4.15 UTILITIES AND INFRASTRUCTURE

This section contains information about water supply, wastewater, stormwater, and solid waste infrastructure relevant to the Draft 2030 General Plan. The section is organized according to type of utility and provides an overview of the current regulatory framework, describes existing conditions, and analyzes the potential impacts of the Draft 2030 General Plan. Impacts associated with hydrology (groundwater and water-related hazards) and water quality are addressed in Section 4.9, Hydrology and Water Quality.

A. Water

This section describes the regulatory framework, existing conditions and potential impacts of the Draft 2030 General Plan with regard to water supply in the Project Area.

1. Regulatory Framework

This section summarizes key federal, State, and local agencies and regulations that govern water service in Danville.

a. Federal Regulatory Agencies and Regulations

i. United States Environmental Protection Agency

The Environmental Protection Agency (EPA) is the federal agency assigned to maintain safe water throughout the country. Danville is in EPA Region 9, which includes Arizona, California, Hawaii, Nevada, and over 147 federally recognized tribes in the Pacific Southwest.[1]

ii. Federal Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), adopted in 1974, authorizes the EPA to set national standards for drinking water, called the National Primary Drinking Water Regulations, to protect against both naturally-occurring and man-made contaminants. These standards set enforceable maximum contam-

[1] U.S. Environmental Protection Agency, *About EPA's Region 9 Office in San Francisco (Pacific Southwest)*, http://www.epa.gov/aboutepa/region9.html, accessed on May 26, 2010.

inant levels in drinking water and require all water providers in the United States to treat water to remove contaminants, except for private wells serving fewer than 25 people. In California, the State Department of Health Services conducts most enforcement activities. If a water system does not meet standards, it is the water supplier's responsibility to notify its customers.

b. State and Regional Agencies, Regulations, and Plans

i. California Department of Public Health

The California Department of Public Health (CDPH) Drinking Water Program (DWP) is within the Division of Drinking Water and Environmental Management.[2] The DWP regulates public water systems; certifies drinking water treatment and distribution operators; supports and promotes water system security; provides support for small water systems and for improving technical, managerial, and financial capacity; and provides funding opportunities for water system improvements. The Field Operations Branch of the DWP is responsible for the enforcement of the federal and California Safe Drinking Water Acts and the regulatory oversight of approximately 7,500 public water systems to assure the delivery of safe drinking water to all Californians. In this capacity, Field Operations Branch staff performs field inspections, issues operating permits, reviews plans and specifications for new facilities, takes enforcement actions for non-compliance with laws and regulations, reviews water quality monitoring results, and supports and promotes water system security.

ii. California State Water Resources Control Board

The California State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) are responsible for controlling water pollution sources to protect the State's surface waters and ground waters for all beneficial uses, including domestic and municipal water supply uses.

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[2] California Department of Public Health (CDPH), *Drinking Water Program*, http://www.cdph.ca.gov/programs/Pages/DWP.aspx, accessed March 16, 2011.

iii. Area of Origin Protections

Area of origin protections were added to the California Water Code to protect local northern California supplies from being depleted by water projects. County of origin statutes reserve water supplies for counties from which the water originates when, in the judgment of the SWRCB, transporting water out of a county would deprive that county of water necessary for its present and future development.

iv. California Department of Water Resources

The California Department of Water Resources (DWR) is responsible for the overall management of California's water resources. DWR oversees regulation of water service availability, including Senate Bills (SB) 610 and 221 and the California Urban Water Management Planning Act, as described below.

v. Assembly Bill 1881

Assembly Bill (AB) 1881 required that DWR distribute a model water efficient landscape ordinance to counties and cities by January 1, 2009. By January 1, 2010, every county and city, including charter cities, was required to adopt either DWR's model ordinance or a water efficient landscape ordinance that is at least as effective as the DWR model ordinance. If a county or city failed to adopt an ordinance, AB 1881 requires that local officials enforce DWR's model ordinance as if it had been adopted by the county or city.

vi. Regulations for Water Use Efficiency

The California Constitution prohibits the waste, unreasonable use, unreasonable method of use and unreasonable method of diversion of water. It also declares that the conservation and use of water "shall be exercised with a view to the reasonable and beneficial use thereof in the public interest and for the public welfare." Water Code Section 275 directs DWR and SWRCB to "take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste or unreasonable use of water."

vii. California Senate Bill 610 and 221

Senate Bill (SB) 610 and SB 221 amended State law to ensure better coordination between local water supply and land use decisions and ensure adequate

water supply for new development. Both statutes require that detailed information regarding water availability be provided to City and County decision-makers prior to approval of large development projects. SB 610 requires water supply assessments (WSAs) for certain types of projects, as defined by Water Code §10912, that are subject to the California Environmental Quality Act (CEQA).[3] SB 221 established consultation and analysis requirements related to water supply planning for residential subdivisions including more than 500 dwelling units.[4]

viii. California Urban Water Management Planning Act

Through the Urban Water Management Planning Act of 1983, the California Water Code requires all urban water suppliers within California to prepare and adopt an Urban Water Management Plan (UWMP) and update it every five years. This requirement applies to all suppliers providing water to more than 3,000 customers or supplying more than 3,000 acre-feet[5] of water annually. The Act is intended to support conservation and efficient use of urban water supplies at the local level. The Act requires that total projected water use be compared to water supply sources over the next 20 years in five year increments, that planning occur for single and multiple dry water years, and that plans include a water recycling analysis that incorporates a description of the wastewater collection and treatment system within the agency's service area along with current and potential recycled water uses.[6] See below under Urban Water Management Plan for a description of the East Bay Municipal Services District (EBMUD) Plan.

