4.14 UTILITIES AND SERVICE SYSTEMS

This chapter describes the existing utilities and service systems for San Leandro and evaluates the potential environmental consequences of implementing the Project. Water supply, wastewater, solid waste, stormwater infrastructure, and energy conservation are each addressed in separate sections of this chapter. In each section, a summary of the relevant regulatory settings and existing conditions is followed by a discussion of potential impacts and cumulative impacts from the implementation of the Project.

4.14.1 WATER

This section outlines the regulatory setting, describes the environmental setting, and discusses potential impacts from buildout of the proposed Plan with regard to local water supply, treatment, and distribution.

4.14.1.1 ENVIRONMENTAL SETTING

Regulatory Setting

Federal Regulations

The Safe Drinking Water Act, the principal federal law intended to ensure safe drinking water to the public, was enacted in 1974 and has been amended several times since it came into law. The Act authorizes the United States Environmental Protection Agency (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 contaminant 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.

State Regulations

California Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, which was passed in California in 1969 and amended in 2013, the State Water Resources Control Board (SWRCB) has authority over State water rights and water quality policy. This Act divided the State into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Board (RWQCB) to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions. RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. San Leandro is overseen by the San Francisco Bay RWQCB.

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\(^1\) of water annually. The Act is intended to support conservation and efficient use of urban water supplies. The Act requires that total project 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.

**Groundwater Management Act (1992)**

The Groundwater Management Act of the California Water Code (Assembly Bill [AB] 3030), signed into law on September 26, 1992 and effective on January 1, 1993, provides guidance for applicable local agencies to develop voluntary Groundwater Management Plans (GMP) in State-designated groundwater basins. The 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.\(^2\)

**Sustainable Groundwater Management Act (2014)**

The Sustainable Groundwater Management Act of 2014 (SGMA) consists of three legislative bills, Senate Bill (SB) 1168 (Pavley), Assembly Bill AB 1739 (Dickinson), and SB 1319 (Pavley). The legislation provides a framework for long-term sustainable groundwater management across California. Under the roadmap laid out by the legislation, local, and regional authorities in medium and high priority groundwater basins will form Groundwater Sustainability Agencies (GSAs) that oversee the preparation and implementation of a local Groundwater Sustainability Plan (GSP). Local stakeholders have until 2017 to organize themselves in Groundwater Sustainability Agencies. Groundwater Sustainability Plans will have to be in place, and implementation will begin sometime between 2020 and 2022. GSAs will have until 2040 to achieve groundwater sustainability.\(^3\)

**California Senate Bills 610 and 221**

SB 610 and SB 221 amended State law to (1) ensure better coordination between local water supply and land use decisions and (2) confirm that there is an adequate water supply for new development. Both statutes require City and County decision-makers receive detailed information regarding water availability prior to approval of large development projects. SB 610 requires the preparation of a Water Supply Assessment (WSA) for certain types of projects subject to the California Environmental Quality Act (CEQA). Projects required to prepare a WSA are:

- Residential development of more than 500 dwelling units.
- Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor area.
- Hotel or motel, or both, having more than 500 rooms.

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\(^1\) Once acre-foot is the amount of water required to cover 1 acre of ground (43,560 square feet) to a depth of 1 foot.


- Industrial, manufacturing, processing plant, or industrial park planned to employ more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

- Mixed-use project that includes one or more of the projects specified above.

- Project that would demand an amount of water equivalent to, or greater than, the amount of water required for 500 dwelling units.

The SB 221 establishes consultation and analysis requirements related to water supply planning for residential subdivisions including more than 500 dwelling units. The water supplier must provide written verification that sufficient water is available for the project before construction begins. Compliance with both SB 610 and SB 221 involves review of the Urban Water Management Plan (UWMP).

**The Water Conservation Act of 2009 (Senate Bill X7-7)**

The Water Conservation Act of 2009,\(^4\) SB X7-7, requires all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita water by 20 percent by 2020, with an interim goal of a 10 percent reduction in per capita water use by 2015. Effective in 2016, urban retail water suppliers who do not meet the water conservation requirements established by this bill are not eligible for state water grants or loans. The SB X7-7 requires that urban water retail suppliers determine baseline water use and set reduction targets according to specified standards; it also requires agricultural water suppliers prepare plans and implement efficient water management practices.

**Water Conservation in Landscaping Act of 2006 (Assembly Bill 1881)**

The Water Conservation in Landscaping Act of 2006 (Assembly Bill (AB) 1881) required the State Department of Water Resources to update the State Model Water Efficient Landscape Ordinance (WELO) by 2009. The State’s model ordinance was issued on October 8, 2009. Under AB 1881, Cities and Counties are required to adopt a State updated model landscape water conservation ordinance by January 31, 2010, or to adopt a different ordinance that is at least as effective in conserving water as the updated Model Ordinance (MO). In accordance with AB 1881, San Leandro has adopted its Landscape Ordinance on January 19, 2010. The ordinance has been in effect since February 1, 2010. See “City of San Leandro Municipal Code” below for a discussion of local ordinances that reduce water consumption and conserve water.

**CALGreen Building Code (Part 11, Title 24, CCR)**

On July 17, 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as “CALGreen”) was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations [CCR]) to apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure, unless otherwise indicated in the code, throughout the State of California. CALGreen established planning and design standards for sustainable site development, including water conservation measures and requirements that new buildings reduce water consumption by 20 percent. The mandatory

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provisions of the California Green Building Code Standards became effective January 1, 2011. The building efficiency standards are enforced through the local building permit process.

The purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories:

- Planning and design
- Energy efficiency
- Water efficiency and conservation
- Material conservation and resource efficiency
- Environmental quality

**The California Plumbing Code (Part 5, Title 24, CCR)**

The 2010 California Plumbing Code (Part 5, Title 24, CCR) was adopted as part of the California Building Standards Code. The general purpose of the universal code is to prevent disorder in the industry as a result of widely divergent plumbing practices and the use of many different, often conflicting, plumbing codes by local jurisdictions. Among many topics covered in the code are water fixtures, potable and non-potable water systems, and recycled water systems. Water supply and distribution shall comply with all applicable provisions of the current edition of the California Plumbing Code.

**The California Health and Safety Code**

A portion of the California Health and Safety Code is dedicated to water issues, including testing and maintenance of backflow prevention devices, coloring of pipes carrying recycled water, and programs addressing cross-connection control by water users.

**The California Water Code**

The California Water Code contains many statutes surrounding various water-related issues including water shortage emergences, reuse, recycling, treated wastewater, appropriation, and fees.

**Recycled Water Regulations (CCR, Title 22)**

Two State agencies have primary responsibility for regulating the application and use of recycled water: the California Department of Public Health (CDPH) and the SWRCB. Planning and implementing water recycling projects entail numerous interactions with these regulatory agencies prior to project approval.

The CDPH establishes the statewide effluent bacteriological and treatment reliability standards for recycled water uses in Title 22, Division 4 (Environmental Health) of the California Code of Regulations. Under Title 22, the standards are established for each general type of use based on the potential for human contact with recycled water.

The SWRCB is charged with establishing and enforcing requirements for the application and use of recycled water within California. Permits are required from the SWRCB for a water recycling operation. As part of the permit application process, applicants are required to demonstrate that the proposed recycled
water operation will not exceed the ground and surface water quality objectives in the basin management plan, and that it is in compliance with Title 22 requirements.5

Executive Order B-29-15 (Mandatory Water Use Restrictions)

Executive Order B-29-15, signed by Governor Brown on April 1, 2015, imposed mandatory water restrictions in California. The Order requires the SWRCB to impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016 as compared to the amount used in 2013. In addition to requiring cities and towns to save water, the Order is intended to increase enforcement to prevent wasteful water use, streamline the state’s drought response and invest in new technologies that will make California more drought resilient.

Executive Order B-36-15 (Continuation of Mandatory Water Use Restrictions)

On November 13, 2015, Governor Brown issued Executive Order B-36-15 (EO B-36-15) that calls for an extension of restrictions to urban potable water usage until October 31, 2016, should drought conditions persist through January 2016.6 EO B-36-15 is the fifth in a series of Executive Orders by Governor Brown on actions necessary to address California’s severe drought conditions. On February 2, 2016 the State Water Board adopted an extended and revised emergency regulation.7 The regulation extends restrictions on urban water use through October 2016 while providing urban water suppliers more flexibility in meeting their conservation requirements. It also directs staff to report back on additional flexibility once more complete water supply information is known in April 2016. The February 2016 Emergency Regulation allows suppliers flexibility in meeting their conservation requirements through adjustments and credits that allow a supplier to modify its conservation standard up to eight percentage points, based on consideration of: 1) climatic differences experienced throughout the state; 2) water-efficient growth experienced by urban areas; and 3) significant investments that have been made by some suppliers toward creating new, local, drought-resilient sources of potable water supply.8 Conservation standards may be adjusted by submitting required information for verification through the new on-line reporting tool at the state’s Drinking Water Information Clearinghouse (DRINC) Portal.9 The tool became available beginning the week of February 8, 2016 and remained open through March 15, 2016.

State Emergency Regulations Restricting Use of Potable Water (CCR Title 23, Sections 863, 864, 865 and 866)

Water Code section 1058.5 grants the SWRCB the authority to adopt emergency regulations in certain drought years in order to: “prevent the waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water, to promote water recycling or water conservation, to require

curtailment of diversions when water is not available under the diverter’s priority of right, or in
furtherance of any of the foregoing, to require reporting of diversion or use or the preparation of
monitoring reports.”

On May 5, 2015, the SWRCB approved a resolution resulting in adoption of emergency drought
regulations implementing the Governor’s April 1, 2015 EO (EO 29-B-15) mandating a statewide 25
percent reduction in potable water use. The regulations require each water supplier to California cities
and towns to reduce water usage compared to 2013 levels for the compliance period June 2015 through
February 2016. The conservation target for each city, town or water supplier depends on the residential
gallons per capita per day used by that city, town or water supplier. The East Bay Municipal Utility District
(EBMUD) is required to reduce potable water use by 16 percent during the compliance period compared
to the same period in 2013 and must report use on a monthly basis to SWRCB, through February 2016. As
noted, this conservation standard is extended through October 2016 by the Extended Water Conservation
Regulation adopted by the SWRCB on February 2, 2016, unless modified through approved adjustments
and credits.

**Utilities Infrastructure and Disadvantaged Unincorporated Communities (Senate Bill 244)**

SB 244 was passed in 2011 to address the hundreds of unincorporated communities in California that may
lack access to basic community infrastructure like sidewalks, safe drinking water, and adequate waste
processing. These communities range from remote settlements throughout the state to neighborhoods
that have been surrounded by, but are not part of, California’s fast-growing cities. This lack of investment
threatens residents’ health and safety and fosters economic, social, and education inequality. Including
these communities in the long range planning of a city or county, as required by SB 244, will result in a
more efficient delivery system of services and infrastructure including but not limited to sewer, water, and
structural fire protection.

There are no Disadvantaged Unincorporated Communities, as defined by SB 244, within San Leandro’s
Sphere of Influence (SOI).

**Local Regulations**

**2010 Urban Water Management Plan**

In compliance with the SB X7-7 and the Urban Water Management Planning Act, the water service
provider for San Leandro –EBMUD – adopted its 2010 UWMP in June 2011. As outlined in the UWMP,
future development would be required to pay connection fees, which would offset the costs of system
maintenance and capital upgrades to support new development in the EBMUD service area. A Draft of the
2015 UWMP is available on the EBMUD web site. The EBMUD Board of Directors will consider the Final UWMP 2015 for adoption at its regularly scheduled meeting on June 28, 2016.13

City of San Leandro Municipal Code

The City of San Leandro Municipal Code is a primary tool that shapes the form and character of physical development in San Leandro. The Municipal Code identifies site development regulations, and other general provisions that ensure consistency between the General Plan and proposed development projects. The Municipal Code is organized by Title, Chapter, Article and Section. The current Municipal Code is up to date through Ordinance 2015-014 and the December 2015 code supplement. The following provisions from the Municipal Code help conserve water resources in San Leandro.

Chapter 3-19, Green Building Ordinance

Chapter 3-19 requires a minimum Leadership in Energy & Environmental Design (LEED) rating of "Silver" for construction projects valued at over $3 million on City-owned facilities. (LEED is a rating system created by the U.S. Green Building Council that ranks different levels of design and construction aimed at improving building energy efficiency, water conservation and sustainable resource use.) The ordinance promotes healthy and efficient City facilities through design, construction and operation, and helps the City reduce its energy consumption and carbon emissions. Green buildings use recycled-content materials, consume less energy and water, have better indoor air quality, and use fewer natural resources than conventional buildings. The chapter finds that the most immediate and meaningful way to advance this cause is to include green building elements in City projects, and to encourage private projects to include green building elements.

Chapter 3-22, Bay-Friendly Landscaping Requirements for City Projects

This requires the integration of Bay-Friendly landscaping strategies in City landscapes and landscapes that are part of public-private partnership projects. Bay-Friendly Landscaping Requirements means the most recent version of guidelines developed by StopWaste14 for use in the professional design, construction, and maintenance of landscapes. City staff shall maintain the most recent version of the Bay-friendly Guidelines at all times. In Alameda County, StopWaste has taken the lead in defining and promoting environmentally friendly landscaping for the commercial, institutional, and residential sectors by developing the Bay-friendly Landscape Guidelines for professional landscapers and the Bay-friendly Gardening Guide for residents. This Chapter finds that requiring City projects and public-private partnership projects to incorporate Bay-Friendly Landscape Guidelines is necessary and appropriate to achieving the benefits of sustainable landscaping in the City.

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14 StopWaste is the Alameda County Waste Management Authority and the Alameda County Source Reduction and Recycling Board operating as one public agency. http://www.stopwaste.org/home/index.asp?page=2.
Chapter 7-9, Floodplain Management - Standards for Utilities

Section 7-9-505, Standards for Utilities, prescribes that all new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate: (1) Infiltration of flood waters into the systems; and (2) Discharge from the systems into floodwaters.

City of San Leandro Zoning Code

In addition to the General Plan and other provisions of the Municipal Code, the City of San Leandro Zoning Code also is a primary tool that shapes the form and character of physical development in San Leandro. The Zoning Code is comprised of regulations, known as zoning regulations, establishing various classes of zoning districts governing the use of land and the placement of buildings and improvements within districts. The following provision from the Zoning Code helps conserve water resources in San Leandro.

Article 19, Landscape Requirements, is intended to implement the new landscape design requirements of the Water Conservation in Landscaping Act of 2006 (AB 1881) and to establish standards for sustainable landscape practices in accordance with the current version of the StopWaste Bay-Friendly Landscape protocols. In recognition of the importance landscaping has in improving the quality of San Leandro’s environment, and that landscape design, installation, maintenance and management must be water efficient and sustainable, this Article establishes procedures to insure that landscaping is installed and maintained in accordance with the requirements of this Code.

Existing Conditions

Water Supply and Infrastructure

East Bay Municipal Utility District

Water service in San Leandro is provided by EBMUD, a publicly owned utility. Based on 2010 census data, approximately 1.34 million people are served by EBMUD's water system in a 332-square-mile area extending from Crockett on the north, southward to San Lorenzo (encompassing the major cities of Oakland and Berkeley), eastward from San Francisco Bay to Walnut Creek, and south through the San Ramon Valley.

Based on historical averages, about 90 percent of the EBMUD water supply originates from the Mokelumne River watershed, which is fed primarily from the melting snowpack of the Sierra Nevada, with the remaining ten percent coming from protected watershed lands and reservoirs in the East Bay Hills.15

EBMUD has water rights that allow for delivery of up to a maximum of 325 million gallons per day (mgd) from the Mokelumne River, subject to the availability of Mokelumne River runoff and to the senior water rights of other users, downstream fishery flow requirements, and other Mokelumne River water uses. Conditions that could, depending on hydrology, restrict EBMUD's ability to receive its full entitlement include:

Upstream water use by prior right holders.

Downstream water used by riparian and senior appropriators and other downstream obligations, including protection of public trust resources.

Variability in rainfall and runoff.

During prolonged droughts, the Mokelumne River supply cannot meet EBMUD’s projected customer demands. To address this, EBMUD has obtained and continues to seek supplemental supplies. For example, EBMUD has completed construction of the Freeport Regional Water Facility, which are also discussed below in the EBMUD Water Supply Planning section of this assessment. In 2014, for the first time, EBMUD tapped Sacramento River water supplies, delivered through the Freeport Regional Water Facility, to protect residents and businesses from further cutback.

The Mokelumne Aqueducts convey the Mokelumne River supply from Pardee Reservoir across the Sacramento-San Joaquin River Delta (Delta) to local storage and treatment facilities. The Mokelumne Aqueducts terminate in Walnut Creek, from where the water is sent directly to EBMUD’s three in-line filtration water treatment plants (WTPs) or to one or more of the EBMUD terminal reservoirs. After treatment, water is distributed to 20 incorporated cities and 15 unincorporated communities in Contra Costa and Alameda counties.

After the WTPs, water is distributed throughout EBMUD’s service area, which is divided into more than 120 pressure zones ranging in elevation from sea level to 1,450 feet. Approximately 50 percent of treated water is distributed to customers by gravity. The water distribution network includes 4,100 miles of pipe, 140 pumping plants and 170 neighborhood reservoirs (tanks storing treated drinking water) having a total capacity of 830 million gallons. EBMUD operates and maintains all treatment, storage, pumping, and distribution facilities within its service area and is responsible for all facilities up to the location of the water meter.

