M. UTILITIES AND INFRASTRUCTURE

This chapter, prepared by LSA Associates, Inc., describes the existing utilities and infrastructure for the City of Albany, as well as the applicable regulatory framework regarding water, wastewater, and storm drainage facilities; solid waste and disposal; electricity; gas; and telecommunications.

1. Setting

This section describes the City of Albany's existing infrastructure, including the water supply and distribution system; the wastewater collection, treatment and disposal system; the stormwater collection system; and other utilities, including solid waste, energy and telecommunications.

a. Water. The following discussion provides background information on the City's water supply, water treatment facilities, water distribution system, and water demand.

(1) Water Supply. Potable water is provided to the City of Albany, and approximately 1.3 million customers throughout portions of Alameda and Contra Costa Counties, by a publicly owned utility, East Bay Municipal Utility District (EBMUD). EBMUD's territory includes 332 square miles of service area, and the City of Albany comprises approximately 1.4 percent of its customers.

The EBMUD water supply system consists of a network of reservoirs, aqueducts, water treatment plants, pumping plants, and other distribution facilities that collects, transmits, treats, and distributes water from its primary water source, the Mokelumne River. Approximately 90 percent of the water used by EBMUD comes from the Mokelumne River watershed, located in the Sierra Nevada. EBMUD conveys water from the Pardee Reservoir, located approximately 38 miles northeast of Stockton, approximately 91 miles to EBMUD water treatment plants and terminal reservoirs through the Pardee Tunnel, the Mokelumne Aqueducts, and the Lafayette Aqueducts.[1]

EBMUD has water rights that allow for delivery of up to 325 million gallons per day (mgd). However, this allocation may be constrained by: (1) upstream water use by prior water right holders; (2) down-stream water use and other downstream obligations, including protection of public trust resources; (3) drought, or less-than-normal rainfall for more than a year; and (4) emergency shortages. EBMUD's secondary water supply source is local runoff from the East Bay area watersheds that is stored in the terminal reservoirs located within service area boundaries. The availability of water from local runoff is dependent on hydrologic conditions and terminal reservoir storage availability.[2]

In addition, recycled water treatment facilities have been constructed at EBMUD's wastewater treatment plant, located at the foot of the Bay Bridge. EBMUD stores the recycled water in a 1.5 million gallon storage tank on the site and uses another 2.4 million gallons a day (mgd) at the wastewater treatment plant for various industrial processes and for landscape irrigation.

[1] East Bay Municipal Utility District, 2013. Water Resources Planning Division. *Urban Water Management Plan 2010*. August.

[2] Ibid.

EBMUD's Policy 73 requires that when non-potable water is available, customers use it for non-domestic purposes including landscape irrigation and industrial uses. One of the programs under this policy, launched in 2008, is the East Bayshore Recycled Water Project which will supply an annual average of 2.5 million gallons per day (mgd) of recycled water to portions of Alameda, Albany, Berkeley, Emeryville and Oakland upon completion. Pipeline construction began in 2012 between Emeryville and Albany. In 2013, EBMUD partnered with the City of Albany to install a recycled water pipeline along Buchanan Street from Pierce Street to San Pablo Avenue.

(2) Water Treatment Facilities. There are six water treatment plants in the EBMUD water supply and distribution system. Combined, the six plants have a treatment capacity of over 375 mgd. The Orinda Water Treatment Plant, which serves Albany, has the largest output with a maximum capacity of 200 mgd. All water delivered to customers is filtered through sand and anthracite, or carbon treatment and plants provide disinfection, fluoridation and corrosion control.[3]

(3) Distribution System. From the water treatment plants, water is distributed to EBMUD's service area which is divided into more than 120 pressure zones ranging in elevation from sea level to 1,450 feet. The EBMUD water distribution network includes 4,100 miles of pipe, 140 pumping plants, and 170 neighborhood reservoirs (tanks storing treated drinking water) generating a total capacity of 830 million gallons.[4]

(4) Water Demand. In fiscal year 2010, EBMUD's system demand was on average 174 mgd. By 2040, EBMUD projects that water demand will increase to approximately 312 mgd in its service area, although with successful completion of water recycling and conservation programs, this demand could be reduced to approximately 230 mgd.[5] In normal water years, EBMUD has sufficient water rights to meet demands through 2040; however, EBMUD's current water supply is insufficient to meet water demand during single- and multi-year droughts despite EBMUD's water conservation and recycled water programs.[6]

To meet projected water needs and address deficient supply during droughts, EBMUD is working to identify supplemental water supplies and recycled water programs. New water supplies will come from water transfers, groundwater storage and regional supply projects.[7]

[3] East Bay Municipal Utility District, 2013a. *Water Treatment*. Website: www.ebmud.com/our-water/water-quality/water-treatment-plants (accessed August 27, 2013).

[4] Ibid.

[5] The planning level of demand is used to assess demands as dictated by community policies. The EBMUD level of demand (312 mgd) does not include the short-term reduction and rebound in demand caused by the multi-year drought (2007-2010) and the downturn in the economy. The EBMUD's 2040 Demand Study projected, on average, less than a 1 percent growth each year in customer demand through 2030 followed by a much lower increase thereafter to a 2040 level of demand of 230 mgd (applying reductions from conservation and recycled water savings).

[6] East Bay Municipal Utility District, 2013, op. cit.

[7] East Bay Municipal Utility District, 2012c. *Water Supply Management Program 2040*. Website: www.ebmud.com/our-water/water-supply/long-term-planning/water-supply-management-program-2040 (accessed December 20, 2013).

EBMUD has also developed mitigation and adaptation strategies to address the changing climate and its effects on water resources. In 2008, EBMUD incorporated climate change into its strategic plan, and has developed and implemented a climate change monitoring and response plan to inform future water supply, water quality, and infrastructure planning.[8]

b. Wastewater. The following discussion provides background information on the City's wastewater collection system, treatment facilities, systemic inflow issues, and planned improvements.

(1) Wastewater Collection. The City's sewer system serves a population of about 18,500 residents within the Albany city limits. The system includes approximately 32 miles of gravity sewer mains. All wastewater is conveyed to the EBMUD North Interceptor, through which it is conveyed south to EBMUD's Main Wastewater Treatment Plant (MWWTP) located near the eastern terminus of the San Francisco-Oakland Bay Bridge. During periods of wet weather, when the capacity of the interceptor is exceeded, flows in the North Interceptor may be diverted north to EBMUD's Point Isabel Wet Weather Facility in Richmond for storage and/or discharge.[9]

Over 75 percent of Albany's sewer system consists of 8-inch and smaller diameter pipe, and over 90 percent is 12-inches and smaller. The oldest portions of the system date to the early 1900s. Most older sewer pipes are constructed of vitrified clay, with plastic materials used for newer sewer construction and rehabilitation. The sewer system also includes approximately 4,600 private sewer laterals, which connect individual homes with the City maintained system. The City assumes responsibility for the maintenance and repair of the lower portion of the laterals located within the public right-of-way to the sewer main.[10]

The City's collection system is generally designed with adequate capacity for existing and future developments and does not have a history of capacity-based sanitary sewer overflows (SSOs). The system was designed to handle peak wet weather flows, but because the collection system is largely built-out, capacity issues are increasingly caused by aging infrastructure. Since the late 1980s the City has been systematically rehabilitating its wastewater collection system. Closed-circuit television has been used to inspect 85 percent of the sewer pipelines in the City. Results indicate that 80 percent of the system has been rehabilitated or replaced, and 20 percent remain in structurally poor condition.[11]

(2) Wastewater Treatment and Disposal. Wastewater treatment is provided by EBMUD, with a network of 15 wastewater pumping stations and 8 miles of force mains that convey wastewater to the MWWTP. EBMUD provides primary treatment for up to 320 mgd and secondary treatment for a maximum flow of 168 mgd. The average annual daily flow into the MWWTP is approximately 80 MGD, representing 48 percent of the plant's secondary treatment capacity. Flows are treated, disinfected, dechlorinated, and discharged through a deep-water outfall (102-inch pipeline) 1.0 mile

[8] East Bay Municipal Utility District, 2012d. *Water Supply: Project and Long-Term Planning*. Website: www.ebmud.com/our-water/water-supply (accessed December 20, 2013).