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[3] Bill Number: SB 610 Chartered, http://info.sen.ca.gov/pub/01-02/bill/sen/sb_0601-0650/sb_610_bill_20011009_chaptered.html, accessed on March 16, 2011.

[4] Bill Number: SB 221, Bill Analysis, http://info.sen.ca.gov/pub/01-02/bill/sen/sb_0201-0250/sb_221_cfa_20010426_132334_sen_comm.html, accessed on March 16, 2011.

[5] One acre-foot is the amount of water required to cover 1 acre of ground (43,560 square feet) to a depth of 1-foot.

[6] Department of Water Resources, *About Urban Water Management*, http://www.water.ca.gov/urbanwatermanagement/, accessed on May 26, 2010.

ix. California Groundwater Management Act

The Groundwater Management Act of the California Water Code (AB 3030) provides guidance for applicable local agencies to develop voluntary Groundwater Management Plans (GMP) in State-designated groundwater basins. GMPs can allow agencies to raise revenue to pay for measures influencing the management of the basin, including extraction, recharge, conveyance, facilities' maintenance and water quality.[7]

x. Statewide Bond Measures

In recent years, a number of statewide bond measures have been approved by California voters, establishing funding for a wide range of water-related programs and improvements aimed at protecting the State's critical water resources.

Among these is the Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Bond Act, passed in 2000. This bond authorized $1.97 billion for water-related projects throughout the State. SWRCB was authorized to allocate $763.9 million of these funds to local projects, such as pollution control programs for coastal and inland waters, watershed protection programs, and pesticide source and mitigation programs, mostly through competitive grants.

Passed in March 2002, Proposition 40, the California Clean Water, Clean Air, Safe Neighborhood Parks, and Costal Protections Act, authorizes over $1 billion for a broad range of water conservation programs, including land acquisition. Later in 2002, an additional $3 billion in bonds was authorized by the voters as part of the Water Quality, Supply, and Safe Drinking Water Projects bond measure. The bond funds are to be directed to a wide variety of water resource programs including the CALFED Bay-Delta Program, safe

[7] Department of Water Resources Planning and Local Assistance Central District, Groundwater, *Groundwater Management*, http://www.cd.water.ca.gov/groundwater/gwab3030.cfm, accessed on May 26, 2010.

drinking water programs, and integrated regional water management programs, among others.

In November 2006, voters approved an initiative allowing the State to sell $5.4 billion in bonds for projects related to safe drinking water, water quality and supply, flood control, natural resource protection, and park improvements.

c. Regional Plans and Regulations

This section summarizes the regional plans and regulations pertaining to water supply and demand in Danville.

i. East Bay Municipal Utilities District Strategic Plan

The first East Bay Municipal Utilities District (EBMUD) Strategic Plan was adopted in 2004 and outlined the goals, strategies, objectives, and performance indicators to help carry out EBMUD's mission. The most recent Strategic Plan, adopted in July 2010, builds upon the efforts of the first three plans, with many of the same goals, strategies and objectives. The updated Strategic Plan reflects the completion of an updated water supply management program, as well as the inclusion of new issues such as the elimination of wet weather facility discharges to San Francisco Bay and current fiscal challenges.[8]

ii. Urban Water Management Plan

The Urban Water Management Plan (UWMP) provides an overview of EBMUD's water supply sources and usage, recycled water and conservation programs. The UWMP is updated every five years and is part of EBMUD's long-range planning to ensure reliable water service for EBMUD customers, especially during multiple-year drought periods. EBMUD adopted a new plan in June, 2011.[9]

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[8] EBMUD, 2010. *Strategic Plan*, page 4.

[9] EBMUD, 2010. *Urban Water Management Plan 2010.*

iii. Water Supply Management Program 2040

On October 13, 2009, the EBMUD Board of Directors approved a 30-year Water Supply Management Plan (WSMP) to provide water for all of EBMUD's customers, which are expected to grow to 1.7 million by the year 2040. The WSMP will meet future water supply needs by:

- Maximizing conservation, saving 39 million gallons a day;
- Aggressively recycling, stretching the supply by 11 million gallons a day;
- Limiting drought rationing to 15 percent; and
- Developing 43 million gallons a day of additional water supplies through a combination of water transfers, groundwater storage and regional supply projects.

The WSMP stresses EBMUD's goals and objectives as set forth in the Strategic Plan.[10]

2. Existing Conditions

This section discusses water supply and demand in Danville. Water service is provided by the East Bay Municipal Utilities District (EBMUD). This discussion references three key terms to describe amounts of water:

- Acre-Foot: An acre-foot (AF) is used to measure large-scale volumes of water. One AF is the amount of water necessary to cover one acre to a depth of one foot and is equivalent to 325,851 gallons.
- Acre-Foot per Year: One acre-foot per year (AFY) is generally enough water to serve the needs of two households of five residents per household for one year.
- Million Gallons per Day: One million gallons per day (MGD) is about equivalent to 1,121 AFY, or enough to serve about 2,200 households.