There are no major water storage facilities in San Leandro; the City is served by nearby facilities in Castro Valley and Oakland, including the Dunsmuir Reservoir just outside the northeastern city limit. Pipelines in San Leandro range from 4 to 36 inches in diameter.

**Groundwater Wells**

A small number of groundwater wells exist in San Leandro for private and municipal use. A recent evaluation of beneficial uses of groundwater in the East Bay Area by the San Francisco Bay RWQCB

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16 The Freeport Regional Water Facility became operational in February 2011. EBMUD’s ability to take delivery of water through the Freeport facility is based on its Long Term Renewal Contract (LTRC) with the U.S. Bureau of Reclamation. The LTRC provides for up to 133,000 acre feet in a single dry-year, not to exceed a total of 165,000 acre feet in three consecutive dry years. Under the LTRC, the Central Valley Project (CVP) supply is available to EBMUD only in dry years when EBMUD’s total stored water supply is forecast to be below 500,000 total acre feet on September 30 of each year.

17 Construction of the Bayside Groundwater Project, Phase 1, was completed in 2010. The project is designed to yield 2 million gallons per day (mgd) over a 6-month period, resulting in an average annual production capacity of 1 mgd-per year.


indicates a total of 76 groundwater wells in the City for “domestic use” (defined as small scale irrigation wells such as private backyard irrigation wells) or “municipal use” (e.g., irrigation for parks). Only three wells potentially serve private homes as a drinking water source.

Recycled Water

Recycled water systems have been developed at the San Leandro and Oro Loma Water Pollution Control Plants, which collectively serve the City of San Leandro’s wastewater treatment needs. The Wastewater Treatment Division of the City of San Leandro provides operation and maintenance of the San Leandro Water Pollution Control Plant (WPCP). The WPCP serves about 55,000 residents, as well as businesses, in the northern two-thirds of San Leandro. The plant provides approximately 200 million gallons of treated water per year to three municipal golf courses.20

The Oro Loma Sanitary District serves the southern one third of San Leandro. The Oro Loma Sanitary District/Castro Valley Sanitary District Water Pollution Control Plant (Oro Loma plant) treats wastewater from San Lorenzo, Ashland, Fairview, Cherryland, Castro Valley, and parts of Hayward and San Leandro using primary and secondary treatment. A portion of the treated wastewater from the Oro Loma plant also is beneficially reused for irrigation at the Sky West Golf Course.21

Water Supply Planning

EBMUD’s Board of Directors adopted the 2010 UWMP on June 28, 2011, by Resolution No. 33832-11. The UWMP is a long-range planning document used to assess current and projected water usage, water supply planning and conservation and recycling efforts. As discussed under the Drought Management Program section in Chapter 3 of the 2010 UWMP, EBMUD’s system storage generally allows it to continue serving its customers during dry-year events. EBMUD imposes rationing based on the projected storage available at the end of September. By imposing rationing in the first dry year of potential drought periods, EBMUD attempts to minimize rationing in subsequent years if a drought persists while continuing to meet its current and subsequent-year fishery flow release requirements and obligations to downstream agencies.

Year 1 of “Multiple Dry Water Years” is determined to be a year that EBMUD would implement Drought Management Program elements at the “moderate” stage with the goal of achieving a reduction between 0 to 10 percent in customer demand. Year 2 of “Multiple Dry Years” is determined to be a year that EBMUD would implement Drought Management Program elements at the “severe” stage with the goal of achieving between 10 to 15 percent reduction in customer demand. Year 3 of “Multiple Dry Years” is a year in which EBMUD would implement Drought Management Program elements at the “critical” stage. Despite water savings from EBMUD’s aggressive conservation and recycling programs and rationing of up to 15 percent, additional supplemental supplies beyond those provided through the Freeport Regional Water Facility and the Bayside Groundwater Facility will be needed during Years 2 and 3 of a three-year drought. Therefore, supplemental supplies are needed in multiple-year drought periods while continuing to meet the requirements of senior downstream water right holders. Chapter 2 of the 2010 UWMP also

lists various potential supplemental water projects, including northern California water transfers, Bayside Groundwater Project Expansion, Los Vaqueros Expansion and others that could be implemented as necessary to meet the projected long-term water supplemental need during multi-year drought periods.

In addition to pursuing supplemental water supply sources, EBMUD also maximizes resources through continuous improvements in the delivery and transmission of available water supplies, and investments in ensuring the safety of its existing water supply facilities. These programs, along with emergency interties and planned water recycling and conservation efforts, would ensure a reliable water supply to meet projected demands for current and future EBMUD customers within the current service area.

**EBMUD’s Drought Response**

In response to drought conditions experienced during the past several years, EBMUD declared a Stage 4 critical drought and set a community-wide goal to reduce water use 20 percent compared to 2013. EBMUD reports that its customers are on track to meet this goal.22

Mandatory water use restrictions in effect in EBMUD’s service territory as of February 2016 are outlined below.

The following Stage 4 measures are required for everyone in the EBMUD service area:

- Shut off sprinklers and irrigation systems.
- No watering of ornamental turf on public street medians allowed.
- No washing of driveways and sidewalks; except as needed for health and safety.
- Use only hoses with shutoff nozzles to wash vehicles.
- Turn off fountains or decorative water features unless the water is recirculated.
- Use of hydrant water outside the EBMUD service area is prohibited.
- Use a broom or air blower, not water, to clean hard surfaces such as driveways and sidewalks, except as needed for health and safety purposes.

The following Stage 4 measures are required for businesses:

- Restaurants and other food service establishments can only serve water to customers upon request.
- Hotels and motels must provide guests with the option of not having their towels and linens washed daily.

EBMUD is required to conserve 16 percent compared to 2013 in accordance with the SWRCB’s emergency regulations to achieve 25 percent savings statewide. Pursuant to these regulations, EBMUD reports water use and conservation on a monthly basis to the SWRCB. Currently, data are available from July 2014 through February 2016. The residential gallons-per-capita-day (gpcd-r) for the EBMUD service area

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ranged from a high of 88 gpcd-r in July 2014 to a low of 53 gpcd-r in January 2016. The total population served by EBMUD in February 2016 was 1,400,000. Approximately 61 percent of water use in the service territory is residential.

City of San Leandro’s Drought Response

The City of San Leandro has instituted the following measures in response to the drought:

1. Well water will be continue to be used for irrigation at the following parks:
   - Halcyon Park
   - Washington Manor Park
   - Thrasher Park
   - Cherry Grove Park (which also feeds Muir School fields)
   - San Leandro Ball Park
   - Pacific Ball Fields
   - Bonaire Park

2. Reclaimed water from the Water Pollution Control Plant will be used for 95 percent of the golf courses’ irrigation needs.

3. Lawns on City properties/parks/ball fields will be mowed at a longer length, which helps the soil retain more moisture.

4. Parks and medians will be irrigated during evening/night hours to decrease the effects of evapotranspiration (water evaporation by the sun).

5. Pressure on sprinkler heads will be reduced, minimizing ‘misting’ effect and associated run-off.

6. ‘Smart’ irrigation clocks will be installed at Marina Park, Toyon Park, Pacific Ball Fields, the Senior Community Center, and new San Leandro Boulevard landscaping improvements.

7. Changing out annuals/lawn areas to Bay-Friendly plantings, which are drought resistant and require less watering.

8. City vehicles will be washed less frequently.

9. Although City fountains presently use recirculated water, all City fountains will be shut off to save water that would otherwise evaporate.

10. Where feasible, well water will be utilized in street sweepers, saving approximately 66 percent of potable water usage.

11. 100 percent well water shall be utilized for graffiti abatement, including pressure washing of streets and buildings.

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25 Joaquin Plaza fountain was turned back on. Also the WPCP is building a new reclaimed water system that will make water available to residents to come and fill up. Should be online in mid-summer, per comment from Debbie Pollart, City of San Leandro, April 21, 2016.
4.14.1.2 STANDARDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on water service if:

1. There were insufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements were needed.

2. It would require or result in the construction of new water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

4.14.1.3 IMPACT DISCUSSION

UTIL-1 The proposed project would have sufficient water supplies available to serve the proposed project from existing entitlements and resources, and would not require new or expanded entitlements.

Proposed General Plan Update

As shown on Table 3-2, the City’s existing (2015) population of 86,486 is projected to grow under the proposed Plan to 101,250 in 2035, for a net increase of 14,790 residents. The City’s existing (2015) employment level of 42,865 jobs is projected to grow under the proposed Plan to 54,995 by 2035, for a net increase of 12,130 jobs.

EBMUD’s 2010 UWMP identifies an initial 2020 water use target of 175 gallons per capita per day (gpcd). Because this initial 2020 target represents less than the required minimum 5 percent reduction from EBMUD’s 2003 to 2007 five-year baseline, EBMUD will pursue a lower target of 150 gpcd. In addition, EBMUD’s UWMP 2010 planning level programs project an even more aggressive and lower 2020 demand level of 144 GPD.

Allocating the EBMUD’s projected (2020) water use rate of 144 gpcd in proportion to residential and non-residential (i.e., employment) development in the City yields a residential rate of 91 gallons per day per resident (gpcd-r) and non-residential (employment) rate of 53 gallons per day per job (gpcd-e). Assuming a per capita residential water use rate of 91 gpcd-r and a per capita employment water use rate of 53 gpcd-e through buildout, the proposed Plan would result in a net increase of 1,988,780 gpd (14,790 residents x 91 gpcd-r + 12,130 jobs x 53 gpcd-e = 1,988,780 gpd).

Actual residential demand in the EBMUD service area since July 2014 has ranged from 88 to 53 gpcd-r, which is significantly less than the 91 gcpc-r assumed based on the UWMP. Although current actual demand is lower than estimated demand in the UWMP, as a result of the recent multi-year drought and the downturn in the economy, the UWMP estimate still reflects a reasonable expectation for growth over the long term and for demand in year 2035.

Since the 1970s, water demand within EBMUD's service area has ranged from 200 to 220 million gallons per day (mgd) in non-drought years. The 2010 UWMP identifies a 2035 water demand forecast of 304 mgd for EBMUD's service area that can be reduced to 229 mgd with the successful implementation of water recycling and conservation programs.\(^{27}\)

Thus, the projected net increase in water demand at buildout of the proposed Plan (~ 2 mgd) is less than 1 percent of the total projected demand in the EBMUDs service territory (~ 229 mgd).

As discussed in the 2010 UWMP, despite water savings from EBMUD’s aggressive conservation and recycling programs and rationing of up to 15 percent, additional supplemental supplies beyond those provided through the Freeport Regional Water Facility and the Bayside Groundwater Facility will be needed during Years 2 and 3 of a three-year drought. Specifically, the UWMP indicated supplemental supplies are needed in multiple-year drought periods while continuing to meet the requirements of senior downstream water right holders. The 2010 UWMP identifies a broad mix of projects, with inherent scalability and the ability to adjust implementation schedules for a particular component, so that EBMUD will be able to continue to pursue the additional supplemental supplies that are projected to be necessary, while also minimizing the risks associated with future uncertainties such as project implementation challenges and global climate change. In addition, the Environmental Impact Report that EBMUD certified for the Water Supply Management Program 2040 examined the impacts of pursuing these supplemental supply projects at a program level.\(^{28}\) Separate project-level environmental documentation will be prepared, as appropriate, for specific components as they are developed in further detail and implemented in accordance with EBMUD’s water supply needs.

In addition to pursuing supplemental water supply sources, EBMUD maximizes resources through continuous improvements in the delivery and transmission of available water supplies, and investments in ensuring the safety of its existing water supply facilities. These programs, along with emergency interties and planned water recycling and conservation efforts, would ensure a reliable water supply to meet projected demands for current and future EBMUD customers within the current service area.

Currently, EBMUD is required to conserve 16 percent compared to 2013 in accordance with the SWRCB’s emergency regulations to achieve 25 percent savings statewide. As of February 2016, EBMUD had achieved a “cumulative” savings rate of 23.6 percent (compared to 2013), well ahead of its mandatory savings rate of 16 percent. The per capita water use rate for February 2016 was 54.5 gpcd-r and represents an 12.8 percent savings compared to February 2013.\(^{29}\)

\(^{27}\) A draft of the forthcoming 2015 UWMP (Table 4-1 therein) indicates projected total water demand in 2040 will be 312 mgd for EBMUD’s service area that can be reduced to 230 mgd with the successful implementation of water recycling and conservation programs. http://www.ebmud.com/water-and-drought/about-your-water/water-supply/urban-water-management-plan/, accessed pm April 28, 2016.


Furthermore, the following the water supply and infrastructure related goals, policies, and actions contained in the proposed Plan, would ensure that new development under the proposed Plan would minimize impacts to water supply:

- **Goal OSC-7**: Resource conservation and greenhouse gas reduction. Promote recycling, water conservation, green building, and other programs which reduce greenhouse gas emissions and create a more sustainable environment.

- **Policy OSC-7.2. Water Conservation.** Promote the efficient use of existing water supplies through a variety of water conservation measures, including the use of recycled water for landscaping.

- **Action 7.2-A: Urban Water Management Plan.** Take the actions necessary to implement EBMUD’s Urban Water Management Plan at the local level.

- **Action 7.2-B: Expansion of Reclaimed Water Use.** Expand the City’s reclaimed water system, enabling further reductions in the use of potable water for landscaping. The City will seek additional funding for projects which enable the delivery of high-quality reclaimed water to an expanded customer base, with additional infrastructure for water delivery.

- **Policy OSC-7.3: Drought-Tolerant Landscaping.** Encourage the use of native vegetation and Bay-friendly landscaping and enforce the State Department of Water Resources Model Water Efficient Landscape Ordinance (WELO).

- **Policy OSC-7.4: Development Standards.** Maintain local planning and building standards that require the efficient use of water through such measures as low-flow plumbing fixtures and water-saving appliances. Require water conservation measures as a condition of approval for major developments.

- **Policy OSC-7.5: City Conservation Practices.** Ensure that City itself follows conservation practices in its day-to-day operations and is a role model for businesses and residents in the area of conservation. The City should encourage the use of reusable and recyclable goods in its purchasing policies and practices, and should develop strategies that encourage residents and businesses to do the same.

- **Action 7.5-A: Community Conservation Events.** Promote community events and fairs that increase environmental awareness, such as Arbor Day tree planting, Earth Day activities, shoreline clean-ups, and creek restoration.

- **Goal CSF-6: Infrastructure.** Ensure that local water, sewer, storm drainage, solid waste, energy, and telecommunication facilities are well maintained; improvements meet existing and future needs; and land use decisions are contingent on the adequacy and maintenance of such facilities.

- **Policy CSF-6.1: Development Impacts.** Permit new development only when infrastructure and utilities can be provided to that development without diminishing the quality of service provided to the rest of the City.

- **Policy CSF-6.2: Fair Share Costs.** Require future development to pay its fair share of the cost of improving the water, sewer, storm drainage, and other infrastructure systems needed to serve that development. Development impact fees, development agreements, and other appropriate forms of mitigation should be used to cover the costs of upgrading or expanding public infrastructure.
Action 6.2-A: Infrastructure Impact Fee and Rate Updates. Regularly update fees and rates for sewer, solid waste, and other public services to ensure that revenues are sufficient to cover operating and maintenance costs.

Policy CSF-6.3: Coordination. Coordinate local infrastructure planning with EBMUD, the Oro Loma Sanitary District, Alameda County, and other service providers to ensure that infrastructure remains adequate to serve existing and planned development.

Policy CSF-6.6: Reclaimed Water System. Continue the expansion of the reclaimed water system, and the delivery of high-quality reclaimed water for landscaping, industrial use, and other non-potable applications as they become financially feasible. Employ advanced technology so that reclaimed water can eventually be made available to all households.

In summary, buildout of the proposed Plan would not result in insufficient water supplies from EBMUD under normal year conditions. In addition, during single-dry year and multiple-dry years, with planned and existing water conservation programs and measures in place, and with EBMUD’s supplemental supply plans, buildout of the proposed Plan would not result in a significant impact on water supply from EBMUD, and new or expanded entitlements would not be needed as a result of the proposed Plan. Moreover, the experience of the recent drought has demonstrated EBMUD can achieve conservation levels beyond those required by the state or planned for in the UWMP if necessary. Thus, in accordance with applicable regulations listed below, impacts would be less than significant.

Applicable Regulations:
- The Water Conservation Act of 2009 (SB X7-7)
- 2010 California Plumbing Code that requires water conserving fixtures
- City of San Leandro’s Landscaping Ordinance – Municipal Code Chapter 3-22
- City of San Leandro’s Green Building Ordinance – Municipal Code Chapter 3-19
- City of San Leandro’s Landscape Requirements – Zoning Code Article 19
- EBMUD’s water supply and demand management strategies and drought management plans identified in the UWMP

Significance before Mitigation: Less than significant.

Proposed Zoning Code Amendments

The proposed amendments to the Zoning Code would bring the Zoning Code into conformance with the proposed Plan. Proposed Zoning Code amendments that would allow increased growth that could increase water demands in San Leandro include increased building density, intensity (Floor Area Ratio, or FAR), and height limits in commercial districts. The potential increase in growth as a result of these Zoning Code amendments is captured in the buildout of the proposed Plan that is analyzed above; the Zoning Code would not increase allowed development beyond what is allowed in the proposed Plan. As described above, buildout of the proposed Plan would not result in insufficient water supplies from EBMUD under normal year conditions. In addition, the water supply and infrastructure related goals, policies, and actions contained in the proposed Plan would ensure that new development under the proposed Plan and Zoning Code amendments would minimize impacts to water supply. Therefore, in accordance with the policies and actions of the proposed Plan and applicable regulations listed above, the proposed Zoning Code amendments would have less-than-significant impact.
**Significance before Mitigation:** Less than significant.