[9] RMC Water and Environment, 2014. *City of Albany Sewer Master Plan Final Report*. May.

[10] Ibid.

[11] Ibid.

off the East Bay shore into the San Francisco Bay. Currently, there are no planned improvements to the wastewater treatment plant that would affect treatment capacity.

(3) Inflow/Infiltration. EBMUD's system is currently unable to handle storm drainage from the communities where sewer pipes leak heavily during rainstorms. Groundwater or stormwater entering the sewer system is referred to as inflow/infiltration, which leads to the dilution of sewage, decreasing the efficiency of treatment and potentially causing sewage volumes to exceed design capacity of the MWWTP. The issue of inadequate wet weather capacity has been particularly critical since 2009, when the San Francisco Regional Water Quality Control Board (RWQCB) issued an order prohibiting further discharges from EBMUD's wet weather facilities.

Flow modeling and hydraulic monitoring was conducted and focused on the City's trunk sewer network, primarily 10-inch and larger pipes, plus some 6- and 8-inch pipes, that conveys flow generated throughout the system to the EBMUD interceptor. The modeling indicated potential capacity deficiencies in a number of areas of the sewer system, the most significant being the 10-inch sewer in Marin Avenue from San Pablo Avenue to the Berkeley city limits.

(4) Planned Improvements. The City is committed to a program to replace sewers (and associated manholes and lower laterals) in the system that have not yet been rehabilitated or replaced since the 1980s, as well as identification and elimination of direct inflow sources and continued participation in a regional private sewer lateral compliance program that will result in replacement of upper laterals throughout the City. These improvements are anticipated to result in significant reductions in inflow/infiltration, and the only deficiency that will remain is the sewer in Marin Avenue which is recommended for upsizing in the City's 2013 Capital Improvement Program (CIP).[12] The CIP also includes recommendations to accelerate the replacement of sewers upstream of identified capacity deficiencies in order to minimize the risk of overflow prior to improvements being completed.[13]

c. Stormwater. The following discussion provides background information on the City's stormwater collection system and pollution control efforts.

(1) Stormwater Collection and Drainages. The City of Albany's storm drain system is a network of structures, channels and underground pipes that carry stormwater to the San Francisco Bay. The storm drain system is maintained by the City and is separate from the sewer system. Stormwater is discharged directly to the San Francisco Bay without treatment. In addition to the approximately 11 miles of storm drains in the City, five creeks flow within and along Albany's borders from the Berkeley hills to the San Francisco Bay.

[12] Albany, City of, 2013. *Albany Capital Improvement Program FY 2013-2014 through FY 2017-2018.* June 12.

[13] RMC, 2014, op.cit.

(2) Stormwater Pollution Control. Pursuant to Section 402 of the Clean Water Act (CWA)[14] and the Porter-Cologne Act, municipal stormwater discharges in the City of Albany are regulated under the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, adopted October 14, 2009 (MRP). The MRP is overseen by the Regional Water Board. MRP Provision C.3 addresses post-construction stormwater management requirements for new development and redevelopment projects that add and/or replace 10,000 square feet or more of impervious area. Provision C.3 requires the City to require incorporation of site design, source control, and stormwater treatment measures into development projects, to minimize the discharge of pollutants in stormwater runoff and non-stormwater discharges, and to prevent increases in runoff flows. The MRP requires that Low Impact Development (LID) methods are to be the primary mechanism for implementing such controls.

MRP Provision C.3.g pertains to hydromodification management. This MRP provision requires that stormwater discharges shall not cause an increase in the erosion potential of the receiving stream over the existing condition. Increases in runoff flow and volume shall be managed so that the post-project runoff shall not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force.

In compliance with provision C.10.c of the MRP, the City recently published a Long-Term Trash Load Reduction Plan, which describes pollution control measures it is implementing in order to meet the July 1, 2017, goal of 70 percent reduced waste loading in the storm drainage system.[15]

The City minimizes pollutant discharges and protects surface waters in local creeks and San Francisco Bay, in compliance with the NPDES permit, through its Clean Water Program.[16] The program is comprised of both flood control and pollution abatement. The program employs a multi-pronged approach, utilizing education, engineering, maintenance and enforcement. The Clean Water Program includes: permit and reporting requirements for private and public development or renovation projects; Best Management Practices (BMPs) for various types of businesses such as restaurants, car washes and automotive repair shops; and public awareness activities such as stenciling of storm drain inlets, creek clean-up and schools projects. Street sweeping and environmentally-friendly drainage improvements are also components of the Clean Water Program.[17]

Municipal activities that curtail stormwater pollution include street sweeping, storm drain maintenance, water utility operations, commercial and industrial inspections, construction site inspections, illicit discharge detection and elimination, pesticide toxicity controls, and public outreach and

[14] Federal regulations for controlling discharges of pollutants from municipal separate storm sewer systems (MS4s), construction sites, and industrial activities were incorporated into the National Pollutant Discharge Elimination System (NPDES) permit process by the 1987 amendments to the Clean Water Act (CWA) and by the subsequent 1990 promulgation of federal stormwater regulations issued by the U.S. Environmental Protection Agency (USEPA). In California, the EPA delegated its authority to the State Water Resources Control Board (State Water Board) to issue NPDES permits.

[15] Albany, City of, 2014. *Trash Long-Term Reduction Plan and Program Assessment Strategy.* February 1.

[16] Alameda Countywide Clean Water Program, 2010. Website: www.cleanwaterprogram.org (accessed July 1, 2014).

[17] Albany, City of, 2014. *Storm Drains*. Website: albanyca.org/index.aspx?page=1270 (accessed February 7, 2015).

education. Actions such as water quality monitoring and controlling pollutants of concern such as copper, mercury, and PCBs, are conducted through regional collaborations.

Additionally, development projects are conditioned to incorporate site design measures, source controls, treatment measures, and on larger projects only, flow duration controls. Since 2000, the City has required new construction to include "post-construction controls" in project design, and since December 2010, projects are required to implement additional post-construction stormwater management requirements for new development and redevelopment projects.

d. Solid Waste. The following section describes Albany's non-hazardous and hazardous waste disposal services and capacity.

(1) Non-Hazardous Solid Waste. Solid waste generated in the City of Albany is collected by Waste Management of Alameda County. The most recent franchise agreement with Waste Management was approved by the City Council in October 2011. Non-hazardous solid waste is taken to the Davis Street Resource and Recovery Complex in San Leandro for processing, and then hauled to the Altamont Landfill and Resource Facility near the City of Livermore. The Davis Street facility has a permitted maximum daily throughput of 5,600 tons. Demolition and construction debris is generally hauled by construction contractors to recycling facilities or the Vasco Road Landfill.