[10] EBMUD Website, http://www.ebmud.com/our-water/water-supply/long-term-planning/water-supply-management-program-2040, accessed on March 24, 2011.

a. Water Supply

EBMUD is a publicly owned utility, formed under California's Municipal Utility District Act that provides drinking water to residential, commercial, and institutional customers in Alameda and Contra Costa counties, including residential and commercial customers in Danville. EBMUD produces an average of 220 MGD in non-drought years to an estimated 1.3 million people.[11]

The Mokelumne River watershed provides approximately 90 percent of the water delivered to EBMUD customers, with the remaining 10 percent originating as runoff from protected watershed lands in the East Bay. EBMUD has water rights and the capacity to divert up to 325 MGD from the Mokelumne River, depending on the rights of other users, the ability to store water and the amount of runoff from the river.[12] Since the Mokelumne water supply is subject to these changes, EBMUD relies on the storage capacity of the Pardee and Camanche Reservoir, which have a combined capacity of 615,000 AF.[13]

i. Pardee and Camanche Reservoirs

The Pardee Reservoir, located near the Town of Jackson, is used for municipal water supply, power generation, and a source of water for the Jackson Valley Irrigation District. The Camanche Reservoir is located 10 miles downstream from the Pardee Dam on the Mokulemne River and is operated jointly with the Pardee Reservoir to store water for irrigation and streamflow regulation, provide flood protection, and provide water to downstream users, fisheries and habitat. As a condition of its water rights, EBMUD manages these two reservoirs to provide up to 200,000 AF of flood control space each year.[14]

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[11] EBMUD, 2009. *Water Supply Management Program 2040 Plan*, page 3-1.

[12] EBMUD, 2009. *Water Supply Management Program 2040 Plan*, page 3-5.

[13] EBMUD, 2009. *Water Supply Management Program 2040 Plan*, page 3-9.

[14] EBMUD, 2009. *Water Supply Management Program 2040 Plan*, pages 3-10 – 3-12.

ii. East Bay Terminal Reservoirs

There are five terminal reservoirs operated by EBMUD: Briones, Chabot, Lafayette, San Pablo and Upper San Leandro. The maximum capacity of these reservoirs is 155,550 AF. The reservoirs regulate EBMUD's Mokelumne River supply in winter and spring, augment the supply with local runoff, provide emergency supply during drought, provide environmental and recreational benefits to the East Bay, and minimize flooding.[15]

iii. Conveyance and Treatment

Water from the Pardee Reservoir is transported through the Pardee Tunnel, Mokelumne Aqueducts, and Lafayette Aqueducts to filter plants in Walnut Creek, Lafayette and Orinda, or stored in one of the terminal reservoirs. In addition to the three filtration plants, there are three plants that provide conventional treatment: the Upper San Leandro Water Treatment Plan (WTP), the San Pablo WTP, and the Sobrante WTP.[16]

iv. New Supplemental Supplies

In 2010, EBMUD added two supplemental water supplies, the Freeport Regional Water Project (FRWP) and the first phase of the Bayside Groundwater Project. These projects will supplement the water supply during dry periods. The FRWP, a cooperative project between the Sacramento County Water Agency (SCWA) and EBMUD, will provide up to 100 MGD of water to EBMUD customers in dry years. The Bayside Groundwater Project Phase 1 will increase storage of drinking water in the South East Bay Plain Basin (SECPB) during wet years for use during a drought. Together these projects will serve as supplemental water sources during dry years to ensure adequate water supply for EBMUD customers.[17]

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[15] EBMUD, 2009. *Water Supply Management Program 2040 Plan*, page 3-12.

[16] EBMUD, 2009. *Water Supply Management Program 2040 Plan*, page 3-14.

[17] EBMUD, 2009. *Water Supply Management Program 2040 Plan*, pages 3-14 to 3-16.

v. Recycled Water

Since 1971, EBMUD has been recycling water for irrigation and other processes, at its main wastewater treatment plant. There is now an Office of Water Recycling that manages the recycled water projects. By 2010, the five recycled water projects were estimated to generate 9.3 MGD of recycled water.[18]

b. Water Demand

EBMUD has calculated water demand until 2035 on a regional basis based on population projections by the Association of Bay Area Governments (ABAG). These figures have been used by EBMUD in their 2010 UWMP to ensure there is an adequate supply even in multiple dry years.

3. Standards of Significance

The Draft 2030 General Plan would have a significant impact related to water supply if it would:

a. Have insufficient water supplies available to serve the project from existing and identified entitlements and resources.

b. Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

4. Impacts Discussion

a. Have insufficient water supplies available to serve the project from existing and identified entitlements and resources.

The Project Description of this EIR shows household and job estimates for Danville and the Planning Area as of January 1, 2011 and shows projections reflecting new development proposed in the Draft 2030 General Plan. The projections indicate approximately 1,340 additional households by 2030 if the

[18] EBMUD, (October, 2009), *Water Supply Management Program 2040 Plan*, pages 3-22 – 3-25.

General Plan is not adopted and 2,250 additional households by 2030 if the proposed changes to the Land Use Map are adopted.

EBMUD's 2010 water projections are based on forecasts from ABAG Projections 2009. Even with the land use map changes contemplated by the Draft 2030 General Plan, the number of additional households in the Danville area would be relatively close to Projections 2009.

Projections 2009 assumed a more aggressive 2010-2030 growth forecast than would be possible under the current (Danville 2010) General Plan. The Projections 2009 growth estimate was 2,020 new households over this 20-year period. However, the ABAG forecast does not appear to include the entire Danville Planning Area. A portion of the unincorporated Danville Planning Area was assigned by ABAG to the Alamo-Blackhawk Subregional Study Area (SSA), and some of the growth expected in the Town's Planning Area is actually occurring there. Moreover, adoption of the General Plan will cause a reduction on the Town's employment forecasts relative to what was presumed by ABAG Projections 2009. This will offset some of the increase in demand associated with higher household growth. In addition, the new units accommodated by the General Plan are mostly multi-family, with lower per capita water consumption than existing development in Danville.