**UTIL-2** The proposed project would not require or result in the construction of new water facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

### Proposed General Plan Update

As discussed in Impact UTIL-1 above, the water demand associated with the proposed Plan would be served with available and planned water supplies provided by EBMUD.

The proposed Plan would continue to be provided with water services from the EBMUD. In general, existing infrastructure would be preserved in place. However, extensions and/or additions to water pipes may be installed to provide water service to individual projects and structures developed in accordance with the proposed Plan.

Although creation of new or extended water distribution pipes could create short-term construction-related environmental effects (e.g., noise, dust, traffic, temporary service interruption, etc.), the work typically would be done in the street right of way and subject to compliance with the City’s regulations and standard conditions for new construction related to water lines, in addition to the EBMUD’s requirements for construction projects. For example, these regulations and conditions would require the water line construction to include best management practices that require water on the construction areas to minimize dust generation, limit construction noise to daytime hours to limit impacts to sensitive receptors, and use modern equipment to limit emissions. In addition, proposed Plan policies regarding infrastructure and development impacts, as discussed below, would further ensure any potential adverse physical effects of these activities are less than significant.

General Plan Policy CSF-6.1 mandates that development shall not be approved until it is demonstrated that infrastructure can be provided without diminishing citywide service levels. Other policies (e.g., Policy CSF-6.2 Fair Share Cost, Policy CSF-6.3 – Coordination, and Action CSF-6.2.A – Infrastructure Impact Fee and Rate Updates) ensure that development pays its fair share for needed improvements to the water distribution system.

It is possible that existing local distribution lines or other water supply infrastructure facilities (pumps, storage tanks, etc.) within the City may be undersized or inadequate for future projects and improvements under the proposed General Plan, which could require replacement with larger diameter pipes and/or new facilities. Potential environmental impacts could result from construction and operation of these pipeline improvements and/or new water supply facilities; however, such impacts would be project-specific. A generic summary of the types of potential impacts associated with water distribution/supply facilities is provided in Table 4.14-1. Any new or expanded local water supply and distribution facilities would require permitting and review in accordance with CEQA, which would ensure environmental impacts are disclosed and mitigated to the extent feasible. Therefore, in accordance with the proposed policies and programs in the proposed General Plan listed above under UTIL-1 and the applicable

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regulations also listed above, impacts related to the construction or expansion of water facilities or infrastructure would be *less than significant*.

In summary, in accordance with the discussion under Impact UTIL-1, and applicable regulations below, buildout of the proposed Plan would not result in water demands that would require the construction of new water treatment facilities or the significant expansion of existing facilities, the construction of which would cause significant environmental effects; thus, impacts would be *less than significant*.

**Applicable Regulations:**
- The Water Conservation Act of 2009 (SB X7-7)
- 2010 California Plumbing Code that requires water conserving fixtures
- City of San Leandro’s Landscaping Ordinance – Municipal Code Chapter 3-22
- City of San Leandro’s Green Building Ordinance – Municipal Code Chapter 3-19
- City of San Leandro’s Landscape Requirements – Zoning Code Article 19
- EBMUD’s water supply and demand management strategies and drought management plans identified in the UWMP

**Significance before Mitigation:** Less than significant.

**Proposed Zoning Code Amendments**

The proposed amendments to the Zoning Code would bring the Zoning Code into conformance with the proposed Plan. Proposed Zoning Code amendments would allow increased growth, consistent with the proposed Plan, that could contribute to the need to expand or improve water supply infrastructure in San Leandro. The proposed Zoning Code amendments include increased building density, intensity (FAR), and height limits in commercial districts, as well as a new Industrial Transition zone. The potential increase in growth as a result of these Zoning Code amendments is captured in the buildout of the proposed Plan that is analyzed above. As described above, extensions and/or additions to water pipes may be installed to provide water service to individual projects and structures developed in accordance with the proposed Plan. However, any new or expanded local water supply and distribution facilities would require permitting and review in accordance with CEQA, which would ensure environmental impacts are disclosed and mitigated to the extent possible. With the proposed policies and programs in the proposed Plan listed above under UTIL-1 and the applicable regulations also listed above, impacts related to the construction or expansion of water facilities or infrastructure to serve buildout of the proposed project would be *less than significant*.

**Significance before Mitigation:** Less than significant.
<table>
<thead>
<tr>
<th>Types of Potentially Affected Resources</th>
<th>Possible Impacts Unless New or Expanded Facilities are Carefully Planned and Executed</th>
<th>Possible Mitigations to Impacts Associated with New or Expanded Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geology and Soils</td>
<td>Increase in erosion and sedimentation from construction activities, change in sediment transport in streams, geologic hazards could cause problems for new facilities and their operators if they are not sited carefully.</td>
<td>Requirement to incorporate a strict SWPPP with project specific limitations during construction. Facilities sited to minimize the impact.</td>
</tr>
<tr>
<td>Water Quality</td>
<td>Changes in stream and reservoir/lake temperature, dissolved oxygen, turbidity, total suspended solids and other water quality parameters of concern during construction and operation of new facilities.</td>
<td>Requirement to incorporate a strict SWPPP with project specific limitations during construction. Treatment processes approved to mitigate any impact to existing stream and reservoir/lake.</td>
</tr>
<tr>
<td>Wetlands and Riparian Habitat</td>
<td>Changes in the amount or functions and values of various types of wetlands from the construction of new facilities, or in riparian areas from changes in the operation of reservoir/lakes and changes in stream flows. Riparian habitat could be affected by hydrology changes or new construction and is especially important habitat for wildlife and botanical species.</td>
<td>Facilities are sited in areas that mitigate the impact to Wetlands and Riparian Habitat. In addition, project specific requirements may be imposed to limit the impact and ensure the Wetlands and Riparian Habitat is not severely impacted without proper mitigation.</td>
</tr>
<tr>
<td>Botanical Resources including Special-Status Species</td>
<td>Disturbance to rare plants and their habitat and other types of vegetation from construction activities.</td>
<td>Facilities are sited in areas that mitigate the impact to Botanical Resources. In addition, project specific requirements may be imposed to limit the impact and ensure the Botanical Resources are not severely impacted without proper mitigation.</td>
</tr>
<tr>
<td>Wildlife Resources including Special-Status Species</td>
<td>Changes in the amount and quality of wildlife habitat where facilities would be located.</td>
<td>Facilities are sited in areas that mitigate the impact to Wildlife Resources. In addition, project specific requirements may be imposed to limit the impact and ensure the Wildlife Resources are not severely impacted without proper mitigation.</td>
</tr>
<tr>
<td>Visual Resources</td>
<td>The addition of new project facilities could affect the visual environment. New pipelines, pumping stations, or transmission lines near or in residential areas or scenic vistas could cause negative impacts.</td>
<td>Facilities must be planned and designed to mitigate any aesthetic impacts. Impacts to Visual Resources are typically mitigated by incorporating design features that limit the visual impact near or in residential areas, including scenic vistas.</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Some irrigated land or grazing land could be taken out of production where project conveyance facilities need to be located and to accommodate growth.</td>
<td>Facilities are sited in areas where minimal impact is anticipated to existing agricultural land.</td>
</tr>
<tr>
<td>Cultural Resources</td>
<td>Historic, prehistoric, and ethnographic resources could be affected by hydrology changes or the construction and maintenance of new facilities.</td>
<td>Facilities are sited in areas that mitigate the impact to Cultural Resources. In addition, project specific requirements may be imposed to limit the impact and ensure the Cultural Resources are not severely impacted without proper mitigation during construction.</td>
</tr>
<tr>
<td>Compatibility with Existing Land Uses and Other Policies and Plans</td>
<td>Some new project facilities may not be compatible with surrounding land uses, or may be inconsistent with related federal, state, tribal, and local plans and policies.</td>
<td>Facilities are sited in areas that mitigate the impact to any compatibility with existing land uses or other policy plans. If necessary, a change in land use request is presented to the public for review and approval prior to implementation of the new facility.</td>
</tr>
</tbody>
</table>
### Table 4.14-1: Potential Future Site- or Project-Specific Environmental Impacts from New or Expanded Water Supply and Distribution Facility Projects

<table>
<thead>
<tr>
<th>Types of Potentially Affected Resources</th>
<th>Possible Impacts Unless New or Expanded Facilities are Carefully Planned and Executed</th>
<th>Possible Mitigations to Impacts Associated with New or Expanded Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Utilities</td>
<td>The routing and siting of new project facilities could interfere with the operation or maintenance of existing or planned public utilities, including communication and energy infrastructure.</td>
<td>Facilities are sited in areas that mitigate the impact to Public Utilities. In addition, project specific requirements may be imposed to limit the impact and ensure the existing or planned Public Utilities are taken into consideration during design, construction and operation of the facility.</td>
</tr>
<tr>
<td>Air Quality and Noise</td>
<td>Air emissions from construction equipment and traffic and loud noises could occur during the construction phase of new projects. New pumping stations could cause adverse noise impacts for nearby residents and recreationists.</td>
<td>New or Expanded Facilities would be designed with noise attenuation features that limit the noise during operation and/or construction. All construction activities are required to limit the air emissions and adhere to local ordinances during construction.</td>
</tr>
<tr>
<td>Transportation</td>
<td>Local roads would experience traffic increases during construction.</td>
<td>Facilities are sited in areas that limit the impact to traffic and incorporate traffic control plans that are proven to minimize the impact.</td>
</tr>
<tr>
<td>Public Health and Safety</td>
<td>Construction activities could create some safety hazards.</td>
<td>Facilities must be designed and implemented during construction with project specific requirements that mitigate any impact to Public Health and Safety.</td>
</tr>
<tr>
<td>Growth-Inducing Effects</td>
<td>New system infrastructure and water supply projects could cause growth-inducing impacts.</td>
<td>Facilities must be designed and implemented to limit the potential for growth inducing impacts. This is typically accomplished by ensuring the facilities are sized for the project specific capacity and sited in areas that have strict requirements for potential growth.</td>
</tr>
</tbody>
</table>

Note: This table identifies examples of potential environmental impacts that could result from future new or expanded water facilities if necessary to support additional growth. No such facilities are needed or proposed in the Plan. The potential impacts listed in this table are not project- or location specific. Similarly, the mitigation impacts listed in this table are not project- or location specific.

### 4.14.1.4 Cumulative Impacts

**Util-3** The proposed project, in combination with past, present, and reasonably foreseeable projects, would result in less-than-significant cumulative impacts with respect to water service.

This section analyzes potential impacts to water supply that could occur from the proposed project in combination with other reasonably foreseeable projects in the surrounding area. The geographic scope of this cumulative analysis is the EBMUD service area and the analysis is based on EBMUD’s current UWMP. While the proposed Plan and associated Zoning Code amendments would contribute to an increased cumulative demand for water supply, the increased demand would not exceed the long-term supply under normal hydrologic circumstances. EBMUD’s UWMP determined that the water supply will be sufficient to accommodate future demand in the EBMUD service areas through 2040, under normal circumstances. In the multiple dry years, with EBMUD drought contingency plans in place, any shortages would be managed through demand reductions and other measures such as increased supplemental supplies. In addition, with SB X7-7 and the State, Regional, and local water conservation ordinances in place, all jurisdictions would be required to conserve water use through establishing water efficiency.
measures. Also, the proposed Plan includes goals, policies and actions that would ensure adequate water supplies are available for the residents of San Leandro. Proposed Plan Policy OSC-7.2, Water Conservation, promotes the efficient use of existing water supplies through a variety of water conservation measures, including the use of recycled water for landscaping. Action OSC-7.2.A, Urban Water Management Plan, calls for taking actions necessary to implement EBMUD's Urban Water Management Plan at the local level. Action OSC-7.2.B, Expansion of Reclaimed Water Use, calls for increased use of recycled water. In addition, pursuant to SB 610 and SB 221, Water Supply Assessments (WSAs) would be prepared for large development projects prior to approval of each project to ensure adequate water supply for new development.

Overall, cumulative water demands would neither exceed planned levels of supply nor require building new water treatment facilities or expanding existing facilities beyond what is currently planned. In addition, future development would be required to pay development fees, which would offset the costs of system maintenance and capital upgrades to support the new development in the EBMUD service area. Together, existing regulations, proposed policies, and other considerations would ensure that cumulative impacts with respect to water supply under the proposed project would be less than significant.

Applicable Regulations:
- The Water Conservation Act of 2009 (SB X7-7)
- 2010 California Plumbing Code that requires water conserving fixtures
- State Updated Model Water Efficient Landscape Ordinance (AB 1881 [2006])
- EBMUD's water supply and demand management strategies and drought management plans identified in the UWMP

Significance before Mitigation: Less than significant.

4.14.2 SANITARY WASTEWATER (SEWER)

This section describes the existing regulatory setting and conditions as well as potential impacts of the proposed project with regard to wastewater collection and treatment facilities.

4.14.2.1 ENVIRONMENTAL SETTING

Regulatory Setting

Federal Regulations

The federal government regulates wastewater treatment and planning through the Federal Water Pollution Control Act of 1972, more commonly known as the Clean Water Act (CWA), as well as through the National Pollutant Discharge Elimination System (NPDES) permit program, both of which are discussed in further detail below.

Clean Water Act

The Federal Water Pollution Act of 1972, more commonly known as the Clean Water Act (CWA), regulates the discharge of pollutants into watersheds throughout the nation. It is the primary federal law governing
water pollution. Under the CWA, the EPA implements pollution control programs and sets wastewater standards. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

**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 connections 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.

**State Regulations**

**State Water Resources Control Board**

On May 2, 2006 the State Water Resources Control Board (SWRCB) adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than one 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 Sanitary Sewer Master Plan. The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the SWRCB using an online reporting system.

The SWRCB has delegated authority to nine RWQCBs to enforce these requirements within their region. The San Francisco Bay RWQCB issues and enforces NPDES permits in San Leandro. NPDES permits allow the RWQCB to regulate where and how the waste is disposed, including the discharge volume and effluent limits of the waste and the monitoring and reporting responsibilities of the discharger. The RWQCB is also charged with conducting inspections of permitted discharges and monitoring permit compliance.

**Sanitary District Act of 1923**

The Sanitary District Act of 1923 (Health and Safety Code Section 6400 et seq.) authorizes the formation of sanitation districts and enforces the Districts to construct, operate, and maintain facilities for the collection, treatment, and disposal of wastewater. The Act was amended in 1949 to allow the districts to also provide solid waste management and disposal services, including refuse transfer and resource recovery.
Local Regulations

Wastewater collection and treatment for the city of San Leandro is provided by two entities: 1) the City of San Leandro Wastewater Treatment Division and 2) Oro Loma Sanitary District. The City of San Leandro provides operation and maintenance of the San Leandro Water Pollution Control Plant (WPCP), which serves about 55,000 residents, as well as businesses, in the northern two-thirds of San Leandro. The Oro Loma Sanitary District operates the Oro Loma Sanitary District/Castro Valley Sanitary District Water Pollution Control Plant (Oro Loma plant), which serves the southern one-third of San Leandro. The Oro Loma plant treats wastewater from San Lorenzo, Ashland, Fairview, Cherryland, Castro Valley, and parts of Hayward and San Leandro using primary and secondary treatment. The boundary between the City’s service area and Oro Loma’s service area is shown on Figure 4.14-1.

City of San Leandro

San Leandro Sewer System Management Plan

The City of San Leandro Water Pollution Control Division has developed a Sewer System Management Plan (SSMP; July 2009) to properly manage, operate, and maintain all parts of the City’s sanitary sewer collection system. The SSMP was prepared in compliance with the State Water Resources Control Board (SWRCB) Order 2006-0003: Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (GWDR), as revised by Order No. WQ 2008-0002.EXEC on February 20, 2008. The GWDR prohibits sanitary sewer overflows (SSOs), requires reporting of SSOs using the statewide electronic reporting system, and requires the preparation of an SSMP.

The SSMP is also required by the San Francisco Bay RWQCB. Requirements are outlined in the Sewer System Management Plan Development Guide dated July 2005 by the RWQCB in cooperation with the Bay Area Clean Water Agencies (BACWA).

City of San Leandro Municipal Code

The City of San Leandro Municipal Code dictates how a sanitary sewer system is constructed. Section 7-9-505(a) Standards for Utilities states that all new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into floodwaters.

The City of San Leandro Municipal Code is a primary tool that shapes the form and character of physical development in San Leandro. The Municipal Code identifies site development regulations, and other general provisions that ensure consistency between the General Plan and proposed development projects. The Municipal Code is organized by Title, Chapter, Article, and Section. The following provision from the Municipal Code helps conserve wastewater collection and treatment capacity in San Leandro.

- Section 7-9-505, Floodplain Management – Standards for Utilities, prescribes that all new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate: 1) infiltration of flood waters into the systems and 2) discharge from the systems into floodwaters.