The Altamont Landfill facility has a total estimated capacity of 62 million cubic yards. As of 2000, the landfill's total estimated used capacity was approximately 16.3 million cubic yards, or 26 percent of the landfill's total capacity. The landfill has a permitted throughput of 11,500 tons per day and is anticipated to have sufficient capacity until 2045, its expected closure date. [18]

The Vasco Road Landfill facility has a total estimated capacity of 33 million cubic yards. As of 2000, the landfill's total estimated used capacity was approximately 23 million cubic yards, or 70 percent of the landfill's total capacity. The landfill has a permitted throughput of 2,250 tons per day and is anticipated to have sufficient capacity until 2019, its expected closure date.[19]

The City of Albany achieved a total solid waste diversion rate of 83 percent by 2006, which meets the Alameda County diversion goal of 75 percent. The California Department of Resources Recycling and Recovery (CalRecycle), formally known as the California Integrated Waste Management Board, implemented new targets that establish daily per-capita disposal rates, and replaces the historical diversion rate measurement that was used prior to 2006. In 2012, the City of Albany disposed of approximately 5,429 tons,[20] or 1.6 lbs/day per person and 6.9 lbs/day per employee of solid waste at

[18] Waste Management, 2015. *Sustainability*. Website: altamontlandfill.wm.com/sustainability/index.jsp (accessed August 14, 2015).

[19] California Department of Resources Recycling and Recovery, 2012. *Solid Waste Information System Facility/Site Listing*. Website: www.calrecycle.ca.gov/SWFacilities/Directory/search.aspx (accessed December 28, 2013).

[20] California Department of Resources Recycling and Recovery, 2014. *Disposal Reporting System (DRS): Multi-year Countywide Origin Summary*. Website: www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=ReportName%3dExtEdrsMultiYrCountyWide%26CountyID%3d1 (accessed January 29).

various disposal facilities, thereby meeting the target of 5 lbs/day per person and 19.3 lbs/per day per employee.[21]

Recycling services are provided to residents and businesses by Waste Management of Alameda County, in compliance with the 2012 Mandatory Recycling Ordinance of Alameda County.[22] Recyclable materials include the following: glass, aluminum and tin, motor oil, cardboard, magazines and newsprint, and plastic. Recyclable materials are delivered to the Davis Street Transfer Center where they are processed.

(2) Hazardous Solid Waste. City of Albany residents can dispose of household hazardous wastes such as paints, pesticides, fertilizers, cleaners and propane tanks at one of four Alameda County Household Hazardous Waste facilities. Household batteries, cell phones, and compact fluorescent light bulbs can be recycled curbside and unwanted medicine and electronics can be disposed of at the Albany Senior Center and at annual collection events.

e. Energy. The following section describes Albany's electricity and natural gas delivery service.

The Pacific Gas & Electric Company (PG&E) provides electricity and natural gas service to Albany. 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.

Gas supplies in northern California come primarily from gas fields in the Sacramento Valley.[23] The PG&E gas transmission pipeline system serves approximately 4.2 million gas customers in northern and central California. However, PG&E produces much of its energy from renewable sources and has plans in place to increase reliance on renewable energy sources. Of the energy provided to PG&E customers in 2010, approximately 16 percent came from renewable resources. In 2010, 24 percent of energy provided to PG&E customers came from nuclear generation; 23 percent was from unspecified sources; 20 percent was from natural gas; 16 percent was from large hydroelectric facilities; and 16 percent was from renewable resources (e.g., wind, geothermal, biomass, small hydroelectric sources, and solar); and less than 2 percent came from coal and other fossil fuels.[24] Because many agencies in California have adopted policies seeking increased use of renewable resources (and have established minimum standards for the provision of energy generated by renewable resources), PG&E expects it will continue to meet future demand for energy via an increasing reliance on renewable resources, including small-scale sources such as photovoltaic panels and wind turbines, in addition to larger-scale facilities, such as wind farms.

[21] California Department of Resources Recycling and Recovery, 2014. *Countywide, Regionwide, and Statewide Jurisdiction Diversion/Disposal Progress Report.* Website: www.calrecycle.ca.gov/LGCentral/Reports/jurisdiction/diversiondisposal.aspx (accessed February 15)

[22] Recycling Rules Alameda County, 2012. *Mandatory Recycling Ordinance of Alameda County- Ordinance 2012-1.* Website:www.recyclingrulesac.org/docs/ordinance_2012-1_mandatory_recycling-executed.pdf (accessed February 12, 2014).

[23] Pacific Gas & Electric Company, 2012. *2012 California Gas Report.* Website: www.pge.com/pipeline/library/regulatory/cgr_index.shtml (accessed February 17, 2014). July.

[24] Pacific Gas & Electric Company, 2012b. *Clean Energy Solutions*. Website: www.pge.com/mybusiness/environment/pge/cleanenergy/index.shtml (accessed February 17, 2014).

Regulatory requirements for efficient use of electricity and gas are contained in Title 24, Part 6, of the California Code of Regulations, entitled "Energy Efficiency Standards for Residential and Non-residential Buildings." These regulations specify the State's minimum energy efficiency standards and apply to new construction of both residential and nonresidential buildings. The standards 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.

f. Telecommunications. The following discussion provides background information on the City's existing telephone and cable delivery services.

AT&T provides telephone services within the City of Albany. AT&T also provides or hosts a variety of other telecommunication services, including Digital Subscriber Line (DSL), Internet Service Provider (ISP), web hosting, virtual private networking, U-verse, Multi-protocol Label Switching (MPLS), and wireless/cellular paging services.

The California Public Utilities Commission requires that AT&T anticipate and serve new growth. To meet this requirement, AT&T continually upgrades its 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.

Additions to the City's infrastructure and proposals for development would result in a need for expansion or changes to AT&T's infrastructure, which would involve suitable siting for equipment placement. Suitable sites must meet requirements for the physical transmission of telecommunication services and conform to the City's guidelines. AT&T also works with the City to ensure that construction of new facilities does not interfere with any new or newly paved streets.

2. Regulatory Framework

This section describes the regulatory framework associated with the provision of utilities.

a. Federal. This section describes the federal regulations for the provision of utilities.

(1) Safe Drinking Water Act. Drinking water is regulated by federal and State laws. The federal government sets minimum standards for water quality, including for drinking water and bodies of water. The Safe Drinking Water Act of 1974 (SWDA) and subsequent amendments gave the U.S. Environmental Protection Agency (USEPA) the authority to establish standards for contaminants in drinking water supplies. The National Primary Drinking Water Standards establish the maximum contaminant levels (MCLs) allowed in public distribution systems. The National Secondary Drinking Water Standards establish the MCLs that apply to potable water supplies at the point of delivery to the customer. The USEPA administers the SDWA at the federal level and establishes MCLs for bacteriological, inorganic, organic and radiological contaminants. [25]

[25] U.S. Code Title 42, and Code of Federal Regulations Title 40.

(2) Clean Water Act. The USEPA is the lead federal agency responsible for managing water quality. The Clean Water Act of 1972 (CWA) regulates the discharge of pollutants to waters of the United States from any point source. The Porter-Cologne Water Quality Act provides the basis for water quality regulation in California, and establishes the authority of the State Water Resources Control Board and the nine RWQCBs to protect and enhance water quality, including administration of the NPDES permit program for discharges, stormwater and construction site runoff.