The various factors cited above, including: the inclusion of a portion of the Danville Planning Area's forecasts being assigned to ABAG's Alamo-Blackhawk SSA; the lower General Plan employment forecasts for Danville relative to Projections 2009 forecasts; and the small margin of difference (2,250 households vs. 2,020 households) between ABAG forecasts and the General Plan 2030 forecasts suggest that the revised General Plan is consistent with EBMUD's Urban Water Management Plan forecasts.

The development of areas inside the Planning Area but outside the Town Limit falls under the jurisdiction of Contra Costa County. Alamo Creek is an existing development in this area, and has all its expected development entitlements. To secure County approval, future development in this area

will be reviewed under CEQA to make sure the water supply is adequate, and that implemented mitigation programs would offset their water requirements. A new EBMUD reservoir is being built on the southeast corner of the Alamo Creek area to ensure adequate water storage capacity.[19]

Several policies ensure that new development proposals do not cause the Town to exceed its growth expectations, or if they do, that adequate water is available. **Policy 20.02** would ensure that Danville coordinates development approvals with the appropriate agencies to ensure that adequate water quantity, quality, and distribution can be provided without adverse impacts. Policies in the Sustainability section promote water conservation measures, including: **Policy 31.01**, which would promote the efficient use of water by encouraging drought-tolerant landscaping, plumbing fixtures and irrigation systems designed for water efficiency, and other building and landscape systems designed to reduce potable water use and water waste; and **Policy 31.02** which would require Danville to support the use of reclaimed water ("gray water") for landscape irrigation on medians, in parks, and in other landscaped areas.

As the growth in population due to development under the Draft 2030 General Plan has been taken into account by the 2010 UWMP, and as water consumption would be reduced through water conservation measures and implementation of General Plan policies, there would be a *less-than-significant* impact on water supplies.

b. Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

EBMUD provides treated water to its customers. As the amount of water is not significantly more than predicted in the 2010 UWMP, no new water treatment facilities would be required. As the population of Danville grows

[19] Town of Danville, personal communication with Barry Miller, June 21, 2012.

slightly and the water usage increases, infrastructure will need to be upgraded. Several policies in the Draft 2030 General Plan facilitate these upgrades. Policy 20.02 would ensure that the Town coordinates development approvals with the appropriate agencies to ensure that adequate water quantity, quality, and distribution can be provided without adverse impacts. **Policy 20.03** would ensure that all water infrastructure would meet EBMUD standards. **Policy 20.04** would ensure that prior to approving new developments, the Town has verified there is sufficient water collection, distribution and treatment capacity to service that development.

Given these growth projections that have already been analyzed, and General Plan policies, the impact would be *less than significant.*

5. Cumulative Impacts

The Town of Danville is not projected to grow substantially more than the forecasts that were used by EBMUD to ensure that there is an adequate supply until 2030. In addition, future growth will occur at higher densities, resulting in less water demand per unit than was assumed by EBMUD. It is possible that some of the other neighboring jurisdictions also served by EBMUD may grow more than predicted. However, Danville would not be a contributing factor. There would therefore be *no cumulative impacts.*

6. Impacts and Mitigation Measures

There are no significant impacts and therefore no mitigation measures.

B. Wastewater

This section describes the regulatory framework, existing conditions and potential impacts of the Draft 2030 General Plan with regard to wastewater in the Project Area.

1. Regulatory Framework

This section summarizes existing federal, State, and local agencies, policies and regulations that apply to wastewater services analyzed in this section.

a. Federal and State Regulations

The following are federal and State regulations that affect wastewater services in Danville.

i. Clean Water Act

The Federal Water Pollution Control Act of 1972, more commonly known as the Clean Water Act (CWA), regulates the discharge of pollutants into watersheds throughout the nation. Under the CWA, the United States Environmental Protection Agency (EPA) implements pollution control programs and sets wastewater standards.

ii. National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the Clean Water Act to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

Wastewater discharge is regulated under the NPDES permit program for direct discharges into receiving waters and by the National Pretreatment Program for indirect discharges to a sewage treatment plant.

iii. State Water Resources Control Board (SWRCB)

On May 2, 2006 the SWRCB adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than 1 mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows

(SSOs) by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System Management Plan (SSMP). The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the SWRCB using an online reporting system.

iv. California Toxics Rule and State Implementation Plan

In the mid-1990s, the U.S. Environmental Protection Agency (EPA) adopted the National Toxics Rule (NTR), which promulgated water quality standards for a number of trace toxic compounds. About 40 criteria in the NTR were applicable in California. On May 18, 2000, EPA adopted the California Toxics Rule (CTR), which included new toxics criteria in addition to the previously adopted criteria from the NTR. The State Implementation Plan (SIP), adopted in 2000, provides implementation provisions for CTR criteria. According to the SIP, full compliance with these criteria was required by May 18, 2010.

v. State Title 22 Requirements

Water recycling criteria, administered by the California Department of Public Health (CDPH), are contained in the California Administrative Code, Title 22, Division 4, Chapter 3, Sections 60301 through 60355. These criteria are known as the Title 22 requirements or standards. Title 22 contains provisions for the uses of recycled water based on the method of treatment, the use area requirements for recycled water projects, and general requirements for design, operations, and reliability. Water used for recreational uses or agricultural irrigation must meet Title 22 standards for unrestricted reuse.

b. Local Regulations and Plans

The following are local regulations and plans that affect wastewater services in Danville.

