of the system consisting of pipe greater than 6 inches in diameter.

Existing sanitary sewer lines within the Plan Area are shown in the Draft Specific Plan. These lines generally range between 4 to 8 inches in size. Eight to 14-inch sanitary sewer force mains are located south of the Plan Area, beneath Bayshore Road.

c. Storm Drainage. The City of Benicia is responsible for the operation and maintenance of storm drain facilities within the City. Facilities include drainage inlets, manhole structures, culverts, open ditches, pump stations, and portions of Sulphur Springs Creek, a large drainage channel.

The Benicia Urban Area sub-basin consists of numerous small drainage areas that drain portions of the Southampton area, the Arsenal area, and other urban areas including Downtown. The Plan Area is served by underground drainage pipes ranging from 12- to 27-inches in size located beneath streets and developed areas. Storm water drains directly to Carquinez Strait through 27- and 36-inch outlets south of the Plan Area.

d. Public Works Field Utilities and Streets Maintenance and Operations. The Benicia Public Works Department is responsible for the maintenance and operation of field utilities (water and sanitary sewer infrastructure), storm water drains, and streets; the Public Works Department also manages the contracts for street light maintenance, signal maintenance, and street sweeping. The maintenance and operation division operates primarily out of the City Corporation Yard, which is located at 2400 East 2nd Street, north of Downtown Benicia. There are currently 23 employees that provide maintenance services at the Corporation Yard. Employees work in the following sections: field utilities and street maintenance administration (two employees); street maintenance section (seven employees); field utilities section (11 employees); and fleet maintenance section (three employees). The maintenance and operations division also maintains a 300-piece vehicle and equipment fleet in a full-service vehicle repair shop at the Corporation Yard. According to the Public Works Department, the maintenance and operations division and Corporation Yard are currently operating at capacity (i.e., current staff cannot assume additional workloads, and there is not additional space at the Corporation Yard to store new equipment/staff that would be required for expanded operations).²

e. Solid Waste. The following section describes Benicia's non-hazardous and hazardous waste disposal services and capacity, as well as the regulatory context for solid waste disposal.

(1) Non-Hazardous Solid Waste. Allied Waste Management (formerly Pleasant Hill Bayshore Disposal) is the local franchise collector for residential recyclables, yard waste, garbage, and commercial refuse in the City of Benicia. Open market recycling services are also available for businesses. Services include: office waste paper; cardboard; newspaper; mixed recyclables and green waste collection.

Non-hazardous solid waste is taken to the Keller Canyon Landfill in unincorporated Pittsburg. The landfill handles construction, demolition and mixed municipal waste. The landfill had a capacity of

² Schiada, Dan, 2006. Director of Public Works Department. Memorandum to Adam Weinstein, LSA Associates, Inc. December 21.

68,279,670 cubic yards in 2001 and a permitted throughput³ of 3,500 tons per day.⁴ The landfill is estimated for closure in the year 2030; however this date is subject to future review and revision.

(2) Hazardous Solid Waste. The City's hazardous wastes are disposed of at the Kettleman Hills Facility, which is operated by Chemical Waste Management, Inc. The Kettleman Hills Facility is located in the San Joaquin Valley along Interstate 5, approximately midway between San Francisco and Los Angeles.⁵ The facility is approved to manage hazardous materials under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and is permitted under the Toxic Substances Control Act (TSCA) and the Resource Conservation and Recovery Act (RCRA). The facility accepts municipal solid waste, non-liquid industrial waste, contaminated soils, ash, grit and sludge. The Kettleman Hills Facility had a remaining capacity of 3,374,415 cubic yards as of September 2001 and has an estimated closure date of December 31, 2010 based on a permitted throughput of 1,400 tons per day.⁶

(3) Assembly Bill (AB) 939. The California Integrated Waste Management Act of 1989 (AB 939) requires local cities and counties to adopt an Integrated Waste Management Plan (IWMP) to establish objectives, policies, and programs relative to waste disposal, management, source reduction, and recycling. All solid waste management in Solano County is governed by the adopted Countywide IWMP. As part of AB 939, all California cities and counties were required to divert 50 percent of solid waste from landfills through the implementation of various strategies, including source reduction, composting, recycling, and yard waste programs by the end of year 2000. The City successfully exceeded this requirement by diverting 62 percent of solid waste in the year 2000. The most recent reporting information shows that the City continues to exceed this requirement; in 2004 (the year for which the most recent information is available) the Countywide IWMB approved diversion rate for the City was 61 percent.

The Countywide IWMB estimates an average waste generation rate of 10.5 pounds per employee per day for commercial uses⁷ and 9 pounds per employee per day for industrial uses.⁸ The average waste generation rate for multi-family residential uses is estimated at 5 pounds per unit per day.⁹

³ Permitted throughput is the maximum permitted amount of waste a landfill can handle and dispose of in one day. This figure is established in the current solid waste facilities permit issued by the Integrated Waste Management Board.