(3) National Pollutant Discharge Elimination System. Treated wastewater is regulated for health and environmental concerns, and is included in the NPDES program. The San Francisco Bay RWQCB regulates operations and discharges from sewage systems through the NPDES permit adopted on October 14, 2009. The permit provides a uniform standard for wastewater and stormwater discharges for the counties and agencies surrounding the San Francisco Bay. Albany is mandated to comply with the NPDES Permit by State and federal laws, statutes, and regulations. By mid-2014, EBMUD and tributary agencies (including Albany) will enter into a Consent Decree with USEPA, the State Water Resources Control Board (SWRCB), and San Francisco Bay RWQCB intended to eliminate discharges from wet-weather facilities over an approximate 20-year period. For Albany, the Consent Decree-required "Work" includes specified annual amounts of sewer rehabilitation, inspection, cleaning, as well as continued implementation of private sewer lateral compliance.

(4) Energy Act 1992. The Federal Energy Regulatory Commission (FERC) regulates the transmission and sale of electricity in interstate commerce (including interstate gas pipelines that serve California), licensing of hydroelectric projects, and oversight of related environmental matters. As part of the license application process, the lead agency must conduct environmental analysis pursuant to the National Environment Policy Act (NEPA). FERC acts under the legal authority of the Federal Power Act of 1935, the Public Utility Regulatory Policies, and the Energy Act of 1992, in addition to several other federal acts. The Energy Act of 1992 addresses energy efficiency, energy conservation and energy management, natural gas imports and exports, and alternative fuels (including as used in motor vehicles). It amended parts of the Federal Power Act of 1935.

b. State. The following describes the State regulatory framework including regulations and agencies responsible for oversight.

(1) California Urban Water Management Planning Act. Pursuant to the California State Water Code requirements, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. The State Water Code requires water agencies to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon and to address a number of related subjects including water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events.

(2) Water Conservation Act of 2009. In compliance with Senate Bill No. 7 (SBx7-7), adopted in November 2009, EBMUD is expanding water conservation programs for all service districts. SBx7-7 mandates a Statewide 20 percent reduction in per capital urban water use by December 31, 2020.

(3) Water Conservation in Landscaping Act. The Water Conservation in Landscaping Act of 2006 (Assembly Bill 1881, Laird) requires cities, counties, and charter cities and charter counties, to adopt landscape water conservation ordinances by January 1, 2010. Pursuant to this law, the Department of Water Resources (DWR) has prepared a Model Water Efficient Landscape Ordinance (Model Ordinance) for use by local agencies. Most new and rehabilitated landscapes are subject to a water efficient landscape ordinance. Public landscapes and private development projects including developer installed single-family and multi-family residential landscapes with at least 2,500 square feet of landscape area are subject to the Model Ordinance. Homeowner provided landscaping at single-family and multi-family homes is subject to the Model Ordinance if the landscape area is at least 5,000 square feet. However, the ordinance does not apply to registered local, State or federal historic sites; ecological restoration projects; mined-land reclamation projects; or plant collections.

(4) Water Supply Consultation. Senate Bill (SB) 610, codified as Sections 10910-10915 of the California Public Resources Code, requires local water providers to conduct a water supply assessment (WSA) for projects proposing over 500 housing units, 250,000 square feet of commercial office space (or more than 1,000 employees), a shopping center or business establishment with over 500,000 square feet (or more than 1,000 employees), or equivalent usage. Issuance of a WSA determination by the local water supplier for a proposed project verifies that the supplier has previously considered a proposed project in its UWMP and has adequate capacity to serve a project in addition to its existing service commitments, or alternatively, measures that would be required to adequately serve the proposed project.

(5) California Environmental Protection Agency. California Environmental Protection Agency (CalEPA) administers and enforces the drinking water program and has adopted its own SDWA, which incorporates the federal SDWA requirements, including some requirements specific only to California (California Health and Safety Code, Section 116350 and related sections).

(6) The California Office of Environmental Health Hazard Assessment. The California Office of Environmental Health Hazard Assessment (OEHHA) has initiated evaluation of several chemicals for which new MCLs have been promulgated by the USEPA, which triggers a requirement that OEHHA prepare a Public Health Goal (PHG) designed to define the level of pollutant at which no adverse health effect is expected to occur. PHG levels are concentrations of chemicals in drinking water that are not anticipated to produce adverse health effects following long-term exposures. These goals are advisory but must be used as the health basis to update the State's primary drinking water standards by the California Department of Public Health (DPH).

(7) Subdivision Map Act. The Subdivision Map Act of 1970 granted local jurisdictions the power to impose drainage improvements, fees, or assessments. Specifically, local jurisdictions may require the provision of drainage facilities, proper grading and erosion control, dedication of land for drainage easements, or payment of fees needed for construction of drainage improvements. The types of applicable standards for the improvements may be specified in the local ordinance.

(8) California Integrated Waste Management Act. In 1989, the California Legislature enacted the California Integrated Waste Management Act (AB 939), which requires the diversion of waste materials from landfills in order to preserve landfill capacity and natural resources. Cities and counties in California were required to divert 25 percent of solid waste by 1995, and 50 percent of solid waste by the year 2000. AB 939 further requires every city and county to prepare two documents

demonstrating how the mandated rates of diversion will be achieved. The Source Reduction and Recycling Element (SRRE) must describe the chief source of the jurisdiction's waste, the existing diversion programs, and current rates of waste diversion and new or expanded diversion programs. The Household Hazardous Waste Element (HHWE) must describe each jurisdiction's responsibility in ensuring that household hazardous wastes are not mixed with non-hazardous solid wastes and subsequently deposited at a landfill. Albany's SRRE and its HHWE was approved in 1995 by CalRecycle.

(9) California Public Utilities Commission. The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. General Order 121-d gives the CPUC permitting authority over construction of new and expanded power plants, electric transmission lines, and substations. Pursuant to CEQA, an environmental analysis must be conducted before issuance of construction permits by CPUC. CPUC Decision 95-08-038 contains the rules for the planning and construction of new transmission facilities, distribution facilities, and substations. The CPUC also regulates local natural gas distribution facilities and services, as well as interstate pipelines.

(10) California Energy Commission. The California Energy Commission (CEC) is the State's primary energy policy and planning agency. The CEC was created by the Legislature in 1974 and is responsible for the following: forecasting future energy needs and keeping historical energy data; licensing thermal power plants 50 megawatts or larger; promoting energy efficiency by setting the State's appliance and building efficiency standards; supporting public interest energy research that advances energy science and technology; supporting renewable energy by providing market support to existing, new, and emerging renewable technologies; developing and implementing the State Alternative and Renewable Fuel and Vehicle Technology Program to reduce the State's petroleum dependency and help attain the State climate change policies; administering more than $300 million in American Reinvestment and Recovery Act funding through State programs; and planning for and directing the State response to energy emergencies.

(11) Title 24 (California Building Standards). The California Code of Regulations 2013 (CALGreen) is a statewide regulatory code for all residential, commercial, hospital, and school buildings. The regulations are intended to encourage more sustainable and environmentally-friendly building practices, require low-pollution emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment. Title 24 standards require that all new residential and non-residential development complies with several energy conservation standards through the implementation of various energy conservation measures, including ceiling, wall, and concrete slab insulation; vapor barriers; weather stripping on doors and windows; closeable doors on fireplaces; insulated hearing and cooling ducts; water heater insulation blankets; and certified energy efficient appliances. CALGreen became mandatory on January 1, 2011, for new residential and commercial construction.

c. Local. The following section describes the local regulatory framework.