i. NPDES Municipal Regional Permit

In 2009, the RWQCB combined all Bay Area NPDES permits into one regional permit called the Municipal Regional Permit (MRP). The consolidated permit was intended to reduce the administrative burden on local municipalities, establish a level playing field for all participants, and more clearly express program priorities. The MRP requires local governments to operate and annually report on programs targeted to the following categories:

- Municipal Operations
- New Development and Redevelopment
- Industrial and Commercial Site Control
- Illicit Discharge and Elimination
- Construction Site Controls
- Public Information and Outreach
- Water Quality Monitoring
- Pesticides Toxicity Controls
- Trash Reduction
- Controls on Mercury, PCBs, Copper, Polybrominated Diphenyl Ethers (PBDE), Legacy Pesticides, and Selenium
- Exempt and Conditionally Exempt Discharges.

ii. Danville Municipal Code

Danville's public sewer system is regulated by Chapter 15 of the Municipal Code. Chapter 15 establishes the procedures for sewer connection permits. It also prohibits the collection, discharge or deposit of sewage that would create a public nuisance in the Town.

iii. Sewer System Master Plan

The Central Contra Costa Sanitary District (CCCSD) has prepared a Sewer System Management Plan (SSMP) in accordance with the requirements of the State Water Resources Control Board (SWRCB) Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

The goals of the SSMP are to:

- Responsibly manage, operate, and maintain all parts of the wastewater collection system and adhere to the components of the SSMP.
- Provide adequate capacity to convey design peak flows.
- Minimize the frequency of sewer system overflows.
- Mitigate the impact of sewer system overflows.
- Develop annual strategic goals and measure progress towards those goals.

2. Existing Conditions

Wastewater in Danville is collected, transported and treated by the Central Contra Costa Sanitary District (CCCSD), a special district that serves approximately 462,000 residents and 3,000 businesses in 13 cities and towns in a 146 square mile area of central Contra Costa County. CCCSD maintains 1,500 miles of sewer lines and 18 pumping stations, in total. The 2010-2011 Fiscal Year budget for CCCSD is $98 million.

The CCCSD Treatment Plant, located near Martinez, which is powered by a cogeneration facility, treats an average of 45 million gallons of wastewater per day. In addition, the Treatment Plant produces nearly 600 million gallons of recycled water each year that is used for plant operations, industrial uses, and landscape irrigation.

3. Standards of Significance

The Draft 2030 General Plan would have a significant impact on wastewater service if it would:

a. Exceed wastewater treatment requirements of the San Francisco Regional Water Quality Control Board.
b. Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
c. Have insufficient wastewater treatment capacity available to serve the project's projected demand in addition to existing demand.

4. Impacts Discussion

a. Exceed wastewater treatment requirements of the San Francisco Regional Water Quality Control Board.

Wastewater in Danville flows to the Martinez treatment plant owned and operated by the CCCSD, before being reused or discharged to surface waters. CCCSD discharges are sampled for water quality objectives and subject to the NPDES permit provisions. In 2010, the Central Contra Costa Sanitary District (CCCSD) had been in 100 percent compliance with its NPDES Permit for 13 years.[20] Implementation of the Draft 2030 General Plan would not affect CCCSD's compliance with Permit No. CA0037648. Impacts from exceeding the wastewater treatment requirements of the RWQCB would be *less than significant.*

b. Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

The 2010 CCCSD Collection System Master Plan Update projected wastewater flows to the sanitary sewer until 2040 using information from the EBMUD 2040 WSMP that included ABAG 2009 projections and other planning documents. The Plan discussed Danville's probable housing growth as listed in the 2009 Housing Element. As discussed above under Section A, Water Supply, development of the Draft 2030 General Plan would not result in a significantly larger service population (e.g., residents and employees) than was anticipated in that report. CCCSD planning efforts would therefore ensure a system with the required capacity.

Within the Town of Danville, several Draft 2030 General Plan policies aim to provide adequate capacity within the sanitary sewer system. Policy 20.02 would ensure that the Town coordinates development approvals with the appropriate agencies to ensure adequate sewage collection and wastewater treatment capacity can be provided without adverse impacts. Policy 20.03

[20] National Association of Clean Water Agencies (NACWA) website: http://www.nacwa.org/index.php?option=com_content&view=article&id=138%3Aplatinum-awards&catid=37%3Apeak&Itemid=63#2010. Accessed on April 25, 2012.

would ensure that all sewer infrastructure would meet CCCSD standards. Policy 20.04 would ensure that prior to approving new developments, the Town has verified there is sufficient sewer collection and treatment capacity to service that development.

Given these growth projections that have already been analyzed, and that growth impacts are minimized by General Plan policies, the impact would be *less than significant.*

c. Have insufficient wastewater treatment capacity available to serve the project's projected demand in addition to existing demand.

Please refer to the response to B. Impacts would be *less than significant.*

5. Cumulative Impacts

The CCCSD service area, which includes the Town of Danville and most neighboring jurisdictions in Contra Costa County is not projected to grow more than the forecasts that were used by CCCSD in its 2010 Collection System Master Plan Update. There is therefore adequate capacity to convey and treat the wastewater on a regional scale and there would therefore be *no cumulative impacts.*

6. Impacts and Mitigation Measures

There are no impacts and therefore no mitigation measures.

C. Stormwater

This section describes the regulatory framework, existing conditions and potential impacts of the Draft 2030 General Plan with regard to stormwater in the Project Area.