Figure 4.14-1

City of San Leandro Wastewater Treatment Division and Oro Loma Sanitary District Boundary

Source: City of San Leandro, 2014; Alameda County, 2013; PlaceWorks, 2015.
**Oro Loma Sanitary District**

**Oro Loma Sewer System Management Plan**

The Oro Loma Sanitary District’s (OLSD’s) current SSMP, developed in January 2014, was prepared in compliance with the SWRCB Order 2006-0003: Statewide GWDR, as revised by Order No. WQ 2008-0002 EXEC on February 20, 2008. The GWDR prohibits SSOs, requires reporting of SSOs using the statewide electronic reporting system, and requires the preparation of an SSMP. The SSMP is also required by the San Francisco Bay RWQCB. Requirements are outlined in the Sewer System Management Plan Development Guide dated July 2005 by the RWQCB in cooperation with the BACWA.

**Oro Loma Sewer System Regulations**

Sewer service charges for all classes of customers are based on quantity and quality of wastewater, as outlined on the Oro Loma Sanitary District, Sewer Service Charges web page.\(^\text{32}\) Oro Loma Sanitary District adopted an ordinance (No. 35-16) regulating the installation and connection of sanitary sewers, establishing a permit and inspections system, adopting a schedule of fees and deposits, and providing liabilities and penalties for violation.\(^\text{33}\) The Oro Loma Sanitary District has a Pollution Prevention Program addresses the issue of pollution from both residential and industrial/commercial dischargers. The District routinely monitors the industrial discharge into the sanitary sewer system through site inspections and Video Inspections.\(^\text{34}\)

**Existing Conditions**

This section describes the environmental setting and potential impacts of the Project with regard to wastewater collection and treatment facilities.

**City of San Leandro Water Pollution Control Division**

The City of San Leandro Water Pollution Control Division is responsible for the regulation, collection, treatment and disposal of wastewater from all residential and commercial sources within the City's sewer service area (i.e., northern two thirds of the City). The City Water Pollution Control Division provides operation and maintenance of a Water Pollution Control Plant, 130 miles of pipeline from 4 to 33 inches in diameter, and 13 remote sewage lift stations.

Wastewater from the northern two-thirds of the City is collected and treated by the City-owned and operated system. Wastewater from this area of the City is piped to and treated by the San Leandro Water Pollution Control Plant (SLWPCP), which is located at the west end of Davis Street (3000 Davis Street, San Leandro).

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Treatment consists of grinding, grit removal, primary sedimentation, trickling filter, activated sludge, secondary clarification, and disinfection by sodium hypochlorite. Treated wastewater from the wastewater treatment facility is transported to East Bay Dischargers Authority’s (EBDA’s) discharge system that ultimately discharges to the deep water of the San Francisco Bay approximately seven miles offshore. The City of San Leandro has a 3 million gallon pond and three tanks with 800,000 gallon capacity for emergency storage. Sludge is anaerobically digested, dewatered using a belt filter press, dried in open drying beds, and disposed of at an authorized disposal site.

The SLWPCP cleans about five (5) million gallons of wastewater a day (mgd), with peak flows up to 23 million gallons per day (mgd) during wet weather flow. The facility provides “secondary” wastewater treatment through physical, biological, and chemical processes. Treated effluent (water) is safely disposed of through EBDA’s collectively owned discharge pipe into the San Francisco Bay.

The SLWPCP is continuously updating equipment and facilities to improve efficiency, increase services, and comply with changing state and federal regulations. In 2011 the Water Pollution Control Division began a major rehabilitation of the treatment plant. Many of the plant's facilities were 60 years old and in need of repair or replacement. Project Goals include: 1) protect public health and the environment, 2) avoid costly emergency repairs to infrastructure, 3) expand operational options to improve efficiency, and 4) add redundancy to improve safety and reliability. The City Public Works department maintains a web page with updates on SLWPCP projects completed, ongoing, and planned.

The City is responsible for: 1) operating and maintaining local sewer lines; 2) protecting City property and streets, the local storm drain system, and other public areas; and 3) collecting, treating, and disposing of wastewater.

A property owner's sewer pipes are called service laterals and run from the connection at the home or business to the connection with the public sewer. Maintenance and repair of service laterals are the responsibility of the property owner.

**Oro Loma Sanitary District**

Wastewater from the southern one-third of the City is collected and treated by the Oro Loma Sanitary District system. Wastewater from this area of the City is piped to and treated by the Oro Loma treatment plant, which is located at 2655 Grant Ave, San Lorenzo, CA.

The Oro Loma wastewater collection system consists of approximately 273 miles of sanitary sewer lines, 6,015 manholes, more than 60 special structures, 14 pump stations, and several inverted siphons.

The Oro Loma Sanitary District/Castro Valley Sanitary District Water Pollution Control Plant (“Oro Loma plant”) treats wastewater from San Lorenzo, Ashland, Fairview, Cherryland, Castro Valley, and parts of Hayward and San Leandro using primary and secondary treatment. The treatment plant is jointly owned by Oro Loma Sanitary District (75 percent) and Castro Valley Sanitary District (CVSD) (25 percent). Under

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35 East Bay Dischargers Authority is a Joint Powers Agency consisting of five local agencies, including the City of San Leandro and Oro Loma Sanitary District.

long term mutual agreements, CVSD reimburses Oro Loma for operations and maintenance costs for wastewater treatment, based on its actual contributory sewage flows (approximately 27 percent), and 25 percent for capital costs, based on its ownership interest. The plant has an average dry weather flow of 12.2 MGD, with a design flow of 20 mgd. Infiltration and Inflow (I/I) contribution measured at the treatment plant typically does not exceed two and one half times the plant’s average dry weather flow (ADWF) of 12.0 mgd. The facility provides “secondary” wastewater treatment through physical, biological, and chemical processes. Treated effluent (water) is safely disposed of through EBDA’s collectively owned discharge pipe into the San Francisco Bay.

**East Bay Dischargers Authority**

There is a 48-inch force main system owned by East Bay Dischargers Authority (EBDA) that runs under Monarch Bay Drive that transmits treated wastewater effluent from the City Water Pollution Control Plant and the Oro Loma plant to a de-chlorination facility south of Estudillo Canal. Discharge is ultimately to the deep water of the San Francisco Bay through the EBDA Common Outfall, located approximately seven miles offshore. This system was constructed in 1978. No local pipe systems are directly connected to this line.

EBDA is a Joint Powers Agency consisting of five local agencies. EBDA was formed on February 15, 1974, by a "Joint Exercise of Powers Agreement" entered into by the City of Hayward, City of San Leandro, Oro Loma Sanitary District, Union Sanitary District, and Castro Valley Sanitary District. EBDA was formed to collectively manage the wastewater treatment and disposal of these agencies. EBDA serves a population of 800,000 and provides service to Pleasanton, Dublin, and Livermore through an agreement with Livermore-Amador Valley Water Management Agency (LAVWMA).

Wastewater discharge (effluent) from EBDA and its member agencies, including the City of San Leandro (SLWPCP) and Oro Loma Sanitary District, is regulated by San Francisco Bay RWQCB Order No. R2-2012-0004 (NPDES No. CA0037869), adopted by the RWQCB January 18, 2012. In this Order, compliance with technology-based effluent limitations for chemical biological oxygen demand (CBOD), CBOD percent removal, total suspended solids (TSS), TSS percent removal and pH will be determined at each individual treatment plant (i.e., including the SLWPCP and Oro Loma plant). Compliance with these standards at each individual treatment plant is designed to ensure all facilities achieve compliance with minimum federal technology-based requirements based on Secondary Treatment Standards at 40 CFR 133. Compliance with all other effluent limitations will be determined at the Common Outfall. EBDA has a total average daily dry weather flow (ADWF) permitted capacity of 107.8 mgd, which is permitted by RWQCB to be discharged at the EBDA Common Outfall. In 2010, the actual ADWF from EBDA’s Common Outfall was 54.8 mgd. In addition, 17.4 mgd was discharged via the LAWMA. The total discharge from EBDA plus LAWMA was 72.3 mgd. Thus, the EBDA had 35 mgd of excess unused permitted dry weather flow capacity in 2010. The EBDA has completed an Anti-Degradation Analysis to increase its ADWF from 107.8 mgd to 119.1 mgd (the RWQCB permit indicates this increase is pending approval from the RWQCB). The permitted peak daily wet weather flow (WWF) is 189.1 mgd.

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As reported in the Order (No. R2-2012-004; NPDES No. CA0037869), the SLWPCP serves a population of about 55,000 in the northern two-thirds of the City of San Leandro. The treatment plant is permitted by the RWQCB to provide secondary treatment of up to 7.6 mgd ADWF. In 2010, the actual ADWF from the Plant was 4.9 mgd. Thus, the SLWPCP had 2.5 mgd of unused permitted dry weather flow capacity in 2010.

Order No. R2-2012-004 (NPDES No. CA0037869) also reports the Oro Loma plant, which serves a population of about 30,000 in the southern one-third of the City of San Leandro, is permitted by the RWQCB to provide secondary treatment of up to 20 mgd ADWF. In 2010, the actual ADWF from the Oro Loma Plant was 12.6 mgd. Thus, the Oro Loma plant had 7.3 mgd of unused permitted dry weather flow capacity in 2010.

### 4.14.2.2 STANDARDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on wastewater service if it would:

1. Exceed wastewater treatment requirements of the applicable RWQCB.
2. 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.
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.

### 4.14.2.3 IMPACT DISCUSSION

This section analyzes the proposed project’s potential impacts to wastewater collection and treatment facilities.

#### UTIL-4

**Implementation of the proposed project would not exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board.**

### Proposed General Plan Update

The San Leandro sewer collection system will direct wastewater from the northern two-thirds of the city to the San Leandro Water Pollution Control Plant (SLWPCP). The Oro Loma sewer collection system will serve the southern one-third of the city and direct wastewater to the Oro Loma plant. The SLWPCP and Oro Loma plant both direct treated wastewater to a common outfall controlled by EBDA, a joint powers authority, which discharges treated effluent to the San Francisco Bay. The San Francisco RWQCB established wastewater treatment requirements for the SLWPCP, the Oro Loma plant and the EBDA outfall in an NPDES Permit (Order No. R2-2012-0004), adopted in 2012. The NPDES Order sets out a framework

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39 The treatment plant also is permitted by the RWQCB to discharge up to 22.3 mgd Peak Daily Wet Weather Flow (PDWWF).
for compliance and enforcement applicable to operation of the SLWPCP and the Oro Loma Plant and their effluent, as well as other sewer agencies contributing flow to the EBDA’s common outfall.

Pursuant to the RWQCB Order, the EBDA routinely (daily, weekly, monthly, etc.) monitor influent and effluent for numerous chemical and biological parameters in multiple process sample stream locations, including at influent and effluent points for the SLWPCP and the Oro Loma Plant. Test results are submitted periodically to the RWQCB to verify compliance with effluent discharge limits. This monitoring allows for a very good assessment of the performance of treatment processes. The EBDA and its member agencies (including SLWPCP and Oro Loma) also implements an approved pretreatment program specified in the NPDES permit, which includes approved local limits as required by the NPDES permit. The permit requires the Discharger (EDBA) to evaluate its local limits, such as those established for industrial users contributing to the treatment plants, to ensure compliance with updated effluent limits. These local limits are approved as part of the pretreatment program required by the NPDES Permit.

The SLWPCP treatment plant is permitted by the RWQCB to provide secondary treatment of up to 7.6 mgd ADWF. In 2010, the actual ADWF from the Plant was 4.9 mgd. Thus, the SLWPCP had 2.7 mgd of unused permitted dry weather flow capacity in 2010.

The Oro Loma treatment plant is permitted by the RWQCB to provide secondary treatment of up to 20 mgd ADWF. In 2010, the actual ADWF from the plant was 12.6 mgd. Thus, the Oro Loma plant had 7.3 mgd of unused permitted dry weather flow capacity in 2010.

The EBDA is permitted by the RWQCB to discharge 107.8 mgd ADWF from the EBDA Common Outfall. In 2010, the actual ADWF from EBDA’s Common Outfall was 54.8 mgd, plus 17.5 mgd from the LAVWMA. Thus, the EBDA had 35 mgd of excess unused permitted dry weather flow capacity in 2010.

The permitted peak Wet Weather Flow (WWF) from EBDA Outfall is 189.1 mgd; 169.4 mgd of which is permitted from EBDA members (including San Leandro and Oro Loma) and up to 41.2 mgd from LAVWMA. Peak daily WWF permitted flow (189.1) does not equal the sum of the allowed parts from EBDA and LVWMA due to LVWMA flow restrictions. The maximum LVWMA flow to the EBDA system, under an EBDA/LAVWMA agreement, is 41.2 MGD, including groundwater reverse osmosis reject flow from Zone 7, if capacity is available. During EBDA peak daily WWF, only 19.72 MGD capacity is available to LVWMA in the EBDA system. If EBDA system capacity is not available due to peak daily WWF, LVWMA is authorized to discharge up to 21.5 MGD of its peak daily WWF to San Lorenzo Creek by a separate Regional Water Board Order (Order No. R2-2011-0028). Under the industrial pretreatment permit that was issued by Dublin San Ramon Services District (DSRSD), Zone 7 groundwater reverse osmosis reject flow is interruptible flow. The pretreatment permit will provide that at times of peak daily WWF, discharge from Zone 7 to DSRSD will be suspended so as to not cause or contribute to any exceedance of EBDA’s peak daily WWF limitation.40

The proposed Plan would increase water demand by approximately 2 mgd. If it is conservatively assumed that 90 percent of this increased water demand becomes wastewater, then the proposed Plan would generate an increase of 1.8 mgd total, of which about 1.2 mgd of wastewater would go to the SLWPCP

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and 0.6 mgd to the Oro Loma plant. These are not significant increases compared to the excess permitted capacity available in 2010 at the SLWPCP and the Oro Loma plant. In addition, in 2011 the City began a project to upgrade the SLWPCP to expand operational options, improve efficiency, add redundancy, and improve reliability. Similarly, Oro Loma Sanitary District has established maintenance and operations procedures and 10-year strategic goals to ensure protection of public health and the environment and “zero effluent violations.”

With continued compliance with applicable regulations listed below, projected wastewater generated from the proposed Plan would not exceed the wastewater treatment requirements or capacity of the San Leandro Water Pollution Control Plant, the Oro Loma treatment plant, the EBDA’s Outfall or the San Francisco RWQCB’s applicable treatment requirements in Order No. R2-2012-0004 (NPDES No. CA0037869). Therefore, the wastewater treatment requirements of the San Francisco RWQCB would not be exceeded due to buildout of the proposed Plan, resulting in a less-than-significant impact.

### Applicable Regulations:
- San Francisco RWQCB NPDES Permit (Order No. R2-2012-0004) for SLWPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- City of San Leandro Sewer System Management Plan
- City of San Leandro Municipal Code, Section 7-9-505, Floodplain Management - Standards for Utilities
- Oro Loma Sewer System Management Plan
- Oro Loma Sewer System Regulations

### Significance before Mitigation: Less than significant.

### Proposed Zoning Code Amendments

The proposed amendments to the Zoning Code would bring the Zoning Code into conformance with the proposed Plan. Proposed Zoning Code amendments that would allow increased growth that could increase wastewater generation in San Leandro include increased building density, intensity (FAR), and height limits in commercial districts. The potential increase in growth as a result of these Zoning Code amendments is captured in the buildout of the proposed Plan that is analyzed above; the Zoning Code amendments would not increase allowed growth beyond what is allowed under the proposed Plan. As described above, the estimated wastewater generation associated with development allowed by the proposed Plan would not be significant compared to the excess permitted capacity available in 2010 at the SLWPCP and the Oro Loma plant. With continued compliance with applicable regulations listed below, projected wastewater generated from the proposed Plan and associated Zoning Code amendments would not exceed the wastewater treatment requirements or capacity of the San Leandro Water Pollution Control Plant, the Oro Loma treatment plant, the EBDA’s Outfall or the San Francisco RWQCB’s applicable treatment requirements in Order No. R2-2012-0004 (NPDES No. CA0037869). Therefore, the impact would be less than significant.

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41 Figure 4.14-2 shows the norther two-thirds of the city is served by the SLWPCP and the southern third by Oro Loma. This ratio was used to roughly apportion the Plan demand for wastewater capacity among the two sewer districts.
Significance before Mitigation: Less than significant.

**UTIL-5**  The proposed project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

### Proposed General Plan Update

Buildout of the proposed Plan would have a significant impact if it would result in the construction of new wastewater treatment facilities or the expansion of existing facilities, the construction of which would have a significant effect on the environment. As discussed in Impact UTIL-4 above and Impact UTIL-6 below, future demands from the proposed Plan would not exceed the design or permitted capacity of the wastewater treatment plants serving the Project (i.e., SLWPCP and Oro Loma treatment plant).

Under the proposed Plan the City would continue to be provided with wastewater collection and treatment services from the City of San Leandro Water Pollution Control Division and the Oro Loma Sanitary District. Existing infrastructure would be preserved in place and, if necessary, extensions and/or replacement of sewer pipes/lift stations would be installed to provide wastewater service to structures developed under the proposed Plan. Although creation of new or extended wastewater pipes or lift stations/capacities could create short-term construction related environmental effects, the work typically would be in existing public rights-of-way or facilities, and would be subject to compliance with applicable regulations and standard conditions for sewer construction projects, including City and/or Oro Loma permits/review for construction within public rights-of-way (e.g., grading permits, private development review, encroachment permits,). For example, these regulations and conditions would require new construction to include best management practices that require construction activities to minimize dust generation by watering the construction area, limit construction noise to daytime hours to limit exposure to sensitive receptors, and use modern equipment to limit emissions. In addition, proposed Plan policies regarding infrastructure and development impacts, as discussed below, would further ensure any potential adverse physical effects of these activities would be less than significant.