(1) City of Albany General Plan. The following existing 1992 General Plan[26] policies address water and sewer issues:

- **Policy CROS 4.2:** Publicize the adverse water quality impacts of dumping residential toxics into domestic waste systems.
- **Policy CROS 4.6:** Develop a comprehensive water conservation policy for City facilities and new development, including requirements for drought-resistant landscaping, water-conserving fixtures, and continue to support EBMUD public information campaigns to reduce water consumption.
- **Policy LU 8.2:** Continue to require appropriate public service and facility impact mitigation programs, including fees upon new development and expansions to existing development, in order to maintain and improve the quality of Albany's public services and facilities.

(2) City of Albany Climate Action Plan. The Albany City Council adopted the Climate Action Plan[27] (CAP) in April 2010. The CAP is comprised of polices and measures that, when implemented, will enable the City to meet its target for greenhouse gas emission reductions. The document encourages water conservation in new and existing buildings and landscapes through the following measures:

- **Measure WC 1.1:** Encourage residential and commercial users to participate in EBMUD's free water audit program.
- **Measure WC 1.2:** Encourage 50 percent reduction in outdoor potable water usage for existing residential and commercial properties.
- **Measure WC 2.1:** Require new construction and major remodels to achieve indoor water efficiency 20 percent above the California Building Standards Code.
- **Measure WC 2.2:** Require new landscape projects to reduce outdoor potable water use by 50 percent.

(3) City of Albany Municipal Code. Albany Municipal Code Section 20.64, Water Reuse, implements State policies requiring the use of recycled water for non-potable water uses within the designated recycled water use area when the City determines that there is not an alternative higher or better use for the recycled water, its use is economically justified, and its use is financially and technically feasible for a project.[28]

Albany Municipal Code Section 20.68 Green Building and Bay Friendly Landscape Ordinance requires the use of Green Building Standards of Compliance in all municipal development projects in order to conserve energy, water, and material resources and create buildings that are healthier, safer, and more comfortable to live in. The Section also requires the use of Bay-Friendly Landscape practices on all municipal properties. The Bay-Friendly Landscape guidelines promote an array of techniques that conserve water and improve water quality including integrated pest management

[26] Albany, City of, 1992. *City of Albany General Plan and Final EIR.* December 7.

[27] Albany, City of. 2010. *City of Albany Climate Action Plan.* Website: www.albanyca.org/index.aspx?page=256 (accessed June 24, 2014). April.

[28] Albany, City of, 2013. *Municipal Code.* Website: clerkshq.com/default.ashx?clientsite=albany-ca (accessed February 4, 2014).

techniques, low flow irrigation systems, and the incorporation of native drought tolerant plants. The ordinance also encourages Albany residents and businesses to apply these techniques to private landscapes.

Sewer system maintenance and capital improvements are funded solely by the Sewer Enterprise Fund, which receives its revenue from sewer service charges and new connection fees. The City's sewer service charge has been gradually increased over the last ten years to fund the Sewer System Management Plan (SSMP), as described below. Additionally, it is the responsibility of homeowners to perform all required maintenance and to keep the upper lateral in good condition as defined by subsection 15-1.1 and as set forth in the Upper Sanitary Sewer Lateral Compliance Plan.[29]

(4) Sanitary Sewer Management Plan. In July 2005 the RWQCB requested the formal preparation of a SSMP from all agencies in the region in order to uniformly address sanitary sewer overflows (SSOs). The City adopted its SSMP on July 6, 2009. One major objective of the SSMP is to reduce the potential for SSOs by reducing the amount of infiltration and inflow of groundwater/ stormwater into the sewer system, which reaches the EBMUD Trunk Sewers. The City of Albany has been a leader in the San Francisco Bay region by implementing the Upper Sanitary Sewer Lateral Compliance Plan, which requires that homeowners provide verification of the condition of upper laterals on their property prior to the sale of their home or construction of major improvements.

(5) Alameda County Waste Reduction and Recycling Act 1990. Through the Waste Reduction and Recycling Act 1990 (Measure D), Alameda County adopted waste reduction goals above AB 939 in 2010 to reduce total tonnage of landfill materials generated in the County by 75 percent.

(6) City of Albany's Zero Waste Plan. The City of Albany provides both residential and commercial collection services for recycling, organics, and trash through a franchise agreement with Waste Management of Alameda County. A new franchise agreement with Waste Management was approved by City Council in October 2011. The new agreement provides a number of new services for the community to help reach the goal of "zero waste" (90 percent diversion from the landfill).

(7) City of Albany Construction and Demolition Debris Ordinance. In 2006, the City of Albany adopted a Construction and Demolition Debris Recycling Ordinance that supports Measure D goals and mandates the diversion of all asphalt, concrete and similar material, as well as 50 percent by weight of all other material during construction projects.

(8) City of Albany Green Building Ordinance. In 2006 Albany adopted a Green Building and Bay Friendly Landscaping Ordinance which requires that municipal and private development projects comply with standards of green building that meet Leadership in Energy and Environmental Design (LEED) or Greenpoint Rated checklists. The checklists provide a standard by which to rate projects based upon the type of green building techniques and materials that are included, and address topics such as the utilization of green building materials, water and energy saving devices, and efficient mechanical systems.

[29] Albany, City of, 2011. *Upper Sanitary Sewer Lateral Compliance Plan.* Revised, October.

3. Impacts and Mitigation Measures

The following section presents a discussion of the impacts related to utilities and infrastructure that could result from implementation of the proposed project. The section begins with the criteria of significance, which establish the thresholds to determine if an impact is significant. The latter part of this section presents the impacts associated with implementation of the proposed project and the recommended mitigation measures, if required. Cumulative impacts are also addressed.

a. Criteria of Significance. Development of the proposed project would result in a significant impact related to utilities and infrastructure if it would cause:

- Water demand to exceed available supply or distribution capacity;
- Wastewater treatment to exceed requirements of the East Bay Municipal Utility District.
- Construction of new water or wastewater treatment facilities or storm water drainage facilities, or expansion of such existing facilities, the construction of which could cause significant environmental effects;
- Solid waste levels to exceed available disposal capacity; or
- Solid waste levels in non-compliance with federal, State, or local regulations related to solid waste (e.g., recycling requirements).

b. Project Impacts. The following discussion described the potential impacts related to utilities and infrastructure that would result from implementation of the Draft General Plan.

(1) Water Supply. The 2010 Urban Water Management Plan takes Albany's projected water demand into consideration when developing demand and supply analysis. EBMUD's water demand projections are based on projected populations from ABAG Projections 2009. Implementation of the Draft General Plan would increase Albany's total population to approximately 20,385 by 2035 which is higher than ABAG's 2009 population projection of 19,300 residents by 2035. Either of these projections make up approximately 1 percent of EBMUD's projected service area of 1,751,000 residents for the year 2035, indicating that Albany's projected population growth is sufficiently accounted for in EBMUD water demand projections.