1. Regulatory Framework

Federal, State and local regulations, plans, and policies provide the regulatory framework for solid waste and recycling services in the Project Area.

a. Federal Regulations

This section describes the federal regulations that pertain to stormwater in the Project Area.

i. Clean Water Act

The Clean Water Act (CWA) prohibits the discharge of pollutants to navigable waters from a point source unless authorized by a NPDES permit. The SWRCB is responsible for issuing NPDES permits to cities and counties through the RWQCB. Phase 2 implementation of NPDES permitting, effective March 10, 2003, extended urban runoff discharge permitting to construction sites that disturb between 1 and 5 acres. Under Phase 2, federal regulations allow two permitting options for stormwater discharges: individual permits and general permits. The California SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2003-0005-DWQ) for Small Municipal Separate Storm Sewer System (MS4) operators to efficiently regulate stormwater discharges under a single permit. Permitees must develop and implement a Stormwater Management Plan (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable.

b. State and Local Regulations

This section describes the State and local regulations and plans that pertain to stormwater in the Project Area.

i. Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) of 1969 requires the State to adopt water quality policies, plans, and objectives to protect the State's waters for the use and enjoyment of the people. The Porter-Cologne Act states that the SWRCB and RWQCBs must adopt and periodically update quality control plans to establish water quality objectives and implementation programs for each of the nine RWQCBs in California. Danville falls under the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin. The Porter-Cologne Act also requires waste dischargers to notify the RWQCB of their activities by submitting a Report of Waste Discharge prior to the discharge of wastewater. The SWRCB and RWQCBs

are authorized to issue and enforce Waste Discharge Requirements, NPDES permits, Section 401 water quality certifications, and other approvals.[21]

In 2009, the San Francisco Bay RWQCB combined all Bay Area NPDES permits into one regional permit called the Municipal Regional Permit (MRP). The RWQCB subsequently issued county-wide municipal storm-water permits to regulate stormwater discharges from municipalities and local agencies in several Bay Area counties, including Contra Costa County. The MRP includes requirements for local governments to operate local storm-water programs.

ii. Water Quality Control Plan for the San Francisco Bay Basin

The RWQCB Region 2 office regulates water quality in the San Francisco Bay Basin in accordance with the Water Quality Control Plan (Basin Plan). The Basin Plan presents the beneficial uses that the Regional Board has designated for surface water, groundwater, marshes, and mudflats, as well as the water-quality objectives and criteria that must be met to protect these uses.

c. Local Regulations and Plans

i. Contra Costa County Flood Control and Water Conservation District

The Contra Costa County Flood Control and Water Conservation District (CCCFCWCD), with assistance from the Soil Conservation Service, has re-shaped and widened segments of San Ramon, Sycamore, and Green Valley Creeks and constructed various flood protection structures. These efforts, along with Danville's drainage maintenance efforts, have reduced the potential for serious floods. The CCCFCWCD is a contributor to regional flood protection efforts.

ii. Contra Costa Clean Water Program

In 1993, the Town of Danville joined with twenty other jurisdictions in Contra Costa County and the Contra Costa County Flood Control and Water

[21] California Wetlands Information System, *Summary of the Porter-Cologne Water Quality Control Act*, http://ceres.ca.gov/wetlands/permitting/Porter_summary.html, accessed on March 15, 2011.

Conservation District to operate and fund a countywide Contra Costa Clean Water Program (CCCWP). The program was necessary to comply with the federal water quality requirements and was implemented on a countywide level to save on program costs. The CCCWP is one of the participating agencies in a regional planning document, the *Flood Protection and Stormwater Management Service Function Area Component of the Bay Area Integrated Regional Water Management Plan.*[22]

iii. Danville Municipal Code

Stormwater management is regulated by Chapters 20 and 32 of the Danville Municipal Code. The intent of Chapter 20 is to protect and enhance the water quality in the Town of Danville's watercourses pursuant to, and consistent with the Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.) and the Federal Clean Water Act (33 U.S.C. Section 1251 et seq.). It also carries out the conditions in the Town's NPDES permit. In an effort to reduce stormwater runoff and discharge into San Francisco Bay, Chapter 32 establishes a fee structure for new development to provide funding towards the NPDES.

iv. Master Storm Drainage/Facilities Maintenance Plan

The Master Storm Drainage Plan is a component of the Facilities Master Plan and contains schedules for the overall maintenance and protection of all drainage facilities, including natural creeks and constructed channels and culverts.

v. Stormwater Control Program

Danville's Stormwater Control Program links the Stormwater Management and Discharge Control Ordinance, the MRP and the most recent version of the CCCWP Stormwater C.3 Guidebook, the manual that explains how to implement the C.3 regulations from the MRP.

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[22] Morrison & Associates, and Dan Cloak Environmental Consulting, 2006. *Flood Protection and Stormwater Management Service Function Area Component of the Bay Area Integrated Regional Water Management Plan.*

2. Existing Conditions

Figure 4.8-1 in Section 4.8, Hydrology and Water Quality, shows the distribution of Danville's natural and manmade drainages. Creeks flow down the side of Mt. Diablo and the Las Trampas Range into San Ramon Creek and its tributaries and then southwest out of the Planning Area. In developing areas, hydraulic studies are typically prepared to determine the extent of drainage improvements required to manage runoff and avoid future flood hazards on-site and downstream. Such studies were used to identify flood control improvements in the Sycamore Valley and are being used to identify developer contributions for drainage improvements in the Alamo Creek watershed on Danville's east side. On most large sites, stormwater retention basins are required, reducing the need for more disruptive improvements to the creek itself.

Danville incorporates Low Impact Development (LID) construction methods to reduce stormwater runoff, into its stormwater management program. These methods promote percolation of rainwater to soil and the underlying aquifer rather than storm drains.