The City regularly replaces aging components of its wastewater collection and transmission system. According to the City of San Leandro’s SSMP, the City capital improvement program (CIP) process includes a system for evaluating the City’s collection system. The CIP process requires a number of continuing improvements including collection system capacity upgrades, correcting structural problems, and modifications to pump/lift stations and the treatment plant. In addition, proposed Plan policies would ensure that development is not approved until it can be demonstrated that adequate wastewater collection capacity exists, or until a financial commitment to create such capacity has been secured:

- **Goal OSC-7: Resource Conservation and Greenhouse Gas Reduction.** Promote recycling, water conservation, green building, and other programs which reduce greenhouse gas emissions and create a more sustainable environment.

- **Policy OSC-7.2: Water Conservation.** Promote the efficient use of existing water supplies through a variety of water conservation measures, including the use of recycled water for landscaping.

- **Action 7.2-A: Urban Water Management Plan.** Take the actions necessary to implement EBMUD’s Urban Water Management Plan at the local level.
**Utilities and Service Systems**

- **Action 7.2-B: Expansion of Reclaimed Water Use.** Expand the City's reclaimed water system, enabling further reductions in the use of potable water for landscaping. The City will seek additional funding for projects which enable the delivery of high-quality reclaimed water to an expanded customer base, with additional infrastructure for water delivery.

- **Policy OSC-7.4: Development Standards.** Maintain local planning and building standards that require the efficient use of water through such measures as low-flow plumbing fixtures and water-saving appliances. Require water conservation measures as a condition of approval for major developments.

- **Action OSC-7.4.A: Graywater Recycling.** Explore Building Code revisions and other programs to facilitate the installation of graywater recycling systems and other systems which capture runoff for domestic use and landscaping.

- **Policy OSC-7.5: City Conservation Practices.** Ensure that City itself follows conservation practices in its day-to-day operations and is a role model for businesses and residents in the area of conservation. The City should encourage the use of reusable and recyclable goods in its purchasing policies and practices, and should develop strategies that encourage residents and businesses to do the same.

- **Action 7.5.A: Community Conservation Events.** Promote community events and fairs that increase environmental awareness, such as Arbor Day tree planting, Earth Day activities, shoreline clean-ups, and creek restoration.

- **Goal CSF-6: Infrastructure.** Ensure that local water, sewer, storm drainage, solid waste, energy, and telecommunication facilities are well maintained; improvements meet existing and future needs; and land use decisions are contingent on the adequacy and maintenance of such facilities.

- **Policy CSF-6.1: Development Impacts.** Permit new development only when infrastructure and utilities can be provided to that development without diminishing the quality of service provided to the rest of the City.

- **Policy CSF-6.2: Fair Share Costs.** Require future development to pay its fair share of the cost of improving the water, sewer, storm drainage, and other infrastructure systems needed to serve that development. Development impact fees, development agreements, and other appropriate forms of mitigation should be used to cover the costs of upgrading or expanding public infrastructure.

- **Action 6.2-A: Infrastructure Impact Fee and Rate Updates.** Regularly update fees and rates for sewer, solid waste, and other public services to ensure that revenues are sufficient to cover operating and maintenance costs.

- **Policy CSF-6.3: Coordination.** Coordinate local infrastructure planning with EBMUD, the Oro Loma Sanitary District, Alameda County, and other service providers to ensure that infrastructure remains adequate to serve existing and planned development.

- **Policy CSF-6.4: Wastewater Collection and Treatment.** Maintain efficient, environmentally sound, and cost-effective wastewater collection and treatment services in San Leandro.

- **Action 9.4.A: Infiltration/Inflow Capital Improvements.** Continue improvements to the City’s wastewater collection system to correct infiltration and inflow problems and expand the reclaimed water delivery system. Ensure that high operating efficiency is retained in both the wastewater collection and treatment systems.
Policy CSF-6.5: Capacity. Maintain adequate capacity at the San Leandro wastewater treatment plant to accommodate projected levels of growth within the service area and encourage the Oro Loma Sanitary District to do the same. Support efforts to maintain and/or improve the high quality of treated effluent at both plants and increase the feasibility and cost-effectiveness of using recycled wastewater for non-potable purposes.

Policy CSF-6.6. Reclaimed Water System. Continue the expansion of the reclaimed water system, and the delivery of high-quality reclaimed water for landscaping, industrial use, and other non-potable applications as they become financially feasible. Employ advanced technology so that reclaimed water can eventually be made available to all households.

Oro Loma Sanitary District also maintains and upgrades its collections and treatment system, as needed. In 2008 the District began recording pipe observations using a national condition scoring standard developed by the National Association of Sewer Service Companies or NASSCO. As the inspection continues and the assessment database grows, staff will utilize these scores to rank and prioritize the rehabilitation projects in the District’s capital improvement program (CIP). For example, the SSMP (2014) reported the District’s CIP included $26.6 million of collection system upgrades over the next five years.

The proposed Plan would not affect currently planned improvements and would not require additional improvements beyond those subject to existing planning processes identified above. As a result, in accordance with the applicable regulations listed below, impacts related to wastewater facilities would be less than significant.

Applicable Regulations:
- San Francisco RWQCB NPDES Permit (Order No. R2-2012-0004) for SLWPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- City of San Leandro Sewer System Management Plan
- City of San Leandro Municipal Code, Section 7-9-505, Floodplain Management - Utilities
- Oro Loma Sewer System Management Plan
- Oro Loma Sewer System Regulations

Significance before Mitigation: Less than significant.

Proposed Zoning Code Amendments

The proposed amendments to the Zoning Code would bring the Zoning Code into conformance with the proposed Plan. Proposed Zoning Code amendments that would allow increased growth that could increase wastewater generation in San Leandro include increased building density, intensity (FAR), and height limits in commercial districts. The potential increase in growth as a result of these Zoning Code amendments is captured in the buildout of the proposed Plan that is analyzed above and the Zoning Code amendments would not have separate or independent impacts to wastewater generation. As described above, existing infrastructure would be preserved in place and, if necessary, extensions and/or replacement of wastewater infrastructure would be installed to service structures developed under the proposed project. Although creation of new or extended infrastructure could create short-term construction related environmental effects, the work typically would be in existing public rights-of-way or
facilities, and would be subject to compliance with applicable regulations and standard conditions for sewer construction projects, including City and/or Oro Loma permits or reviews for construction within public rights-of-way. In addition, proposed Plan policies listed above would ensure that development is not approved until it can be demonstrated that adequate wastewater collection capacity exists, or until a financial commitment to create such capacity has been secured. Therefore, the impact would be less than significant.

Significance before Mitigation: Less than significant.

The proposed project would not result in the determination by the wastewater treatment provider, which serves or may serve the Project that it does not have adequate capacity to serve the Project’s projected demand in addition to the provider’s existing commitments.

Proposed General Plan Update

As discussed under Impact UTIL-4 above, the SLWPCP treatment plant is permitted by the RWQCB to provide secondary treatment of up to 7.6 mgd ADWF, and the Oro Loma plant is permitted by the RWQCB to provide secondary treatment of up to 20 mgd ADWF. In 2010, the actual ADWF from the SLWPCP was 4.9 mgd, and the ADWF from the Oro Loma Plant was 12.6 mgd. Thus, in 2010, unused permitted dry weather flow capacity in 2010 was 2.7 mgd at the SLWPCP and 7.4 mgd at the Oro Loma Plant.

The water supply impact assessment in UTIL-1 estimated the proposed Plan would increase water demand by approximately 2 mgd at buildout in 2035. If it is conservatively assumed that 90 percent of this increased water demand becomes wastewater, then the proposed Plan will generate an increased wastewater treatment demand of approximately 1.2 mgd at the SLWPCP and 0.6 mgd at the Oro Loma plant. Thus, the Plan’s worst-case estimated increase in wastewater flow in 2035 represents less than 50 percent of the excess capacity available in 2010 at the SLWPCP; and less than ten percent of the excess capacity available in 2010 at the Oro Loma Plant. In addition, in 2011, the City began a project to upgrade the treatment plant to expand operational options, improve efficiency, add redundancy, and improve reliability; this upgrade project was completed in 2016. However, the plant would not increase capacity.

The EBMUD UWMP projected future water demand to increase approximately 6.5 percent between 2015 and 2040 for its entire service area, which includes the City of San Leandro and much of the service area of the Oro Loma Sanitary District. In 2010 the SLWPCP had 36 percent excess wastewater capacity (2.7/7.6) and the Oro Loma Plant had 37 percent excess wastewater treatment capacity (7.4/20). Therefore, cumulative future wastewater demand also will be easily accommodated by both treatment plants, based on the conservative assumption that wastewater demand is roughly equal to water demand.

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42 In 2014 the ADFW was 12.2 mgd for the Oro Loma plant; according to the SSMP.
44 2040 adjusted (recycling and conservation) demand (230 mgd) minus 2010 adjusted demand (216 mgd) divided by 216 mgd = approximately 6.5 percent.
With continued compliance with applicable regulations listed below, wastewater generated from the proposed Plan would not exceed the capacity of the San Leandro Water Pollution Control Plant or the Oro Loma treatment plant, or the permitted capacities specified in the San Francisco RWQCB’s Order No. R2-2012-0004 (NPDES No. CA0037869). Furthermore, the wastewater related goals, policies, and actions contained in the proposed Plan, as summarized above would ensure that new development under the proposed Plan would minimize impacts to wastewater collection and treatment capacity. Therefore, the proposed Plan would not result in the determination by the wastewater treatment providers that they do not have adequate capacity to serve the Plan’s projected demand in addition to the providers’ existing commitments, resulting in a less-than-significant impact.

**Applicable Regulations:**
- San Francisco RWQCB NPDES Permit (Order No. R2-2012-0004) for SLWPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems
- SWRCB Order No. WQ 2008-0002-EXEC revising SWRCB Order No. 2006-0003-DWQ
- City of San Leandro Sewer System Management Plan
- City of San Leandro Municipal Code, Section 7-9-505, Floodplain Management - Standards for Utilities
- Oro Loma Sewer System Management Plan
- Oro Loma Sewer System Regulations

**Significance before Mitigation:** Less than significant.

**Proposed Zoning Code Amendments**

The proposed amendments to the Zoning Code would bring the Zoning Code into conformance with the proposed Plan. Proposed Zoning Code amendments that would allow increased growth that could increase wastewater generation in San Leandro include increased building density, intensity (FAR), and height limits in commercial districts. The potential increase in growth as a result of these Zoning Code amendments is captured in the buildout of the proposed Plan that is analyzed above and the Zoning Code amendments would not have separate or independent impacts to wastewater generation. As described above, with continued compliance with applicable regulations listed above, wastewater generated from the proposed project would not exceed the capacity of the San Leandro Water Pollution Control Plant or the Oro Loma treatment plant, or the permitted capacities specified in the San Francisco RWQCB’s Order No. R2-2012-0004 (NPDES No. CA0037869). Furthermore, the proposed wastewater related goals, policies, and actions listed above would ensure that new development under the proposed Plan and associated Zoning Code amendments would minimize impacts to wastewater collection and treatment capacity. Therefore, the impact would be less than significant.

**Significance before Mitigation:** Less than significant.
4.14.2.4 CUMULATIVE IMPACTS

The proposed project, in combination with past, present, and reasonably foreseeable projects would result in less-than-significant cumulative impacts with respect to wastewater service.

This section analyzes potential impacts related to wastewater treatment that could occur from the proposed project in combination with reasonably foreseeable growth within the service areas of the SLWPCP, Oro Loma Sanitary District and EBDA.

Buildout of the proposed Plan and associated Zoning Code amendments would generate an increase in the volume of wastewater delivered for treatment at SLWPCP and Oro Loma plant, and eventual discharge through EBDA’s common outfall. The increase in 2035 represents less than 50 percent of the excess available treatment capacity at the SLWPCP and less than 10 percent of the excess capacity available at Oro Loma Plant in 2010. The total increased wastewater flow represents less than two percent (2 mgd/107.8 mgd) of the EBDA’s permitted total average daily dry weather flow, and less than six percent (2 mdp/35 mgd) of the EBDA’s permitted excess average daily dry weather flow capacity, in 2010. Based on the current excess wastewater treatment capacity of SLWPCP and Oro Loma plant, and excess discharge capacity of EBDA, and the projected population growth and water demand in the service area, cumulative projected wastewater treatment demand is far below the excess capacity of the SLWPCP, Oro Loma plant and EBDA. Because the cumulative demand would not substantially impact the existing or planned capacity of the wastewater treatment systems, which have sufficient capacity for wastewater that would be allowed by the proposed project, the construction of new wastewater treatment facilities would not be necessary.

Additionally, future development would be required to comply with all applicable regulations and ordinances protecting wastewater treatment services as described in Section 4.14.2.1.

Wastewater from cumulative projects is assumed in the City’s and Oro Loma’s SSMPs and would be treated according to the wastewater treatment requirements documented in the referenced NPDES permit for SLWPCP, Oro Loma and EBDA, and enforced by the San Francisco RWQCB.

Therefore, with continued compliance with applicable regulations listed below, cumulative development combined with the proposed Plan would not exceed wastewater treatment requirements, and cumulative impacts to sanitary wastewater service would be less than significant.

Applicable Regulations:
- San Francisco RWQCB NPDES Permit (Order No. R2-2012-0004) for SLWPCP
- SWRCB Order No. 2006-0003-DWQ for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems

According to the respective 2010 UWMPs, the project increased water demand from 2010 to 2035/2040 for the EBMUD (~ 6.5 percent), Alameda County Water District (ACWD) (16 percent), and the water suppliers to the LAVWMA (30 percent) – the water suppliers that together account for essentially all of the wastewater through the EBDA outfall – will be far less than the existing excess capacity of the of the EBDA outfall in 2010 (33 percent; 107.8-72.3/107.8). [for purposes of this analysis wastewater demand is conservatively assumed to be equivalent to water demand.]
4.14.3 SOLID WASTE

This section describes the existing regulatory setting and conditions as well as potential impacts of the proposed Plan with regard to solid waste management.

4.14.3.1 ENVIRONMENTAL SETTING

Regulatory Setting

State Regulations

California Integrated Waste Management Act

California’s Integrated Waste Management Act of 1989, AB 939 (Sher), subsequently amended by SB 1016 (Wiggins), 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 required 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.

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. The California Integrated Waste Management Board was replaced by the California Department of Resources Recycling and Recovery (CalRecycle) in 2010. CalRecycle sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an annual report to CalRecycle with an update of its progress in implementing diversion programs and its current per capita disposal rate. In 2014, the statewide residential per capita disposal rate was 4.5 pounds per resident per day, and the statewide employee per capita disposal rate was 10.2 pound per employee per day.46

In 2011, AB 341 was passed that sets a State policy goal of not less than 75 percent of solid waste that is generated to be source reduced, recycled, or composted by the year 2020. CalRecycle was required to submit a report to the legislature by January 1, 2014 outlining the strategy that will be used to achieve this policy goal.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act require areas in development projects to be set aside for collecting and loading recyclable materials. The Act required CalRecycle (formerly 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, providing for adequate areas in development projects for the collection and loading of recyclable materials.

Mandatory Commercial Organics Recycling

In October of 2014 Governor Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. Greenhouse gas (GHG) emissions result from the decomposition of organic wastes in landfills. Mandatory recycling of organic waste is aimed at helping achieve California’s aggressive recycling and GHG emission goals. The implementation schedule is as follows:

- **January 1, 2016**: Local jurisdictions shall have an organic waste recycling program in place. Jurisdictions shall conduct outreach and education to inform businesses how to recycle organic waste in the jurisdiction, as well as monitoring to identify those not recycling and to notify them of the law and how to comply.

- **April 1, 2016**: Businesses that generate eight cubic yards of organic waste per week shall arrange for organic waste recycling services.

- **January 1, 2017**: Businesses that generate four cubic yards of organic waste per week shall arrange for organic waste recycling services.

- **August 1, 2017 and Ongoing**: Jurisdictions shall provide information about their organic waste recycling program implementation in the annual report submitted to CalRecycle. (See above for description of information to be provided.)

- **Fall 2018**: After receipt of the 2016 annual reports submitted on August 1, 2017, CalRecycle shall conduct its formal review of those jurisdictions that are on a two-year review cycle.

- **January 1, 2019**: Businesses that generate four cubic yards or more of commercial solid waste per week shall arrange for organic waste recycling services.

- **Fall 2020**: After receipt of the 2019 annual reports submitted on August 1, 2020, CalRecycle shall conduct its formal review of all jurisdictions.

- **Summer/Fall 2021**: If CalRecycle determines that the statewide disposal of organic waste in 2020 has not been reduced by 50 percent of the level of disposal during 2014, the organic recycling requirements on businesses will expand to cover businesses that generate two cubic yards or more of

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commercial solid waste per week. Additionally certain exemptions, previously discussed, may no longer be available if this target is not met.

**Global Warming Solutions Act of 2006, Scoping Plan**

The California Global Warming Solutions Act of 2006 (also known as AB 32) Scoping Plan, which was adopted by the Air Resources Board (ARB), included a Mandatory Commercial Recycling Measure. The Mandatory Commercial Recycling Measure focuses on diverting commercial waste as a means to reduce greenhouse gas (GHG) emissions, with the goal of reducing GHG emissions by five million metric tons of carbon dioxide equivalents (MTCO2e), consistent with the 2020 targets set by AB 32. To achieve the Measure’s objective, the commercial sector will need to recycle an additional 2 to 3 million tons of materials annually by the year 2020.