⁴ California Integrated Waste Management Board, 2007. Facility/Site Summary Details Keller Canyon Landfill. Website: www.ciwmb.ca.gov/swis/detail.asp. June.

⁵ Waste Management, Inc., 2003. *CWM Kettleman Hills Landfill*. Website: www.wm.com.

⁶ California Integrated Waste Management Board, 2007. Facility/Site Summary Details, Kettleman Hills Landfill. Website: www.ciwmb.ca.gov/SWIS/detail.asp. June.

⁷ Integrated Waste Management Board, 2007. *Estimated Solid Waste Generation Rates for Commercial Establishments*. Website: www.ciwmb.ca.gov/WasteChar/WasteGenRates/Commercial.htm. June.

⁸ Integrated Waste Management Board, 2007. *Estimated Solid Waste Generation Rates for Industrial Establishments*. Website: www.ciwmb.ca.gov/WasteChar/WasteGenRates/Industrial.htm. June.

⁹ Integrated Waste Management Board, 2007. *Estimated Solid Waste Generation Rates for Residential Developments*. Website: www.ciwmb.ca.gov/WasteChar/WasteGenRates/Residential.htm. June.

f. Telecommunications. AT&T provides telephone and digital subscriber line (DSL) internet services and Comcast provides cable television and internet services to the City. Both of these service providers are privately owned and operated and recover the costs of operation, maintenance, and capital improvement through connection and user fees, which are collected from customers. Telephone, cable television and internet services are currently available within the Plan Area.

The California Public Utilities Commission (CPUC), which regulates California's telecommunication industry, requires that local phone service providers anticipate and serve new growth. To meet this requirement, local phone service providers continually upgrade their facilities and infrastructure, adding new facilities and technology to remain in conformance with California Public Utilities Commission tariffs and regulations and to serve customer demand in the City.

g. Electricity and Gas. The Pacific Gas & Electric Company (PG&E) provides electricity and natural gas service to customers in Benicia. PG&E charges connection and user fees for all new development, in addition to sliding rates for electrical and natural gas service based on use. Electricity and gas services are currently offered in the Plan Area. Regulatory requirements related to electricity and gas are discussed below.

Title 24, Part 6, of the California Code of Regulations, entitled "Energy Efficiency Standards for Residential and Nonresidential Buildings," specifies requirements to achieve the State's minimum energy efficiency standards. The standards apply to new construction of both residential and nonresidential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating and lighting. Compliance with these standards is verified and enforced through the local building permit process. Please see Section IV.N for a discussion of sustainability and energy issues.

2. City of Benicia General Plan

Applicable utilities and infrastructure-related General Plan goals, policies, and one program are presented below.

Land Use and Growth Management

- *Growth Management Goal 2.4:* Ensure that development pays its own way.
 - *Growth Management Program 2.4.A:* Monitor development to ensure it does not overburden the City's infrastructure.

Community Services

- *Water Goal 2.36:* Ensure an adequate water supply for current and future residents and businesses.
 - *Water Policy 2.36.1:* Approve development plans only when dependable and adequate water supply to serve the development is assured.
 - *Program 2.36.D:* Continue to require development to utilize adopted City standards for low-water-use landscaping.
- *Water Goal 2.40:* Ensure adequate wastewater treatment capacity to serve all development shown in the General Plan.
 - *Water Policy 2.40.1:* Approve changes in land use designations for new development only if adequate wastewater treatment capacity is assured.
- *Recycling Goal 2.42:* Enhance the recycling of solid waste.

3. Draft Specific Plan

The Draft Specific Plan contains the following goals, policies, and actions related to utilities and infrastructure.

- *Infrastructure Goal 6:* Ensure that public services keep pace with new development and that development pays its fair share of the cost of infrastructure.
 - *Infrastructure Policy 1:* Ensure that development patterns are orderly, efficient, and economically feasible in order to optimize land values and efficiently utilize public services and infrastructure.
 - *Infrastructure Action 6.1.1:* Coordinate development approval with the Capital Improvement Plan to ensure that adequate municipal facilities and services are available to serve incoming development.
 - *Infrastructure Action 6.1.2:* Where existing facilities are inadequate, approve new development only when the developer can demonstrate that all necessary public facilities will be adequately financed and installed prior to project occupancy, or the facility improvements are consistent with applicable facility plans approved by the City.
 - *Infrastructure Action 6.1.3:* Require development to pay its full share of the cost of on- and off-site public infrastructure and services generated by new demand.
 - *Infrastructure Policy 2:* Work to safeguard public health, safety and prosperity by providing and maintaining facilities that enable the community to live in harmony with sustainable practices and natural systems.
 - *Infrastructure Action 6.2.1:* Provide for efficient use of water through the use of natural drainage, drought tolerant landscaping, and recycling, with exception for plant and ornamental species that are perpetuated for historical purposes.
 - *Infrastructure Action 6.2.2:* Approve new development only when a dependable, safe and adequate water supply can be assured by the City.
 - *Infrastructure Action 6.2.3:* Ensure the availability of adequate wastewater treatment capacity prior to the approval of new development.
 - *Infrastructure Action 6.2.6:* Promote the use of recycling programs for residential, commercial and industrial development in order to meet the mandated objectives set forth in the California Integrated Waste Management Act.
 - *Infrastructure Action 6.2.7:* Require commercial, retail, and industrial development to consolidate trash and recycling in City-approved receptacles and enclosures, and not within pedestrian access or public ways.