3. Standards of Significance

The Draft 2030 General Plan would have a significant impact on stormwater service if it would:

a. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

4. Impacts Discussion

a. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Several Draft 2030 General Plan policies ensure that the stormwater drainage system is upgraded in response to new development.

- Policy 20.02 would ensure coordination by the Town with appropriate agencies over development proposals to ensure that adequate utilities – including storm drains – are provided without adverse community impacts.
- **Policy 20.06** would ensure that the costs of upgrading and constructing public facilities needed to serve new development are the responsibility of the developers and not of existing residents.
- **Policy 20.07** would discourage private infrastructure improvements such as private storm drainage systems.
- **Policy 20.08** would enforce non-point source pollution control measures as required by federal and State law, controlling erosion and sedimentation, and encouraging retention ponds and other measures to reduce or contain urban runoff.

In the Sustainability section, the following policy would reduce the amount of water reaching the storm drain system.

- **Policy 32.06** would encourage the use of permeable pavement for parking lots, driveways, walkways and other paved surfaces as a way to absorb stormwater, recharge the aquifer, and reduce urban runoff.

With implementation of these goals and policies, and review of new storm drainage systems when building permits are issued, and measures to reduce the volume of water reaching the storm drain system, the Draft 2030 General Plan would not result in the construction of new stormwater drainage facilities or expansion of existing facilities that would have significant environmental effects. There would therefore be a *less-than-significant* impact.

5. Cumulative Impacts

Development in Danville within the 2030 planning horizon would consist primarily of development of vacant sites within the existing General Plan designations and redevelopment of sites designated as housing opportunity sites. As Danville is generally in a basin surrounded by undeveloped hillsides, there is little upstream development that would complicate the stormwater

infrastructure requirements for Danville. As part of the CCCWP, Danville coordinates its stormwater management efforts with neighboring jurisdictions to prevent any regional impacts. And, as demonstrated above, storm sewer infrastructure in Danville will keep pace with new development and not contribute towards any regional impact. There would therefore be *no cumulative impact.*

6. Impacts and Mitigation Measures

There are no impacts and therefore no mitigation measures.

D. Solid Waste and Recycling

This section describes the regulatory framework, existing conditions and potential impacts of the Draft 2030 General Plan with regard to solid waste and recycling in the Project Area.

1. Regulatory Framework

State and local regulations, plans, and policies provide the regulatory framework for solid waste and recycling services in the Project Area.

a. State Regulations

This section describes the State regulations that pertain to solid waste and recycling services in the Project Area.

i. California Integrated Waste Management Act

California's Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939 and amended by SB 1016) set a requirement for cities and counties throughout the State to divert 50 percent of all solid waste from landfills by January 1, 2000 though source reduction, recycling, and composting. To help achieve this, the Act requires that each city and county prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of on-going landfill capacity. As part of CIWMB's Zero Waste Campaign, regulations affect what common household items can be placed in the trash. As of February 2006,

household materials including fluorescent lamps and tubes, batteries, electronic devices and thermostats that contain mercury are no longer permitted in the trash.[23]

In 2007, SB 1016 amended AB 939 to establish a per capita disposal measurement system. The per capita disposal measurement system is based on two factors: a jurisdiction's reported total disposal of solid waste divided by a jurisdiction's population. CIWMB sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an annual report to CIWMB with an update of its progress in implementing diversion programs and its current per capital disposal rate.[24]

ii. California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act requires areas to be set aside for collecting and loading recyclable materials in development projects. The Act required CIWMB to develop a model ordinance for adoption by any local agency relating to adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects. As noted in Section E.2.b.ii, Danville's Land Use and Development Code (Division 14.09 of the Municipal Code) complies with the Act and requires areas for the collection of recyclable material and solid waste.

b. Local Plans and Regulations

This section describes the local plans and regulations that pertain to solid waste and recycling services in the Project Area.

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[23] California Integrated Waste Management Board's Zero Waste Campaign's website, http://www.zerowaste.ca.gov, accessed on June 17, 2010.

[24] California Integrated Waste Management Board, http://www.calrecycle.ca.gov/LGCentral/Basics/PerCapitaDsp.htm#Jurisdiction, accessed on March 15, 2011.

i. Danville Municipal Code

Chapter 7, Health and Welfare of the Danville Municipal Code regulates solid waste disposal and recycling in Danville. Sections 7-4, Refuse Collection, and 7-5, Refuse Disposal Sites, adopt the Central Contra Costa Solid Waste Authority (CCCSWA) Ordinance and regulate disposal sites within Danville.

ii. Central Contra Costa Solid Waste Authority Ordinance 97-01

Central Contra Costa Solid Waste Authority (CCCSWA), of which Danville is a participating member, has established an Ordinance that supersedes ordinances of its member agencies regulating solid waste, green waste, and recyclable material collection, processing, disposal and litter. The purpose of the ordinance is to enable the CCCSWA to meet the CIWMB requirements for minimizing disposal to landfills and therefore lengthening the landfill life.

2. Existing Conditions

This section describes the existing conditions pertaining to solid waste and recycling in the Project Area.

a. Solid Waste and Recycling

CCCSWA provides solid waste and residential recycling services for Contra Costa County, including the Town of Danville. CCCSWA holds franchise agreements with Allied Waste Services for the collection, transfer, and disposal of residential and commercial solid waste, and with Valley Waste Management for the collection of residential recycling, green waste and food scraps.[25]

CCCSWA also operates a recycling center in Walnut Creek, where residents can bring recyclables that don't fit in their residential recycling bins, as well as antifreeze, motor oil, wooden pallets and yard clippings, for a small fee.[26]

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[25] Central Contra Costa Solid Waste Authority website, http://www.wastediversion.org/app_pages/view/4, accessed on March 17, 2011.