CalRecycle adopted this Measure at its January 17, 2012 Monthly Public Meeting. The regulation was approved by the Office of Administrative Law on May 7, 2012 and became effective immediately. On June 27, 2012, the Governor signed SB 1018, which included an amendment requiring both businesses that generate 4 cubic yards or more of commercial solid waste per week and multi-family residences with five or more units to arrange for recycling services. This requirement became effective on July 1, 2012.

**CALGreen Building Code**

On July 17, 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as “CALGreen”) was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations [CCR]) to apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State of California, unless otherwise indicated in this code. Section 4.408, Construction Waste Reduction Disposal and Recycling, mandates that, in the absence of a more stringent local ordinance, a minimum of 50 percent of non-hazardous construction and demolition debris must be recycled or salvaged. The Code requires the Applicant to have a waste management plan, for on-site sorting or construction debris, which is submitted to the City of San Leandro for approval. The Plan does the following:

- Identifies the materials to be diverted from disposal by recycling, reuse on the Project or salvage for future use or sale.
- Specifies if materials will be sorted on-site or mixed for transportation to a diversion facility.
- Identifies the diversion facility where the material collected can be taken.
- Identifies construction methods employed to reduce the amount of waste generated.
- Specifies that the amount of materials diverted shall be calculated by weight or volume, but not by both.

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Local Regulations

Alameda Countywide Integrated Waste Management Plan

The California Integrated Waste Management Act of 1989 (AB 939) requires each County to prepare and adopt a Countywide Integrated Waste Management Plan (CIWMP). The CIWMP is a state-mandated plan prepared by the Alameda County Waste Management Authority. The plan identifies solid waste facilities and “waste sheds” within Alameda County. It describes the countywide plan for reaching the state-mandated 50 percent recycling goal and the county-mandated 75 percent recycling goal. Waste reduction and disposal facilities in the county that require Solid Waste Facility Permits must conform to policies and siting criteria contained in the CIWMP.

The CIWMP includes, by reference, source reduction and recycling elements, household hazardous waste elements and non-disposal facility elements for each city and the unincorporated county area, as well as a plan that describes countywide diversion programs and landfill disposal needs.

City of San Leandro Municipal Code

The City of San Leandro Municipal Code is a primary tool that shapes the form and character of physical development in San Leandro. The Municipal Code identifies site development regulations, and other general provisions that ensure consistency between the General Plan and proposed development projects. The Municipal Code is organized by Title, Chapter, Article, and Section. The current Municipal Code is up to date through Ordinance 2014-006 and the June 2014 code supplement. The following provision from the Municipal Code helps minimize solid waste generation and conserve resources in San Leandro.

- Chapter 3-19, The City’s Green Building Ordinance, requires a minimum Leadership in Energy & Environmental Design (LEED) rating of "Silver" for construction projects valued at over $3 million on City-owned facilities. (LEED is a rating system created by the U.S. Green Building Council that ranks different levels of design and construction aimed at improving a building’s energy efficiency.) The ordinance promotes healthy and efficient City facilities through design, construction and operation, and helps the City reduce its energy consumption and carbon emissions. Green buildings use recycled-content materials, consume less energy and water, have better indoor air quality, and use fewer natural resources than conventional buildings. The Chapter finds that the most immediate and meaningful way to advance this cause is to include green building elements in City projects, and to encourage private projects to include green building elements.

City of San Leandro Green Building Checklist

A Green Building Checklist to ensure compliance with the 2013 California Green Building Standard Code, also known as CALGreen, is listed on the City’s web site for both residential and commercial projects. Starting January 1, 2014, new construction, additions, and alterations are subject to CALGreen.

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requirements. The checklist must be submitted with and incorporated into the plan sets, and any items that are marked on the checklists must then be referenced and detailed in the plans.

**Voluntary Green Building Guidelines for Private Development**

In 2006, the San Leandro City Council endorsed several leading guidelines developed by outside organizations for commercial and residential green building practices as well as sustainable landscaping. The endorsed guidelines include: 1) Build It Green GreenPoint Rated Guidelines (residential), 2) US Green Building Council (LEED) Guidelines (commercial), and 3) StopWaste Bay-Friendly Landscaping Guidelines. The guidelines are available on the City’s web site.\(^{51}\) To help private developers and homeowners implement green building measures, several City of San Leandro staff members have completed technical training in green building, and the City maintains an informational kiosk showcasing green building materials and techniques in its Permit Center on the first floor of City Hall.

**Existing Conditions**

This section describes existing conditions related to solid waste disposal services.

CalRecycle reports that in 2014 a total of 117,167 tons of solid waste from San Leandro was disposed at 16 different landfills.\(^{52}\) Ninety-three percent (93 percent) of San Leandro’s solid waste in 2014 went to four of those facilities: Altamont Landfill & Resource Recovery (22,545 tons, or 19.24 percent), Forward Landfill, Inc. (23,721 tons, or 20.24 percent), Potrero Hills Landfill (20,534 tons, or 17.52 percent), and Vasco Road Sanitary Landfill (42,423 tons, or 36.20 percent).

**Altamont Landfill and Resource Recovery Facility**

The Altamont Landfill and Resource Recovery facility is owned and operated by Waste Management Inc., and is located on a 2,130 acres site at 10840 Altamont Pass Road, Livermore, CA 94550. It is a Class II and Class III landfill and features a disposal area of approximately 472 acres. The facility can receive up to 11,500 tons of solid waste for disposal per day, with a maximum permitted capacity of approximately 62 million cubic yards. The most current data available from CalRecycle indicates that the facility has an estimated closure date of January 1, 2025.\(^{53}\)

**Forward Landfill, Inc.**

The Forward Landfill, Inc., is located at 9999 S. Austin Road, Manteca, CA 95336. It is a Class I, Class II and Class III landfill. There are four disposal areas listed by CalRecycle, with data available for two of the areas. Area 01 has 354.5 acres of disposal area. It can receive up to 8,668 tons/day, with a total permitted capacity of 51,040,000 cubic yards. Area 02 has 157 acres disposal area. It can receive up to 8,668 tons/day, with a total permitted capacity of 51,040,000 cubic yards. Area 01 has 354.5 acres of disposal area. It can receive up to 8,668 tons/day, with a total permitted capacity of 51,040,000 cubic yards. Area 02 has 157 acres disposal area. It can receive up to 8,668 tons/day, with a total permitted capacity of 51,040,000 cubic yards.

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tons/day, with a total permitted capacity of 51,040,000 cubic yards. The estimated closure date for Areas 01 and 02 is January 1, 2020.

**Potrero Hills Landfill**

The Potrero Hills Landfill is a Class III facility located in Fairfield, California, with a mailing address of 675 Texas St, Ste. 5500 Fairfield, CA 94533. The permitted disposal area is 340 acres, and the permitted maximum throughput is 4,330 tons/day. The maximum permitted capacity is 83,100,000 cubic yards. The estimated closure date is February 18, 2048.

**Vasco Road Sanitary Landfill**

The Vasco Road Sanitary Landfill is owned and operated by Republic Services of California I, LLC. This Class II and Class III facility is located at 4001 North Vasco Road, Livermore, CA 94550. The maximum permitted daily throughput is 2,250 tons/day. It has 222 acres of disposal area. The maximum permitted capacity is 32,970,000 cubic yards. The estimated closure date is August 31, 2019.

### 4.14.3.2 STANDARDS OF SIGNIFICANCE

According to Appendix G, Environmental Checklist, of the CEQA Guidelines, the proposed project would have a significant impact on solid waste service if:

1. Implementation of the Project would not be served by a landfill(s) with sufficient permitted capacity to accommodate the Project’s solid waste disposal needs.
2. Implementation of the Project would be out of compliance with federal, State, and local statues and regulations related to solid waste.

### 4.14.3.3 IMPACT DISCUSSION

**UTIL-8** The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the Project’s solid waste disposal needs.

**Proposed General Plan Update**

In 2014, CalRecycle reported that 93 percent of the City’s solid waste disposal waste went to a total of four landfills. Table 4.14-2 compares the maximum daily capacity and estimated closure date for each of the four facilities.

The City of San Leandro disposal rate per resident in 2014 was 4.6 pounds of solid waste per person per day (ppd), which was below the CalRecycle target of 8.7 ppd per person.

**Table 4.14-2** Landfills Existing Daily Capacity and Estimated Closure Date

<table>
<thead>
<tr>
<th>Landfill Facility</th>
<th>Daily Capacity (tons/day)</th>
<th>Estimated Closure Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altamont Landfill</td>
<td>11,500</td>
<td>1/1/2025</td>
</tr>
<tr>
<td>Forward Sanitary Landfill</td>
<td>8,668</td>
<td>1/1/2020</td>
</tr>
<tr>
<td>Potrero Hills Landfill</td>
<td>4,330</td>
<td>2/14/2048</td>
</tr>
<tr>
<td>Vasco Road Sanitary Landfill</td>
<td>2,250</td>
<td>8/31/2019</td>
</tr>
</tbody>
</table>
resident. The disposal rate per business employee in the City in 2014 was 9.2 ppd, which was below the CalRecycle target rate of 18.2 ppd per employee. However, these 2014 data are still awaiting review by the agency. CalRecycle also reports the City’s per capita disposal rates in 2011 were 4.0 ppd for residents and 9.1 ppd for employees; the most recent year for which disposal rates have been reviewed by the agency. The City of San Leandro’s disposal rates for both residents and employees have been below target rates since 2007.

In Section 3.8 of this Draft EIR it is estimated the Project will generate a net increase of 14,790 residents and 12,130 jobs. For analysis purposes, if solid waste generation is assumed to be the actual 2014 San Leandro per capita generation rates of 4.6 ppd for residents and 9.2 ppd for employees, the total solid waste generated by the Project’s residents and workers is estimated to be 179,630 pounds per day, or 90 tons per day at buildout (2035).

The total estimated solid waste generation rate for the proposed Plan of 90 tons per day is less than 5 percent of the smallest daily capacity of the four main landfills providing disposal services to the city (2,250 tons/day for Vasco Sanitary Landfill), as shown in Table 4.14-2.

Three of the four landfills that receive the majority of the city’s solid waste are likely to reach their permitted maximum capacities between 2019 and 2025, as shown in the Table 4.14-2. However, one of the four is not estimated to close until 2048 (Potrero Hills Landfill). In addition, there are 16 landfills that received waste from the city in 2014, and 21 landfills that received waste from the city in 2013. If one or more of the four landfills on Table 4.14-2 were unavailable in the future, it is likely the city’s solid waste volume could be increased at one or more of the other landfills that already serve the city.

In addition, the City will continue to promote recycling and reduce the amount of solid waste placed in landfills, including through the proposed Plan goals, policies, actions and implementation strategies with regards to solid waste collection, recycling and disposal:

- **Goal OSC-7: Resource Conservation and Greenhouse Gas Reduction.** Promote recycling, water conservation, green building, and other programs which reduce greenhouse gas emissions and create a more sustainable environment.
- **Policy OSC-7.1: Recycling.** Actively promote recycling, composting, and other programs that reduce the amount of solid waste requiring disposal in landfills.
- **Action 7.1.A: Source Reduction and Recycling Programs.** Continue to implement Source Reduction and Recycling programs, consistent with the Stopwaste.org Strategic Plan.

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55 According to the CalRecycle web site, “Awaiting Review” means “The Department has not completed its analysis, or approved the per capita disposal figures or program implementation for the years included in this review cycle.” http://www.calrecycle.ca.gov/LGCentral/DataTools/Reports/BRDefine.htm#Annual, accessed January 5, 2016.
56 The per capita disposal rate target is also known as “the 50 percent equivalent per capita disposal target.” It is the amount of disposal San Leandro would have had during the 2003 – 2006 base period (designated by CalRecycle) if it had been exactly at a 50 percent diversion rate. It is calculated by CalRecycle using the average base period per capita generation for San Leandro (in pounds), then dividing this generation average in half to determine the 50 percent equivalent per capita disposal target. The target is an indicator for comparison with that jurisdiction’s annual per capita per day disposal rate beginning with the 2007 program year.
Action 7.1.B: Waste Reduction Programs. Encourage special bulky waste pick-up events, citywide garage sales, programs offering rebates for inefficient appliances or polluting vehicles, disincentives to excessive packaging, and other waste collection activities that reduce pollution and improper waste disposal.

Action 7.1.C: Commercial and Multi-Family Residential Programs. Continue to expand recycling programs for multi-family dwellings and commercial-industrial customers, and to implement construction and demolition debris recycling and e-waste recycling programs. Commercial and industrial recycling programs should include a significant public information and education component and should be coordinated through the Chamber of Commerce and other business organizations.


Action 7.1.F: Discouraging Unnecessary Consumption. Promote waste reduction through initiatives that discourage excessive or unnecessary consumption and encourage the use of “second hand” goods and recycled materials.

Policy OSC-7.5: City Conservation Practices. Ensure that City itself follows conservation practices in its day-to-day operations and is a role model for businesses and residents in the area of conservation. The City should encourage the use of reusable and recyclable goods in its purchasing policies and practices, and should develop strategies that encourage residents and businesses to do the same.

Action 7.5.A: Community Conservation Events. Promote community events and fairs that increase environmental awareness, such as Arbor Day tree planting, Earth Day activities, shoreline clean-ups, and creek restoration.

Goal CSF-6: Infrastructure. Ensure that local water, sewer, storm drainage, solid waste, energy, and telecommunication facilities are well maintained; improvements meet existing and future needs; and land use decisions are contingent on the adequacy and maintenance of such facilities.

Policy CSF-6.1: Development Impacts. Permit new development only when infrastructure and utilities can be provided to that development without diminishing the quality of service provided to the rest of the City.

Policy CSF-6.2: Fair Share Costs. Require future development to pay its fair share of the cost of improving the water, sewer, storm drainage, and other infrastructure systems needed to serve that development. Development impact fees, development agreements, and other appropriate forms of mitigation should be used to cover the costs of upgrading or expanding public infrastructure.

Action 6.2.A: Infrastructure Impact Fee and Rate Updates. Regularly update fees and rates for sewer, solid waste, and other public services to ensure that revenues are sufficient to cover operating and maintenance costs.

Policy CSF-6.3: Coordination. Coordinate local infrastructure planning with EBMUD, the Oro Loma Sanitary District, Alameda County, and other service providers to ensure that infrastructure remains adequate to serve existing and planned development.
With continued compliance with applicable regulations listed below, leading to increased recycling and waste diversion, anticipated rates of solid waste disposal from the proposed Plan would have a less-than-significant impact in regard to permitted landfill capacity.

**Applicable Regulations:**
- California Integrated Waste Management Act
- Global Warming Solutions Act of 2006, Scoping Plan
- Mandatory Commercial Organics Recycling (AB 1826)
- CALGreen Building Code
- City of San Leandro Green Building Checklist
- City of San Leandro Municipal Code, Chapter 3-19, The City's Green Building Ordinance

**Significance before Mitigation:** Less than significant.

**Proposed Zoning Code Amendments**

The proposed amendments to the Zoning Code would bring the Zoning Code into conformance with the proposed Plan. Proposed Zoning Code amendments that would allow increased growth that could increase solid waste generation in San Leandro include increased building density, intensity (FAR), and height limits in commercial districts. The potential increase in growth as a result of these Zoning Code amendments is captured in the buildout of the proposed Plan that is analyzed above; the Zoning Code amendments would not have separate or additional impacts to solid waste generation. As described above, the city of San Leandro’s disposal rates for both residents and employees have been below target rates since 2007, and the total estimated solid waste generation rate for the proposed Plan is less than 5 percent of the smallest daily capacity of the four main landfills providing disposal services to the city. In addition, the City will continue to promote recycling and reduce the amount of solid waste placed in landfills, including through the proposed Plan goals, policies, actions and implementation strategies listed above. With continued compliance with applicable regulations listed above, anticipated rates of solid waste disposal from the proposed Zoning Code amendments would have a less-than-significant impact in regard to permitted landfill capacity.

**Significance before Mitigation:** Less than significant.

**Proposed General Plan Update**

As discussed above, the City of San Leandro has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. The City’s per capita disposal rate is below the target rate established by CalRecycle. The City has established a mandatory Green Building Checklist. The checklist must be submitted with and incorporated into the development plan sets, and any items that are marked on the checklist must then be referenced and detailed in the plans.

In addition, the proposed Plan includes goals, policies, actions and strategies that promote recycling and conservation and will help ensure adequate waste collection and disposal facilities are available for the
residents and workers of San Leandro. Together these policies and actions will help to ensure that buildout of the proposed Plan is consistent with statutes and regulations related to solid waste.

Therefore, in accordance with the applicable regulations listed below, development allowed by the proposed Plan would comply with applicable statutes and regulations and the impact would be less than significant.

**Applicable Regulations:**
- California Integrated Waste Management Act
- Global Warming Solutions Act of 2006, Scoping Plan
- Mandatory Commercial Organics Recycling (AB 1826)
- CALGreen Building Code
- City of San Leandro Green Building Checklist
- City of San Leandro Municipal Code, Chapter 3-19, The City’s Green Building Ordinance

**Significance before Mitigation:** Less than significant.

### Proposed Zoning Code Amendments

The proposed amendments to the Zoning Code would bring the Zoning Code into conformance with the proposed Plan. Proposed Zoning Code amendments that would allow increased growth that could increase solid waste generation in San Leandro include increased building density, intensity (FAR), and height limits in commercial districts. The potential increase in growth as a result of these Zoning Code amendments is captured in the buildout of the proposed Plan that is analyzed above and the Zoning Code amendments would not have separate, additional impacts to solid waste generation. As described above, the City has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste, and the city’s per capita disposal rate is below the target rate established by CalRecycle. In addition, the proposed Plan includes goals, policies, actions and strategies to promote recycling and conservation. With continued compliance with applicable regulations listed above, development allowed by the proposed Plan and associated Zoning Code amendments would comply with applicable statutes and regulations and the impact would be less than significant.