Implementation of the Draft General Plan would result in an increase in demand for water due to projected population and employment growth. EBMUD estimates that average daily potable water demand in 2010 was 216 mgd for approximately 1.3 million customers,[30] which indicates an average of 166 gallons per customer per day. For the purposes of this analysis, it is assumed that water demand per customer would remain constant. Using the average water demand, the increase in population that could result from implementation of the Draft General Plan could increase water demand within Albany to approximately 3.38 mgd. This increase would represent approximately 1.47 percent of EBMUD's projected 2035 water demand.

[30] The East Bay Municipal Utilities District does not identify water supply generation rates, and therefore, the analyses uses information contained in the East Bay Municipal Utility District, 2013. Water Resources Planning Division. *Urban Water Management Plan 2010.* August.

Development and population increases that would occur with implementation of the Draft General Plan are not expected to create demand for water that would exceed EBMUD's projected water supply. As previously described, under EBMUD's 2010 Urban Water Management Plan, EBMUD's water system has sufficient water rights to meet demands through 2040; however, EBMUD's current water supply is insufficient to meet water demand during single- and multi-year droughts despite EBMUD's water conservation and recycled water programs. To meet projected system-wide water needs, EBMUD may need to supplement water supplies and improve recycled water programs.

To reduce impacts on water demand the City would implement Draft General Plan Policies CON-6.2, CON-6.8, CON-6.9, CON-6.10, and CSF-6.5 which promote the conservation of water and reduce potable water demand through recycled water programs. Additionally, Draft General Plan Actions CON-6.A and CON-6.H would promote water efficiency through the requirement of water efficiency standards and replacement of inefficient irrigation infrastructure. Draft General Plan Policy CSF-6.1 and Action CSF-6.E would require that the City would work with EBMUD to ensure adequate supply and safety of water and support the regular updates of the Urban Water Management Plan. The Draft General Plan would ensure continued implementation of best management practices and enforcement of water efficiency regulations. The policies and actions identified above follow:

- **Policy CON-6.2: Energy and Water Audits.** Promote the use of energy audits and water audits by Albany residents and businesses to identify and eliminate sources of waste, conserve resources, and reduce utility costs. Lead by example by performing such audits on municipal buildings and properties, and undertaking appropriate improvements to address energy and water inefficiencies in City facilities.
- **Policy CON-6.8: Water Conservation Measures.** Conserve water in City facilities and new development by maintaining requirements for bay-friendly landscaping and water-conserving plumbing fixtures, and by continuing to support EBMUD's public information campaigns to reduce water consumption
- **Policy CON-6.9: Reducing Water Usage.** Partner with EBMUD, PG&E, Stopwaste.org and other organizations to achieve water efficiency and reduced usage and support indoor and outdoor conservation practices. (CAP Obj WC-2)
- **Policy CON-6.10: Reclaimed Water.** Support the use of reclaimed water, both on an individual basis (e.g., gray water recycling for private residences) and on a citywide basis for landscaping and irrigation. (new)
- **Action CON-6.A: Green Building Code.** Require new construction to meet or exceed California Green Building Code standards for energy and water efficiency. Albany's building codes should be regularly reviewed and periodically amended to meet or exceed state requirements.
- **Action CON-6.H: Irrigation Efficiency.** As funding allows, replace existing City irrigation infrastructure with more efficient infrastructure that reduces losses from evapotranspiration and creates the opportunity for the future application of reclaimed water.
- **Policy CSF-6.1: Water Supply, Storage, and Distribution.** Work with East Bay Municipal Utility District (EBMUD) to ensure the adequacy and safety of water utilities. The City will work with EBMUD to plan for an adequate long-term water supply, the safety of the water storage and distribution system, the adequacy of the system to support fire flow needs, and the safe treatment and disposal of Albany's wastewater.
- **Policy CSF-6.5: Reclaimed Water.** Continue to work toward the expanded application of reclaimed water from the EBMUD treatment plant for a variety of purposes, such as landscape irrigation.

- **Action CSF-6.E: Urban Water Management Plan.** Support EBMUD in regular updates of its Urban Water Management Plan to reflect current forecasts, water supply conditions, and best practices in water management.

With the adopted 2010 EBMUD Urban Water Management Plan, existing regulations, and the implementation of more stringent Citywide water conservation strategies, supplies to meet increased water demand should be adequate to serve demand for water generated by projected growth associated with the Draft General Plan, and impacts associated with water supply and demand would be less than significant. New or expanded entitlements for water supplies for EBMUD would not be required and impacts related to water supply would be less than significant.

(2) Exceed Wastewater Treatment Requirements. As previously described, future development within Albany must comply with programs and regulations currently in place that regulate storm drainage facilities including NPDES Municipal Regional Permit (Draft General Plan Policy CON-4.4) regulations and the City's Stormwater Management Regulations. The policy identified above follows:

- **Policy LU-4.4: Mitigating Development Impacts.** Ensure that the effects of proposed development projects on civic uses, such as schools, parks, the Library, and other public buildings are considered before such projects are approved. Provisions to mitigate impacts and ensure that development "pays its way" through fees or improvements to public facilities should be included in project approvals.
- **Policy CSF-6.1: Water Supply, Storage, and Distribution**. Work with East Bay Municipal Utility District (EBMUD) to ensure the adequacy and safety of water utilities. The City will work with EBMUD to plan for an adequate long-term water supply, the safety of the water storage and distribution system, the adequacy of the system to support fire flow needs, and the safe treatment and disposal of Albany's wastewater.
- **Policy CSF-6.2: Sanitary Sewer System.** Ensure the safe management, operation, and maintenance of Albany's wastewater collection system.
- **Action CSF-6.A: Capital Improvement Program.** Maintain an ongoing capital improvement program that identifies infrastructure needs, priorities, timing, and funding sources for the next two to five years.
- **Action CSF-6.B: Sewer Master Plan Implementation.** Implement the recommendations of the 2014 Sewer Master Plan to ensure that the sanitary sewer system can support current and future needs while improving water quality.
- **Policy CON-4.4: Municipal Regional Permit.** In compliance with the Clean Water Act, participate in the Alameda Countywide Clean Water Program and NPDES Municipal Regional Permit (MRP) to reduce stormwater discharges to local waterways and San Francisco Bay. In accordance with the MRP, ensure that post-runoff conditions on any development site shall not exceed pre-project rates and durations.

The MRP establishes a uniform stormwater discharge standard for the jurisdictions surrounding the San Francisco Bay. The discharge of stormwater from the City's storm drainage system is regulated by the Federal NPDES Nonpoint Source Program (established through the Clean Air Act). Albany is under the jurisdiction of the RWQCB and City compliance with the MRP is mandated by State and federal laws, statutes, and regulations. Therefore, implementation of the Draft General Plan would not exceed wastewater treatment requirements, and the impact would be considered less than significant.

(3) Construction of New Wastewater Treatment Facilities. New growth and development associated with implementation of the Draft General Plan would increase overall sanitary sewer flows and require the upgrading or replacement of existing deficient City sewer mains. The 2014 Albany Sewer Master Plan[31] analyzes sewer capacity based on future wastewater flows. The Sewer Master Plan utilized information in the City of Albany Housing Element as well as the proposed plans for University Village Mixed-Use Development. Flows were estimated based on typical unit flow factors of 170 gpd for multi-family residential units and 0.1 gpd/square foot of building floor space for non-residential uses. The Sewer Master Plan concluded that the additional wastewater flow associated with potential growth would be negligible and would not result in impacts to capacity of the existing sewer system. The Sewer Master Plan recommends implementing a capital improvement program to prioritize sewer pipes for rehabilitation and replacement.