4. Impacts and Mitigation Measures

This section discusses potential impacts to infrastructure and utility systems that could result from implementation of the Draft Specific Plan. The section begins with the criteria of significance, which establish the thresholds used to determine whether an impact is significant. The latter part of this section presents the impacts associated with the proposed project and identifies mitigation measures, as appropriate. Less-than-significant impacts to infrastructure and utilities are discussed first, followed by significant impacts.

a. Significance Criteria. The Draft Specific Plan would have a significant impact on the City's infrastructure and utility systems if it would:

- Increase water demand such that there would not be sufficient water supplies available to serve the project from existing entitlements and resources, or would require new or expanded entitlements;

- Require or result in the construction of new water or 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 which serves or may serve the project that it does not have adequate capacity to service the project's projected demand in addition to the provider's existing demand;
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Violate applicable federal, State, and local statutes and regulations related to solid waste.

b. Less-than-Significant Utilities and Infrastructure Impacts. The proposed project would result in the following less-than-significant impacts to utilities and infrastructure.

(1) Water Supply, Treatment and Conveyance. The City's *Urban Water Management Plan* provides water demand projections based on growth anticipated by the City's General Plan. Table IV.M-3 compares the City's water supply and demand for 2005 to 2025 for a normal year, single dry year, and multiple dry years. As shown in Table IV.M-2, the City is projected to have a surplus of water available even in multiple dry years. Demand associated with new and redeveloped uses (totaling approximately 320,413 square feet of new and redeveloped mixed uses and 22 residential units) within the Plan Area is not anticipated to exceed the City's available water supply. Draft Specific Plan Action 6.2.2 would ensure that new development within the Plan Area would not be approved unless adequate water supply can be assured by the City. These approvals may include water supply assurance for individual development projects as they are considered for approval by the City or completion of zone- or district-wide water supply evaluations (for multiple development projects).

Table IV.M-2: Supply and Demand (Acre-Feet/Year)

	2005			2020, 2025 and Later ^b		
	Normal Year	Single Dry Year	Multiple Dry Year	Normal Year	Single Dry Year	Multiple Dry Year
Supply from All Sources ^a	21,670	18,937	17,354	25,357	20,684	19,550
Demand	11,897	11,897	11,897	13,527	13,527	13,527
<i>Surplus of Supply</i>	<i>9,773</i>	<i>7,040</i>	<i>5,457</i>	<i>11,830</i>	<i>7,157</i>	<i>6,023</i>

^a City supply sources include the State Water Project.

^b Buildout is anticipated to occur by 2020. Therefore, demands in 2025 and later are expected to be the same as 2020.

Source: Benicia, City of, 2005. *Urban Water Management Plan, Final Report*. December.

In addition, new and redeveloped uses resulting from implementation of the Draft Specific Plan are not anticipated to exceed the capacity of the recently improved Water Treatment Plant. The City's WTP has adequate capacity to meet the demands of the future development anticipated by the General Plan, which anticipates the development of mixed uses in the Plan Area. The City's master planning for the WTP and the distribution system that conveys treated water to customers has taken into account anticipated future demand.

As development occurs within the Plan Area, it may be necessary to add new and upgrade existing water lines. The Draft Specific Plan anticipates that new water lines would be needed beneath portions of Jefferson Street and Jackson Street. The addition of this infrastructure would not result in environmental impacts beyond those identified in other sections of this EIR (e.g., construction-related impacts). In addition, Draft Specific Plan Actions 6.1.2 and 6.1.3 require that the developers of individual development projects be responsible for the cost and construction of new infrastructure required to serve new development. Implementation of these actions would ensure that adequate water infrastructure would be available to serve new development.