**Significance before Mitigation:** Less than significant.

### 4.14.3.4 Cumulative Impacts

**UTIL-10** The proposed project, in combination with past, present, and reasonably foreseeable development, would result in less-than-significant impacts with respect to solid waste.

Buildout of the proposed Plan and associated Zoning Code amendments 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 within the city and its SOI, and from other cities in the region, based on ABAG’s most recent projections, may exceed that which was taken into account when calculating landfill capacity. Also, because three of the four landfill facilities that take approximately 93 percent of the city’s solid waste (in 2014) are expected to close between 2019 and 2025, San Leandro or other
jurisdictions that use the same facilities may eventually experience insufficient future landfill capacity at those sites to accommodate existing or increased population and employment levels.

However, Potrero Hill’s landfill is not estimated to close until 2048. In addition, there are 16 landfills that received waste from San Leandro in 2014, and 21 landfills served the City in 2013. If one or more of the landfills that currently receive the majority of solid waste were unavailable in the future, it is likely the city’s solid waste volume could be increased at one or more of the other landfills that already serve the City.

As shown in the Chapter 4.11, Population and Housing, of this Draft EIR, projected residential growth in San Leandro with the proposed project is consistent with that anticipated by regional ABAG projections. Therefore, considering that the amount of growth anticipated would not exceed ABAG projections, and that landfill capacity exists in landfills currently serving the city, the proposed project would not induce substantial unexpected population growth, or growth for which inadequate planning has occurred, including planning with respect to solid waste, and a less-than-significant impact would result in this respect.

Therefore, with continued compliance with the applicable regulations listed below, the solid waste related impact of the proposed Plan and associated Zoning Code amendments, in combination with past, present, and reasonably foreseeable development, would be less than significant.

**Applicable Regulations:**
- California Integrated Waste Management Act
- Global Warming Solutions Act of 2006, Scoping Plan
- Mandatory Commercial Organics Recycling (AB 1826)
- CALGreen Building Code
- City of San Leandro Green Building Checklist
- City of San Leandro Municipal Code, Chapter 3-19, The City's Green Building Ordinance

**Significance before Mitigation:** Less than significant.

### 4.14.4 STORMWATER

This section outlines the regulatory setting, describes environmental setting, and discusses potential impacts from buildout of the proposed Plan with regard to stormwater infrastructure.

#### 4.14.4.1 ENVIRONMENTAL SETTING

**Regulatory Setting**

**Federal Regulations**

**Clean Water Act**

The U.S. Environmental Protection Agency (EPA) is the lead federal agency responsible for water quality management. The Clean Water Act (CWA, codified at 33 U.S.C. Sections 1251-1376) of 1972 is the primary
federal law that governs and authorizes water quality control activities by the EPA, as well as the states. Various elements of the CWA address water quality, and they are discussed below.

Permits to dredge or fill waters of the United States are administered by the U.S. Army Corps of Engineers (USACE) under Section 404 of the CWA. “Waters of the United States” are defined as all waters subject to the ebb and flow of the tide (which includes harbors), interstate waters, water impoundments, streams, rivers, and wetlands. The regulatory branch of the USACE is responsible for implementing and enforcing Section 404 of the CWA and issuing permits. Any activity that discharges fill material and/or requires excavation in waters of the United States must obtain a Section 404 permit. Before issuing the permit, the USACE requires that an analysis be conducted to demonstrate that the proposed project is the least environmentally damaging practicable alternative. Also, the USACE is required to comply with the National Environmental Protection Act (NEPA) before it may issue an individual Section 404 permit.

Under Section 401 of the CWA, every applicant for a Section 404 permit that may result in a discharge to a water body must first obtain State Water Quality Certification that the proposed activity will comply with State water quality standards. Certifications are issued in conjunction with USACE Section 404 permits for dredge and fill discharges. In addition, a Water Quality Certification must be sought for any activity that would result in the placement of structures in waters of the United States that are not jurisdictional to the USACE, such as isolated wetlands, to ensure that the proposed activity complies with State water quality standards. In California, the authority to either grant water quality certification or waive the requirement is delegated by the State Water Resources Control Board (SWRCB) to its nine RWQCBs.

Under federal law, the EPA has published water quality regulations under Volume 40 of the Code of Federal Regulations (40 CFR). Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the CWA, water quality standards consist of two elements: (1) designated beneficial uses of the water body in question and (2) criteria that protect the designated uses. Section 304(a) requires the EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. In California, the EPA has designated the SWRCB and its RWQCBs with authority to identify beneficial uses and adopt applicable water quality objectives.

When water quality does not meet CWA standards and compromises designated beneficial uses of a receiving water body, Section 303(d) of the CWA requires that water body be identified and listed as “impaired”. Once a water body has been designated as impaired, a Total Maximum Daily Load (TMDL) must be developed for the impairing pollutant(s). A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards, with a factor of safety included. Once established, the TMDL allocates the loads among current and future pollutant sources to the water body. In the vicinity of the Project site, Lower San Francisco Bay is listed as a Section 303(d) impaired water body.57

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National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established by the CWA to regulate municipal and industrial discharges to surface waters of the United States, including discharges from municipal separate storm sewer systems (MS4s). 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.

Under the NPDES Program, all facilities which discharge pollutants into waters of the US are required to obtain an NPDES permit. Requirements for storm water discharges are also regulated under this program. In California, the NPDES permit program is administered by the SWRCB through the nine RWQCBs. The City of San Leandro lies within the jurisdiction of San Francisco RWQCB (Region 2) and is subject to the waste discharge requirements of the Municipal Regional Stormwater Permit (MRP; Order No. R2-2015-0049) and NPDES Permit No. CAS612008, which was issued on November 19, 2015 and effective as of January 1, 2016. The Alameda County permittees include Alameda County, the Alameda County Flood Control and Water Conservation District, and 14 cities, including the City of San Leandro.

Under Provision C.3 of the MRP, the co-permittees use their planning authorities to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address both soluble and insoluble stormwater runoff pollutant discharges and prevent increases in runoff flows from new development and redevelopment projects. This goal is to be accomplished primarily through the implementation of low impact development (LID) techniques.

Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains.\(^{58}\) FEMA also issues Flood Insurance Rate Maps (FIRMs) that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection is established by FEMA. FEMA's minimum level of flood protection for new development is the 100-year flood event, also described as a flood that has a 1-in-100 chance of occurring in any given year.

Additionally, FEMA has developed requirements and procedures for evaluating earthen levee systems and mapping the areas affected by those systems.\(^{59}\) Levee systems are evaluated for their ability to provide protection from 100-year flood events and the results of this evaluation are documented in the FEMA Levee Inventory System (FLIS). Levee systems must meet minimum freeboard standards and must be


Utilities and Service Systems

maintained according to an officially adopted maintenance plan. Other FEMA levee system evaluation criteria include structural design and interior drainage.

As required by the FEMA regulations, all development constructed within the Special Flood Hazard Zone (as delineated on the FIRM) must be elevated so that the lowest floor is at or above the base flood elevation level. The term “development” is defined by FEMA as any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials. Per these regulations, if development in these areas occurs, a hydrologic and hydraulic analysis must be performed prior to the start of development, and must demonstrate that the development does not cause any rise in base flood elevation levels, as no rise is permitted within regulatory floodways. Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision, as soon as practicable, but not later than six months after such data becomes available.

FEMA is conducting a new coastal study called the California Coastal Analysis and Mapping Program (CCAMP) and has revised the 100-year and 500-year coastal flood events and the SFHAs within the coastal areas of Alameda County. The preliminary maps were issued on May 16, 2015. The maps have not yet been finalized and the City of San Leandro and Alameda County are in discussions with FEMA to determine what actions may be taken to remove some of the properties from the flood zones; including repair of levees and the elevation of banks, streets, and sea walls in some locations.

Rivers and Harbors Act of 1899

Under the Rivers and Harbors Act of 1899, the USACE requires permits for activities involving the obstruction of the navigable capacity of any waters of the United States or the construction of any structures in or over navigable waters of the United States, including ports, canals, navigable rivers or other waters. “Navigable waters” under Section 10 of the Rivers and Harbors Act are defined as “those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce.” Pursuant to Section 10 of the Rivers and Harbors Act, the USACE administers this regulatory program separate from the Section 404 program. A Section 10 permit may be required for structures or work outside the limits of navigable waters if the structure or work affects the course, location, condition, or capacity of the water body.

State Regulations

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act (Water Code sections 13000 et seq.) is the basic water quality control law for California. The act established the SWRCB and divided the State into nine regional basins, each under the jurisdiction of a RWQCB. The SWRCB is the primary state agency responsible for the

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protection of California’s water quality and groundwater supplies. The RWQCBs carry out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a water quality control plan or basin plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region’s ground and surface water, and local water quality conditions and problems. As described above, San Leandro is within the jurisdiction of the San Francisco Bay RWQCB (Region 2).

The Porter-Cologne Act also authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements (WDRs), NPDES permits, Section 401 water quality certifications, or other approvals. Other State agencies with jurisdiction over water quality regulation in California include the California Department of Health Services (DHS) for drinking water regulations, the California Department of Fish and Wildlife (CDFW) and the Office of Environmental Health and Hazard Assessment (OEHHA).

**State Water Resources Control Board General Construction Permit**

In California, the SWRCB has broad authority over water quality control issues for the State. The SWRCB is responsible for developing statewide water quality policy and exercises the powers delegated to the State by the federal government under the CWA.

Construction activities that disturb one or more acres of land that could impact hydrologic resources must comply with the requirements of the SWRCB Construction General Permit (Order 2012-0006-DWQ). Under the terms of the permit, applicants must file Permit Registration Documents (PRDs) with the SWRCB prior to the start of construction. The PRDs include a Notice of Intent (NOI), risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and a signed certification statement. The PRDs are submitted electronically to the SWRCB via the Storm Water Multiple Application and Report Tracking System (SMARTS) website.

Applicants must also demonstrate conformance with applicable Best Management Practices (BMPs) and prepare a Storm Water Pollution Prevention Plan (SWPPP), containing a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection, discharge points, general topography both before and after construction, and drainage patterns across the project site. The SWPPP must list BMPs that would be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for nonvisible pollutants if there is a failure of the BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Some sites also require implementation of a Rain Event Action Plan (REAP). The updated Construction General Permit (2012-0006-DWQ), effective on July 17, 2012 also requires applicants to comply with post-construction runoff reduction requirements.62

**California Coastal Act of 1976**

The California Coastal Act of 1976 established three designated coastal management agencies to plan and regulate the use of land and water in the coastal zone: the California Coastal Commission, the San

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Francisco Bay Conservation and Development Commission, and the California Coastal Conservancy. Under California’s federally approved Coastal Management Program, the California Coastal Commission manages development along the California coast except for San Francisco Bay, where the San Francisco Bay Conservation and Development Commission oversees development. The mission of the California Coastal Conservancy is to purchase, protect, restore, and enhance coastal resources and provide shoreline access. Additional information on the San Francisco Bay Conservation and Development Commission, which has jurisdiction for projects in and around San Francisco Bay, is discussed in the Local Regulations section below.

**State Updated Model Water Efficient Landscape Ordinance (Assembly Bill 1881)**

The updated Model Water Efficient Landscape Ordinance requires cities and counties to adopt landscape water conservation ordinances by January 31, 2010 or to adopt a different ordinance that is at least as effective in conserving water as the updated Model Water Efficient Landscape Ordinance (WELO). The City of San Leandro adopted the Bay-Friendly Landscape Ordinance in accordance with Assembly Bill 1881. The ordinance incorporates landscape protocols developed by the Alameda County Waste Management Authority (StopWaste) and all parameters in the WELO. The ordinance became effective as of February 1, 2010.

**Local Regulations**

**San Francisco Bay Regional Water Quality Control Board**

Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The regional boards are required to formulate and adopt water quality control plans for all areas in the region and establish water quality objectives in the plans. San Leandro is within the jurisdiction of the San Francisco Bay RWQCB (Region 2).

The San Francisco Bay RWQCB addresses region-wide water quality issues through the creation of the Water Quality Control Plan for San Francisco Bay Basin (Basin Plan). The Basin Plan was updated most recently in March 2015. This Basin Plan designates beneficial uses of the State waters within Region 2, describes the water quality that must be maintained to support such uses, and provides programs, projects, and other actions necessary to achieve the standards established in the Basin Plan. The Water Quality Control Policy for the Enclosed Bays and Estuaries of California, as adopted by the SWRCB in 1995, also provides water quality principles and guidelines to prevent water quality degradation and protect the beneficial uses of waters of enclosed bays and estuaries.

**Bay Protection and Toxic Cleanup Program**

In 1989, the California legislature established the Bay Protection and Toxic Cleanup Program with the goal of protecting present and future beneficial uses of the Bay and estuarine waters of California. In addition, the program was tasked with identifying toxic hot spots (i.e., localized areas with elevated concentrations of pollutants) and developing prevention and control strategies to remediate the toxic hot spots. As part

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of this program, in 1993 the San Francisco Bay RWQCB initiated the Regional Monitoring Program (RMP) which includes water quality monitoring near the city of San Leandro. The purpose of the program is to assess regional water quality conditions, characterize patterns and trends of contaminant concentrations and distribution in the water column, as well as identify general sources of contamination in San Francisco Bay. The program has established a database of water quality and sediment quality in the Bay, particularly with respect to trace elements and organic contaminants.

**San Francisco Bay Conservation and Development Commission (BCDC)**

The California Coastal Act carries out its mandate locally through the San Francisco Bay Area Conservation and Development Commission (BCDC). BCDC’s jurisdiction for San Francisco Bay includes all sloughs, marshlands between mean high tide and five feet above mean sea levels, tidelands, submerged lands, and land within 100 feet of the Bay shoreline. The precise boundaries are determined by BCDC upon request.

As a permitting authority along the San Francisco Bay shoreline, BCDC is responsible for granting or denying permits for any proposed fill, extraction of materials, or change in the use of any water, land, or structure within BCDC’s jurisdiction. Their jurisdiction extends from all tidally influenced portions of the site up to the mean high tide and then continuing up to 100 feet inland. A permit from BCDC is required for any Bay filling or dredging, which includes piers, pilings, and floating structures moored in the Bay for extended periods. A permit from BCDC would be required before proceeding with any potential shoreline development. Permits may be granted or denied only after public hearings and after the process for review and comment by the City or County has been completed.

Projects in BCDC jurisdiction that involve Bay fill must be consistent with the Bay Plan policies on the safety of fills and shoreline protection. These policies state that adequate flood protection should consider future relative sea level rise and all proposed development should be above the highest estimated tide level for the expected life of the project or sufficiently protected by levees.

**Alameda County Flood Control & Water Conservation District**

The Alameda County Flood Control and Water Conservation District (ACFCD) is a division of the Alameda County Public Works Agency that develops and maintains flood control systems for the public safety, health, and welfare of Alameda County residents and businesses. Additionally, the ACFCD enforces pollution control regulations governing County waterways.

The ACFCD is in the process of issuing a Hydrology and Hydraulics Manual that will outline the District’s requirements for new development and modification of existing flood control systems in western Alameda County. The ACFCD requires that primary drainage systems (between 50 acres and 10 square miles) be evaluated for two storm types. The system must convey the five-year storm when using the 100-year tide level of 7.6 feet above sea level (National Geodetic Vertical Datum [NGVD] 29) as an outlet constraint, and must convey the 100-year storm event when using the mean higher high water level of 4.4 feet above sea level (NGVD 29) as an outlet control constraint. In addition, all facilities that are part of the FEMA Flood Insurance Study must be designated to contain the FEMA 100-year storm using FEMA criteria.

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Alameda County Clean Water Program

Together with 13 other incorporated cities in Alameda County, San Leandro has joined with the Alameda County Flood Control and Water Conservation District, the Zone 7 Water Agency, and Alameda County in the Clean Water Program (CWP) initiative. Members of the program are regulated waste dischargers under the 2015 NPDES Permit issued by the San Francisco Bay RWQCB, and are responsible for municipal storm drain systems and watercourses that they own or operate. As part of the permitting process, dischargers must submit a Stormwater Management Plan that describes a framework for management of stormwater discharges during the term of the permit.

The City of San Leandro, as a co-permittee under the NPDES permit, is also subject to the Provision C.3 requirements for new development and redevelopment projects, including post-construction stormwater management requirements. Provision C.3 requirements are separate from, and in addition to, requirements for erosion and sediment control and for pollution prevention measures during construction. These requirements apply to all new development or redevelopment projects that create or replace 10,000 square feet of impervious surfaces. Project applicants are required to implement site design measures, source control measures, and stormwater treatment measures to reduce stormwater pollution during operation of the project. The permit specifies methods to calculate the required size of treatment devices.

Alameda County Watercourse Ordinance

The Alameda County Watercourse Ordinance is intended to prevent damage during flooding, control erosion and sedimentation, safeguard and preserve watercourses, and restrict the discharge of pollutants into watercourses. A watercourse is defined as any natural or man-made channel through which water flows continuously or intermittently. The ordinance controls development within and adjacent to watercourses by establishing 20-foot minimum setbacks for buildings from the top of the bank and provides the provisions for the issuance of watercourse permits.