Albany is located in EBMUD's Special District 1 and therefore wastewater from Albany is treated at EBMUD's Main Wastewater Treatment Plant (MWWTP) in Oakland. EBMUD's MWWTP operates in compliance with all relevant San Francisco Bay RWQCB requirements. EBMUD provides secondary treatment for a maximum flow of 168 MGD. Primary treatment is provided for up to 320 MGD. Storage basins provide plant capacity for a short-term hydraulic peak of 415 MGD. On average, about 63 million gallons of wastewater are treated every day.[32]

For the purpose of this analysis, it is assumed that the generation of wastewater consists of approximately 90 percent of total potable water used. The remaining 10 percent is assumed to be consumed or used for irrigation purposes. Using this standard, implementation of the Draft General Plan would produce approximately 3.04 mgd of wastewater. (90 percent of the anticipated water demand 3.38 mgd as described above). This additional wastewater would comprise approximately 1.80 percent of the remaining secondary treatment flow and 0.95 percent of the primary treatment capacity and would not exceed the remaining capacity for secondary or primary treatment. This increase in wastewater would be adequately treated by existing EBMUD treatment facilities. Implementation of the Draft General Plan would not require the construction of new water or wastewater treatment facilities or the expansion of existing facilities, and impacts associated with the collection and treatment of wastewater would be less than significant.

Impacts related to wastewater treatment would be further reduced by implementation of the following Draft General Plan Policies:

- **Policy CSF-6.1 Water Supply, Storage, and Distribution.** Work with East Bay Municipal Utility District (EBMUD) to ensure the adequacy and safety of water utilities. The City will work with EBMUD to plan for an adequate long-term water supply, the safety of the water storage and distribution system, the adequacy of the system to support fire flow needs, and the safe treatment and disposal of Albany's wastewater.
- **Policy CSF-6.2: Sanitary Sewer System.** Ensure the safe management, operation, and maintenance of Albany's wastewater collection system.

[31] Albany, City of, 2014. *City of Albany Sewer Master Plan.* May.

[32] East Bay Municipal Utility District, 2015. *Wastewater Treatment* . Website: www.ebmud.com/wastewater/collection-treatment/wastewater-treatment/treatment (accessed August 12, 2015).

- **Policy CSF-6.4: Sewer Inspections and Maintenance.** Maintain regular inspection, maintenance, replacement, and enforcement programs for the local sewer and storm drainage systems. Ensure the proper design and construction of all laterals by contractors and other third parties.
- **Action CSF-6.B: Sewer Master Plan Implementation.** Implement the recommendations of the 2014 Sewer Master Plan to ensure that the sanitary sewer system can support current and future needs while improving water quality.

(4) Solid Waste. As previously described, non-hazardous solid waste produced in the City is transported to the Davis Street Transfer Station and Resource Recovery Complex in San Leandro and then hauled to the Altamont Landfill and Resource Recovery Facility. The Davis Street facility has a permitted maximum daily throughput of 5,600 tons and a permitted capacity of 9,600 tons per day. The Altamont Landfill facility has a total estimated capacity of 62 million cubic yards. As of 2014, the landfill had a remaining 68.4 percent capacity.[33] The landfill has a permitted throughput of 11,500 tons per day. [34] The Altamont Landfill has a disposal capacity through 2045.[35]

Construction and operational activities associated with Draft General Plan growth would generate additional solid waste in the City. Estimated growth would add an additional 1,800 residents to the City by 2035. In 2012, the City disposed of approximately 5,429 tons or 1.6 pounds per person per day of solid waste. Keeping the average daily output of solid waste per person constant, implementation of the Draft General Plan could increase solid waste disposal demand by approximately 1.44 tons per day. This amount would represent approximately 0.02 percent of Altamont's permitted daily capacity and, therefore, would not result in a significant impact related to solid waste capacity.

The Draft General Plan policies and actions related to solid waste are as follows:

- **Policy CON-7.1: Zero Waste.** Work toward an ultimate target of "zero waste" by continuing to reduce solid waste generation and expand local recycling and composting programs. The City will pursue a 90 percent diversion target by 2030.
- **Policy CON-7.2: Expanded Waste Diversion.** Work with stopwaste.org and other organizations to adopt local ordinances which expand the scope of recycling and waste reduction. A particular emphasis should be placed on increasing the diversion rate for multi-family buildings and commercial businesses and expanding recycling of construction and demolition debris.
- **Policy CON-7.3: Waste Reduction**. Support regional, statewide, and national initiatives to reduce waste through such measures as eliminating junk mail, reducing excessive product packaging, increasing e-waste recycling, promoting the sharing and reuse of consumer goods in lieu of individual consumption and expanding the market for recycled goods and products.
- **Policy CON-7.4: Education and Outreach.** Expand education and outreach on the importance and benefits of waste reduction.

[33] Waste Management, 2014. *Altamont Landfill and Resource Recovery Facility Fact Sheet.* Available online at: www1.wmsolutions.com/pdf/factsheet/Altamont_Landfill.pdf (accessed February 18, 2015).

[34] California Department of Resources Recycling and Recovery, 2012. *Solid Waste Information System Facility/Site Listing*. Website: www.calrecycle.ca.gov/SWFacilities/Directory/01-AA-0009/Detail (accessed February 18, 2015).

[35] Waste Management, 2015, op. cit.

- **Policy CON-7.5: Commercial and Household Hazardous Waste.** Continue and expand efforts to reduce, collect, and ensure the proper disposal of household hazardous waste, commercial business waste, electronic waste, bulky goods, and other waste that cannot be easily recycled through conventional pick-up.
- **Action CON-7.A: Municipal Waste Reduction.** Implement measures to reduce municipal waste and increase the use of recycled products and salvaged materials for City operations. This could include environmentally friendly purchasing practices, installation of recycling receptacles in parks and public spaces, city sponsored composting programs, and environmental education initiatives.
- **Action CON-7.B: Waste Reduction Program.** Maintain a solid waste reduction and management program that is coordinated with the Countywide Stopwaste.org program. Components of this program include trash collection, compost and recycling collection, education and outreach, and other components to minimize landfilled waste.
- **Action EH-3.C: Household Hazardous Waste Day.** Work with Stopwaste.org to establish an annual household hazardous waste (HHW) collection day in Albany, or alternatively to establish a partnership with nearby cities that enables Albany residents to more easily dispose of household hazardous waste.

Potential impacts to solid waste facilities would also be reduced through the implementation of Draft General Plan policies. The Draft General Plan supports efforts and measure to maximize waste reduction and recycling within the City. Implementation of Draft General Plan Policies CON-7.1 through CON-7.5 would reduce impacts related to solid waste generated by planned growth by reducing the waste stream, meeting local waste diversion requirements, and continuing to exceed the 2006 75 percent waste diversion rate for the City. Implementation of Draft General Plan Policy CON-7.1 would reduce the amount of solid waste generated in the City, thereby increasing the life span of the landfill, and require Citywide participation in waste reduction and recycling efforts. In regard to construction waste, development projects would be required to comply with the City's Construction and Demolition Debris Ordinance, which would reduce a portion of the solid waste sent to the landfill.

Implementation of the Draft General Plan policies and actions and the City's existing programs designed to minimize the waste stream would ensure that construction of new solid waste disposal facilities or substantial expansion of existing facilities would not be required in Alameda County. As such, implementation of the Draft General Plan would not generate a demand for solid waste disposal that could not be accommodated by existing landfills, and this impact would be less than significant.