[26] Central Contra Costa Solid Waste Authority website, http://www.wastediversion.org/app_pages/view/4, accessed on March 17, 2011.

Danville's current disposal rate is 5.5 pounds of waste per person per day, which was well below the CIWMB target of 6.5 pounds of waste per person per day.

b. Diversion from Landfill

The 2010 General Plan established a goal of diverting 50 percent of Danville's waste from landfills to comply with State Law AB939. The Town reached this goal and has embarked on additional programs to reach a 75 percent diversion rate.

c. Landfills

Contra Costa County's waste is taken to two landfills: Acme Landfill and Keller Canyon Landfill. Keller Canyon Landfill, in Pittsburg, has a daily maximum capacity of 3,500 tons/day and a total permitted capacity of 75,018,280 tons/day of which 85 percent has been used. It is expected to remain open until December 2030.[27] Acme Landfill is in Martinez, receives 1,500 tons/day and has a total permitted capacity of 268,700, of which 65 percent has been used. It is expected to remain open until June 2021.

d. Household Hazardous Waste

The Central Contra Costa Sanitary District (CCCSD), in partnership with Mt. View Sanitary District, operates a permanent Household Hazardous Waste (HHW) Collection Facility, located at 4797 Imhoff Place in Martinez. Residents of Central Contra Costa County can use the facility at no charge, while small businesses can use the facility for a nominal fee. Most of the hazardous waste collected at the facility is recycled or reused. Products that can be reused are given to residents and businesses through a waste exchange program. The remaining HHW is disposed of in a safe manner.[28]

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[27] CIWMB website, http://www.calrecycle.ca.gov/profiles/Facility/Landfill/LFProfile1.asp?COID=7&FACID=07-AA-0032, accessed August 16, 2011.

[28] Central Contra Costa Solid Waste Authority website, http://www.wastediversion.org/app_pages/view/251, accessed on March 17, 2011.

3. Standards of Significance

The Draft 2030 General Plan would have a significant impact on solid waste service if it would:

a. Not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

b. Not comply with federal, State and local statutes and regulations related to solid waste and recycling.

4. Impacts Discussion

a. Not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

As a participating member in the CCCSWA, the Town of Danville has adopted the CCCSWA Ordinance that regulates the amount of waste disposed in landfills in order to comply with the CIWMB requirements for diversion of waste from landfills.

The two landfills currently used for Contra Costa County waste: Acme and Keller landfills, are considered adequate until 2021 and 2030, respectively, (which is more than the 15 years required by statute) after which alternative locations for solid waste disposal would presumably have to be sought.

Several policies in the Sustainability section of the Draft 2030 General Plan would reduce the amount of waste that is landfilled, thereby preserving the regional capacity and prolonging the landfills' useful life.

- **Policy 31.03** would promote composting, recycling, and other programs that reduce the amount of household solid waste requiring disposal in landfills.
- **Policy 31.04** would expand participation in recycling programs by the commercial sector, including Danville offices, restaurants, retail stores, and other businesses. The Town's adoption of the necessary ordinances to carry out this mandate would be consistent with AB 341.

- **Policy 31.05** would reduce the amount of construction and demolition (C&D) debris being disposed in landfills through mandatory C&D recycling requirements.
- **Policy 31.06** would require new and rehabilitated multi-family developments to provide on-site shared collection bins for recyclable and compostable waste.

Other policies ensure that the City offers a market for use of recycled products. **Policy 31.09** would ensure that the Town encourages the use of recycled or reusable goods in its purchasing practices and implement other conservation practices that may be followed by Danville residents. **Policy 32.03** would encourage the use of recycled-content construction materials in major rehabilitation projects and in new construction.

With implementation of these policies, the amount of waste being sent to landfills would be minimized and reduced below the growth expected given the increase in population. There would therefore be a *less-than-significant* impact.

b. Not comply with federal, State, and local statutes and regulations related to solid waste and recycling.

As the CCCSWA is not at this time a regional agency as defined by CIWMB, each individual jurisdiction is still subject to its own waste diversion requirement under CIWMB. Danville's current disposal rate is 5.5 pounds of waste per person per day, below the CIWMB target of 6.5 pounds of waste per person per day and it is therefore in compliance.

Under Policy 31.04 discussed above and with the passage of AB 341, the Town has agreed to adopt ordinances mandating recycling from commercial enterprises. Additionally, **Policy 31.05** would ensure mandatory diversion of construction and demolition debris from landfills in line with the CIWMB requirements.

With implementation of these policies, the Town would be in compliance with federal, State and local statutes related to solid waste and recycling and there would therefore be *no impact*.

5. Cumulative Impacts

Regional growth will increase the quantity of solid waste for disposal. Although AB 939 established a goal for all California cities to provide at least 15 years of ongoing landfill capacity, growth from other Contra Costa cities may exceed that which was taken into account when calculating landfill capacity. However, the anticipated population growth from Danville during the planning period, is estimated at 10 percent (for the Town). ABAG 2009 projections estimate that growth in Contra Costa County as a whole would be 14 percent and the City of San Ramon would grow by 25 percent. Anticipated growth in Danville is therefore less than the expected regional growth and Danville's modest growth has been accounted for in CIWMB plans. The cumulative impact would be *less than significant.*

6. Impacts and Mitigation Measures

There are no impacts and therefore no mitigation measures.