(2) Wastewater. Although implementation of the Draft Specific Plan would result in an increase in the demand for wastewater treatment and disposal, this demand is not anticipated to result in dry weather wastewater flows that exceed existing or planned capacity of the WWTP. In addition, Draft Specific Plan Action 6.2.3 ensures the availability of adequate wastewater treatment capacity prior to the approval of new development projects within the Plan Area. The City's Public Works Department would make this determination prior to approval of individual development projects. As a result, implementation of the Draft Specific Plan would comply with wastewater treatment requirements established by the Regional Water Quality Control Board (RWQCB).

As will be the case for water supply lines, development within the Plan Area may necessitate new and upgraded sanitary sewer lines to accommodate the additional wastewater. The Draft Specific Plan anticipates that new sanitary sewer lines would be needed beneath portions of Adams Street and new streets constructed within the Jefferson Ridge/Officers' Row Zone. The addition of this infrastructure would not result in environmental impacts beyond those identified in other sections of this EIR. Similar to the provision of water infrastructure, Draft Specific Plan Actions 6.1.2 and 6.1.3 require that individual development projects be responsible for the cost and construction of new infrastructure required to serve new development. Implementation of these actions would ensure that adequate water infrastructure exists to serve new development.

(3) Storm Drainage. New storm drainage pipelines and detention facilities would be required within the Plan Area to accommodate new and redeveloped uses. Construction of these additional facilities would not result in significant environmental impacts beyond those discussed in other sections of this EIR. Draft Specific Plan Actions 6.2.4 and 6.2.5 would require that storm water runoff from new development not exceed existing flow rates, and would promote storm water management strategies in compliance with the City's Stormwater Management Plan. These management strategies would include natural storm water treatment features, including swales, permeable paving, and landscaped areas. Landscape-style storm water treatment features may also be incorporated into one of four Potential Storm Water Quality Areas identified in the Draft Specific Plan. Such features would passively improve the quality of runoff and would enhance environmental quality. Refer to Section IV.N, Sustainability and Energy, for a recommended policy that would incorporate remnant wetlands on the site into the proposed Storm Water Quality Areas. Implementation of these actions would reduce the impacts of new development on the storm drainage system.

(4) Public Works Field Utilities and Street Maintenance and Operations. Construction of new streets and water, wastewater, storm drainage infrastructure within the Plan Area would increase the demand for maintenance services within the Plan Area. As discussed above, the City's maintenance and operations division and Corporation Yard are currently operating at capacity.

Implementation of the Draft Specific Plan would place additional demands on these City services. Draft Specific Plan Action 6.1.3 requires new development within the Plan Area to pay its full share of the cost of on- and off-site public infrastructure and services generated by new demand. In compliance with this requirement, individual developers within the Plan Area would be required to pay the pro-rata contribution associated with corporation yard improvements. These may include improvements to the corporation yard itself or the provision of a second City corporation yard. Payment of the fair-share cost of these improvements would ensure that new development within the Plan Area would not result in a significant impact to the operations and maintenance services provided by the City.

(5) Solid Waste. As described above, the CIWMB estimates an average waste generation rate of 10.5 pounds per employee per day for commercial uses, 9 pounds per employee per day for industrial uses, and 5 pounds per multi-family residential unit per day. Implementation of the Draft Specific Plan would result in the addition of approximately 451 new employees and 22 new residential units within the Plan Area. Of the 451 new jobs created in the Plan Area, 379 would be commercial, while 72 would be industrial (see Table IV.B-3 in Section IV.B, Population, Employment and Housing). This would amount to an estimated addition of 4,738 pounds per day (approximately 2 tons per day) of solid waste at Draft Specific Plan buildout. This represents less than 0.05 percent of the total daily permitted throughput for the Keller Canyon Landfill. The amount of solid waste generated by Draft Specific Plan development would not exceed the capacity of Keller Canyon Landfill. Therefore, implementation of the Draft Specific Plan would have a less-than-significant impact on landfill capacity.

Allied Waste Management currently provides recycling services to the Plan Area. These services contribute to a reduction in solid waste generated by proposed development. In addition, implementation of Draft Specific Plan Actions 6.2.6 and 6.2.7 would promote recycling programs within the Plan Area in an effort to reduce solid waste generation. The design and location of on-site recycling bins serving new development would be subject to City review and approval prior to issuance of building permits.

(6) Energy and Telecommunications. As described above, the Plan Area is currently serviced by electricity, natural gas, telephone, cable, and internet infrastructure located along local streets. New and redeveloped mixed uses within the Plan Area are anticipated in the City's General Plan, as well as by the utility providers who coordinate future service demands with the City. As such, new and redeveloped uses that would occur with implementation of the Draft Specific Plan are anticipated and, as a result, would have a less-than-significant impact on electricity, gas, telecommunications, cable, and internet services. Please see Section IV.N for a discussion of sustainability and energy issues.

c. Significant Utilities and Infrastructure Impacts. The proposed project would not result in any significant impacts to utilities and infrastructure.