(5) Regulations Related to Solid Waste. State law requires that 50 percent of solid waste be diverted from landfills. In 2010, Albany had an 84 percent diversion rate, the highest diversion rate in the County. Therefore, the City is in compliance with State law. Additionally, Albany has committed to the waste reduction programs, plans, and policies discussed above in the regulatory subsection. Therefore, implementation of the Draft General Plan would not conflict with a federal, State, or local statue or regulation related to solid waste disposal. This impact would be less than significant.

(6) Energy and Telecommunications. As described in the setting section, PG&E provides electricity and natural gas service to Albany. 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. As required and regulated by the California Public Utilities Commission, PG&E will continue to meet future demand for energy within the City of Albany.

Regulatory requirements for efficient use of electricity and gas are contained in Title 24, Part 6, of the California Code of Regulations, entitled "Energy Efficiency Standards for Residential and Non-residential Buildings." These regulations specify the State's minimum energy efficiency standards and apply to new construction of both residential and nonresidential buildings. The standards 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.

In regards to telecommunications, the California Public Utilities Commission requires that AT&T anticipate and serve new growth. To meet this requirement, AT&T continually upgrades its 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.

Given, that energy and telecommunications service providers are required to anticipate and serve new growth, implementation of the Draft General Plan would result in a less-than-significant impact to the provision of energy and telecommunication services. The Draft General Plan policies and actions related to the conservation of energy are as follows:

- **Policy LU-1.7: Sustainable Development**. Ensure that future development mitigates its environmental impacts to the greatest extent possible and is designed and constructed to advance the principles of sustainability. This should include the use of greener building practices, greater energy and water efficiency, and the design of new development in a way that encourages walking and bicycling.
- **Action LU-1.B: Sustainable Infrastructure**. Ensure that the City's capital improvement program places a priority on sustainable infrastructure projects, such as renewable energy, composting and recycling facilities, bicycle racks, and electric vehicle charging stations.
- **Policy CSF-6.8: Communication Infrastructure**. Work with internet, cable, and telecommunication service providers to improve service to Albany residents and businesses.
- **Action CON-3.A: CAP Progress Reports and Updates**. Provide periodic progress reports on the implementation of Climate Action Plan (CAP) measures regarding building energy and water efficiency measures. Update the CAP at least once every five years to reflect the completion of specified actions, the development of new actions, the availability of resources and technology, and new targets for greenhouse gas reduction.
- **Policy CON-6.2: Energy and Water Audits**. Promote the use of energy audits and water audits by Albany residents and businesses to identify and eliminate sources of waste, conserve resources, and reduce utility costs. Lead by example by performing such audits on municipal buildings and properties, and undertaking appropriate improvements to address energy and water inefficiencies in City facilities.
- **Policy CON-6.3: Energy Retrofits**. Encourage the retrofitting of residential and commercial buildings to increase energy efficiency and maximize the use of renewable energy.
- **Policy CON-6.4: Cool Roofs and Pavement**. Encourage the design of roofs, pavement, and other exposed surfaces in a manner that mitigates the heat island effects of development and improves energy efficiency.
- **Policy CON-6.5: Solar Access**. Preserve solar access rights in a way that is consistent with state law and supports the use of photovoltaic energy systems.

- **Policy CON-6.7: Renewable Energy**. Support low cost financing programs which incentivize private investment in energy efficiency and renewable energy systems. This could include measures such as solar energy empowerment districts and alternative financing for solar installations.
- **Action CON-6.A: Green Building Code**. Require new construction to meet or exceed California Green Building Code standards for energy and water efficiency. Albany's building codes should be regularly reviewed and periodically amended to meet or exceed state requirements.
- **Action CON-6.B: Zero Emissions Municipal Buildings**. Pursue a zero emissions target for City buildings through the development of renewable energy systems, performance data displays, and energy efficiency improvements to public buildings.
- **Action CON-6.D: Energy Outreach**. Develop outreach programs to increase energy efficiency and renewable energy investments in the city, and partner with other organizations such as PG&E and Stopwaste.org to carry out their energy education and outreach efforts. The City will continue to hold events such as the annual Arts and Green Festival to raise awareness of environmental issues and opportunities for more sustainable living.
- **Action CON-6.E: Point of Sale Energy Requirements**. Continue to evaluate point of sale energy efficiency upgrade requirements for homes and businesses. Consider ordinances requiring such upgrades.
- **Action CON-6.F: Multi-Family Energy Use Monitoring**. Continue working with Stopwaste.org to develop and implement a benchmarking pilot program which assists landlords and tenants in gauging utility usage over time. Encourage PG&E, EBMUD, and other utilities to provide comparative conservation metrics on utility bills.

c. Cumulative Impacts. The utilities identified below are generally provided or delivered on a local level, but often originate from sources outside of the City and/or as part of a regional distribution system. Development associated with the Draft General Plan would contribute to regional impacts associated with the provision of utilities, which would be considered less than significant unless otherwise noted below.

(1) Water Supply. Potable water is provided to the City of Albany, and approximately 1.3 million customers throughout portions of Alameda and Contra Costa Counties, by EBMUD. EBMUD's territory includes 332 square miles of service area, and the City of Albany comprises approximately 1.4 percent of its customers. New urban land uses within the surrounding area and development associated with implementation of the Draft General Plan would be dependent on the EBMUD's water supply.

Within EBMUD's service district, potable water demand is projected to increase by 6,725 acre feet per year from 2015 to 2035. The increase in demand would account for all the anticipated growth in water demand in Albany during this 20-year period. Existing cumulative demand is approximately 249,957 acre feet per year; with implementation of the Draft General Plan, cumulative demand would increase. Albany's contribution to cumulative demand would be less-than-significant (i.e., less than 2 percent). EBMUD's current water supply is insufficient to meet water demand during single- and multi-year droughts despite EBMUD's aggressive water conservation and recycled water programs. To meet projected water needs, EBMUD would need to supplement water supplies and improve recycled water programs. The Draft General Plan would ensure continued implementation of best management practices and enforcement of water efficiency regulations. As a result, Albany's contribution would not be cumulatively considerable and therefore, would not result in a cumulative impact to water supply resources.

(2) Wastewater Treatment. Implementation of the Draft General Plan would contribute additional wastewater treatment demand. However, as previously described, EBMUD has sufficient capacity for current dry and wet weather loads and for future system-wide load projections, and there are no plans for expansion of the WWTP. Therefore, implementation of the Draft General Plan would not make a significant cumulative contribution to impacts on wastewater treatment demand. This impact is considered to be less than significant.

(3) Solid Waste. New development estimated to occur under the Draft General Plan would increase the generation of solid waste in Albany. Additional growth in surrounding communities like Berkeley, El Cerrito, and Emeryville would also generate solid waste. However, solid waste management is generally provided by the respective jurisdictions and not on a regional basis. The City of Berkeley and City of Emeryville solid waste stream is transferred to Altamont Landfill in Livermore, and the waste streams of the City of El Cerrito are transferred to the West Contra Costa Sanitary Landfill. Since growth associated with the Draft General Plan would represent 0.02 percent of Altamont's permitted daily capacity, it is anticipated that the landfill would have adequate capacity to accommodate solid waste generation from Albany. Therefore, implementation of the Draft General Plan would not make a significant cumulative contribution to impacts on solid waste management. This impact is considered to be less than significant.