San Leandro Municipal Code

Four chapters of the City of San Leandro Municipal Code contain directives pertaining to hydrology and water quality issues, as explained in the following paragraphs:

- *Stormwater Management and Discharge Control – Chapter 3-15.* This chapter provides the storm water requirements for projects conducted within San Leandro and is consistent with the requirements of the San Francisco RWQCB. Section 3-15-220, Watercourse Protection, states that no person shall commit or cause to be committed any of the following acts, unless a written authorization has first been obtained from the City Manager or his or her designee:
  
  1. Discharge into or connect any pipe or channel to a watercourse;
  2. Modify the natural flow of water in a watercourse;
  3. Carry out development within 30 feet of the center line of any creek or 20 feet of the top of a bank;

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(4) Deposit in, plant in, or remove any material from a watercourse including its banks, except as required for necessary maintenance;

(5) Construct, alert, enlarge, connect to, change, or remove any structure in a watercourse; or

(6) Place any loose or unconsolidated material along the side of or within a watercourse, or so close to the side as to cause a diversion of the flow, or to cause a probability of such material being carried away by storm waters passing through such watercourse.

- Bay-Friendly Landscaping Requirements for City Projects – Chapter 3-22. The City of San Leandro has also adopted a Water Efficiency Landscape Ordinance in coordination with StopWaste that exceeds the State’s model ordinance in terms of water savings.

- Floodplain Management – Chapter 7-9. The ordinance is designed to protect human life and health, minimize expenditures for costly flood control projects, minimize the need for rescue and relief efforts, business interruptions, and damage to public facilities and utilities. The ordinance also ensures that property owners construct new and substantially improved buildings in the 100-year floodplain in accordance with the National Flood Insurance Program’s goals to protect life and property.

- Grading, Excavations, and Fill – Chapter 7-12. This requires projects to prepare erosion control and sedimentation control plans and drainage plans to the City Engineer for approval prior to the start of project construction. The plans will ensure that storm water from the site meets the quality standards dictated by Chapter 3-15, Stormwater Management and Discharge Control. The erosion and sediment control plans must be prepared in accordance with the most current “Association of Bay Area Governments (ABAG) Manual of Standards for Erosion and Sediment Control Measures” and the “Handbook for Erosion and Sediment Control.”

Existing Conditions

Regional and Local Hydrology

San Leandro is located in the San Francisco Bay Hydrologic Region, which covers approximately 4,500 square miles and encompasses 10 counties, including Alameda County. It corresponds with the boundaries of the San Francisco Bay RWQCB (Region 2) and the San Francisco Bay Area Integrated Regional Water Management (IRWM) Plan. The San Francisco Bay Hydrologic Region is a complex network of watersheds, marshes, rivers, creeks, reservoirs, and bays mostly draining into the San Francisco Bay and the Pacific Ocean.

There are five watersheds within San Leandro: San Leandro Creek Watershed, Oyster Point Watershed, San Leandro Marina Watershed, Estudillo Canal Watershed, and San Leandro Watershed. A summary of each watershed and its surface water features are provided in Section 4.8.1.2 of this DEIR. The creeks, drainage channels, and watersheds in the vicinity of the EIR Study Area are shown on Figure 4.8-1.


Local Drainage

The City of San Leandro Department of Public Works owns and maintains 175 miles of storm drain conduits throughout the City. The City’s storm drain system feeds into a larger system owned and operated by the ACFCD. This system includes the lower reaches of San Leandro and San Lorenzo Creeks, as well as a number of channels extending into San Leandro neighborhoods west of Interstate 880. The ACFCD’s drainage facilities include levees, pump stations, erosion control devices, and culverts. The ACFCD maintains these facilities, including fence repair, vegetation removal, preventive maintenance of pump stations, spill prevention and cleanup, and investigation of inquiries and clean water concerns.

The City of San Leandro storm drains are maintained by the Department of Public Works. Catch basins and conduits are cleaned annually. Debris is removed from the tops of the storm drain inlets and the inside of the basins are cleaned. Prior to winter rains, City crews inspect problem flood areas and clear debris to minimize storm drain blockages. Major development proposals are reviewed to assess drainage impacts and determine appropriate mitigation measures. As appropriate, the City requires stormwater detention ponds or improvements to the City’s storm drain system to ensure that runoff from new development does not degrade local creeks. These measures are related to the C.3 provisions of the Alameda County Clean Water Program. A map of some of the major storm drains within San Leandro is shown in Figure 4.8-1.

Alameda County is divided into nine flood control zones by the Alameda County Flood Control and Water Conservation District (ACFCD). San Leandro is located within Zones 2, 9, and 13. A map of the flood control zones and storm drains is shown on Figure 4.8-2.

Flood Control Zone 2 covers 40,390 acres, 55 miles of natural creeks, 4 miles of earth channels, 11 miles of concrete channels, and 49 miles of underground storm drain pipes. Completed flood control projects in San Leandro included improvements of a roughly 1,000-foot section of the Line C earthen channel near the Bayfair Center and Coelho Drive. Eroded channel banks were restored to their original design and native trees and vegetation were planted. New and ongoing projects in Zone 2 include the following:

- San Lorenzo Creek Restoration and Wetlands – plan to restore wetlands at the mouth of San Lorenzo Creek as it flows into the Bay partially funded by a federal Coastal Impact Assistance Program grant administered through the US Department of the Interior.
- FEMA Tidal Studies – plan to study the effects of sea level rise on Bay area shorelines, creeks, and levees and determine what changes may be needed to provide 100-year level of flood protection. The ACFCD is participating with FEMA in these studies.
- Floodplain Mapping in the San Lorenzo Creek Watershed – A US Geological Survey (USGS) hydrology study, published in 2003, indicated an increase in stormwater flowing through flood control channels within the watershed with a potential to flood in several large areas. The ACFCD is studying the most cost-effective solutions to provide greater flood protection to properties. The options include making

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modifications to Don Castro Reservoir so that it can manage more stormwater, constructing floodwalls in several locations along the creek, and/or removing bottlenecks like undersized culverts that restrict water flow.

- Improving levees to meet FEMA certification.
- Line N desilting from San Francisco Bay to the Union Pacific railroad tracks.
- Estudillo Canal tidegate structure rehabilitation.
- San Leandro Creek hazardous trees removal between Huff Avenue and MacArthur Boulevard.

Flood Control Zone 9 encompasses 2,482 acres with 14 miles of underground pipes, 2 miles of concrete channels, 1 mile of earth channels, and less than 1 mile of natural and improved creeks. Ongoing projects in Zone 9 that impact San Leandro include participation in the FEMA tidal studies to determine the effects of sea level rise on shorelines, creeks, and levees and an evaluation of all levees to determine their condition and what repairs would be necessary to achieve FEMA certification.

Flood Control Zone 13 consists of 3,200 acres, with 3 miles of natural creeks, less than 1 mile of earth channels, 1 mile of concrete channels, and 14 miles of underground pipes. The ACFCD recently completed a new Davis Street pump station west of I-880 to alleviate frequent flooding caused by a combination of higher sea levels and stormwater from heavy rains. The ACFCD is continuing to work with Friends of San Leandro Creek involving construction of an environmental education center and stabilization and restoration of the San Leandro Creek banks near Alvarado Street. New and ongoing projects include improving levees to meet FEMA certification.

Although Flood Control Zone 12 is north of San Leandro and covers Emeryville and Oakland, there are a couple of ongoing projects that impact San Leandro. In addition to the FEMA tidal studies and levee evaluation, a new floodwall was constructed in 2009 along San Leandro Creek between 98th Street and I-880 at the Oakland/San Leandro border to improve the carrying capacity of the channel. This is part of a larger project along San Leandro Creek to improve the flow-carrying capacity of the channel.

The construction, monitoring, and maintenance of the stormwater infrastructure are a joint effort between ACFCD and the San Leandro Public Works Department. The ACFCD is currently working with FEMA to identify and map coastal hazards and provided input for the updated FIRM panels, which delineate SFHAs and BFEs. The preliminary maps have been completed but are not yet finalized, which is expected to occur by July 2016.

**Water Quality**

Surface water quality is affected by point source and non-point source pollutants. Point source pollutants are those emitted at a specific point, such as a pipe. Non-point source pollutants are typically generated by surface runoff from diffuse sources, such as streets, paved areas, and landscaped areas. Non-point source pollutants are more difficult to monitor and control, although they are important contributors to surface water quality in urban areas.

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72 Alameda County Public Works Agency, 2014, Modification No. 3 to the Agreement with DHI Water & Environment, Inc. to Perform Specialized Coastal Hazard Analysis and Mapping of Select Shoreline Areas of Alameda County.
Stormwater runoff pollutants vary with land use, topography, and the amount of impervious surface, as well as the amount and frequency of rainfall and irrigation practices. Runoff in developed areas typically contain oil, grease, litter, and metals accumulated in streets as well as pesticides, herbicides, particulate matter, nutrients, animal waste, and other oxygen-demanding substances from landscaped areas, driveways, parking lots, and rooftops. The highest pollutant concentrations usually occur at the beginning of the wet season during the “first flush.”

The San Francisco Bay RWQCB monitors surface water quality through implementation of the Basin Plan and designates beneficial uses for surface water bodies and groundwater. The beneficial uses for surface water bodies and groundwater within the city boundaries are listed on Table 4.8-1, in Section 4.8.1.2 of this Draft EIR.

All stormwater runoff generated within San Leandro would eventually discharge into San Francisco Bay. Storm drains within the City limits connect to San Leandro Creek, Estudillo Canal, and San Lorenzo Creek, which drain to San Francisco Bay.

In addition to the establishment of beneficial uses and water quality objectives, another approach to improve water quality is a watershed-based methodology that focuses on all potential pollution sources and not just those associated with point sources. If a body of water does not meet established water quality standards under traditional point source controls, then it is listed as an impaired water body under Section 303(d) of the Clean Water Act. For 303(d) listed water bodies, a limit is established, which defines the maximum amount of pollutants (or Total Maximum Daily Load – TMDL) that can be received by that water body. South San Francisco Bay is listed as an impaired water body near the Project site and stormwater runoff from the project would discharge into this water body. The list of 303(d) pollutants in San Francisco Bay and the status of TMDL implementation are provided on Table 4.8-2, in Section 4.8.1.2 of this Draft EIR.

Water quality in San Leandro creeks and streams and San Francisco Bay is monitored by the San Francisco Estuary Institute (SFEI), in collaboration with the San Francisco Bay RWQCB. The Regional Monitoring Program (RMP) assesses water quality conditions in the Bay and some of its tributaries and has established a database of water quality sampling results. Monitoring of contaminant loads from representative watersheds, including San Leandro Creek, was completed in April 2014 and will be compiled into a synthesis report to support decisions associated with the next regional stormwater permit. The nearest San Francisco Bay monitoring station (SB031W) is located off the southern tip of the Oakland International Airport, approximately 1.2 miles west of the San Leandro coast. The most recent comprehensive water quality sampling was conducted in 2007, which carried out analysis for conventional water quality parameters (conductivity, dissolved oxygen, hardness, nitrates, pH, salinity, and suspended solids, among others), trace elements (including mercury and methylmercury), trace organics (including polyaromatic hydrocarbons [PAHs], polychlorinated biphenyls [PCBs], phthalates, polybrominated diphenyl ethers, and pesticides), and toxicity. The results indicated that water quality conditions at these locations were well within the water quality objectives established by the RWQCB for the monitored parameters.

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 Flooding

In San Leandro, flood protection is provided by the ACFCD and the City is within three flood protection zones, as described in further detail in the Local Drainage section of this chapter. Flood protection facilities include flood control channels, storm drains, and dikes. San Leandro also prohibits the construction of structures, fill, grading, or otherwise obstructing the designated floodway for watercourses that flow through the City, as codified in Chapter 3-15-220, Watercourse Protection, and Chapter 7-9, Floodplain Management, of the Municipal Code.

The locations of levees within San Leandro are also shown on Figure 4.8-4. Although some locations within the city are protected from flooding by levees, FEMA's policy is to disregard any flood protection benefit provided by a levee if that levee is not certified as meeting National Flood Insurance Program (NFIP) standards for freeboard and geotechnical stability.74 Most of the levees within San Leandro are not currently certified. However, the City in conjunction with ACFCD and FEMA are in the process of evaluating and improving some of the levees to meet certification standards, which would remove some of the adjacent areas from the 100-year floodplain.

FEMA has performed detailed coastal engineering analyses and mapping of the San Francisco Bay shoreline within nine adjoining counties, including Alameda County.75 The analyses and mapping has resulted in updated preliminary FIRM panels, revised SFHAs, and Base Flood Elevations (BFEs) for some areas within San Leandro. The preliminary FIRMs can be accessed at FEMA's San Francisco Bay Area Coastal Study website76 and have been incorporated into Figure 4.8-4.

The Alameda County Public Works Agency and the City of San Leandro are working together on actions that will remove approximately 1,000 properties in the Mulford Gardens neighborhood from the 100-year floodplain designation. Actions taken by San Leandro would include increasing land mass elevations at the slough at the west end of Davis Street and at the shoreline on Neptune Drive just north of Marina Boulevard to prevent flooding and meeting with the owners of the Mission Bay mobile home park regarding constructing a sea wall on the west side of the property line adjacent to the rail line in order to remove the their properties from the floodplain.

Actions taken by Alameda County would include repairing the flap gates and addressing the elevation of banks at Estudillo Canal from Monarch Bay Drive Bridge to Wicks Boulevard. The flap gate repair and elevation work would be designed to protect the Marina Faire neighborhood from flooding.

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4.14.4.2 STANDARDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on water service if:

1. It would require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

4.14.4.3 IMPACT DISCUSSION

The proposed project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

Proposed General Plan Update

New development and/or redevelopment as part of the proposed Plan and the change in land uses could result in an increase in impervious surfaces, which in turn could result in an increase in stormwater runoff, higher peak discharges to drainage channels, and the potential to cause nuisance flooding in areas without adequate drainage facilities. However, none of the future development would require alteration of the course of an existing stream or river. Most of the future development sites are in infill or already developed areas that are paved and new development on these sites should not create a substantial increase in the amount of impervious surfaces.

In addition, projects that involve the disturbance of one acre or more of land would be subject to NPDES construction permit requirements, including preparation of a SWPPP, which includes BMPs to limit the discharge of sediment and non-stormwater discharges from the site. Projects that involve the creation and/or replacement of more than 10,000 square feet of impervious surfaces would trigger the implementation of source control measures and site design measures to address stormwater runoff, as per the C.3 provisions of the Alameda County Clean Water Program. In addition, stormwater treatment measures are required to contain site runoff, using specific numeric sizing criteria based on volume and flow rate. All detention or stormwater treatment facilities would be designed to the standards of the City of San Leandro and the ACFCD. This would minimize the amount of stormwater runoff from new development and redevelopment sites within the City.

With the implementation of C.3 provisions for new development and redevelopment projects, there would not be a significant increase in stormwater runoff to the City’s storm drain system. The construction of stormwater facilities, implementation of BMPs and preparation of related plans would serve to minimize any potential impacts, rather than create adverse impacts.

The ACFCD is in the process of developing a Hydrology and Hydraulics Manual to provide guidance on sizing and designing drainage systems, based on prescribed storm events. Also, implementation of C.3 provisions for new development, which include LID design and bioretention areas, flow-through planters, vegetated buffer strips, and/or on-site retention facilities, would minimize increases in peak flow rates or runoff volumes, thus reducing stormwater runoff to the storm drain system.
Development could lead to stormwater runoff impacts associated with increased flow volume that could result in an exceedance of the capacity of the storm drain system, or result in substantial erosion or siltation, could lead to the construction or expansion of stormwater facilities and associated environmental impacts. The following goals, policies and actions of the proposed Plan, once adopted, would ensure that stormwater runoff impacts from new development projects under the proposed Plan would be minimized:

- **Policy OSC-5.7: Creek Maintenance.** Support creek maintenance projects that minimize erosion, stabilize creek banks, and protect property from the threat of flooding. Work with private property owners and Alameda County to ensure that fallen vegetation and other potentially hazardous flow obstructions are promptly removed.

- **Policy CD-7.4: Urban Open Space.** Encourage the incorporation of drought-tolerant landscaped open spaces, such as plazas, courtyards and pocket parks, within new development and redevelopment projects.

- **Action CD-7.4.A: Paving of Planter Strips.** Consider an ordinance or zoning amendment to prohibit the paving of planter strips along City streets, except where these strips are narrow and such a prohibition would be impractical or conflict with the City's water conservation goals.

- **Action CD-7.4.B: Bio-Swales in Planter Strips.** Consider a program wherein, at the request of the homeowner, the City would remove existing planter strips so that they may be replaced with Bay-friendly landscaping, or converted to bio-swales that support the City's stormwater management and green infrastructure plans. If initiated, such a program would need to be grant-funded or funded by property owners, with ongoing maintenance provided by property owners rather than the City.

- **Goal CSF-6: Infrastructure.** Ensure that local water, sewer, storm drainage, solid waste, energy, and telecommunication facilities are well maintained; improvements meet existing and future needs; and land use decisions are contingent on the adequacy and maintenance of such facilities.

- **Policy CSF-6.1: Development Impacts.** Permit new development only when infrastructure and utilities can be provided to that development without diminishing the quality of service provided to the rest of the City.

- **Policy CSF-6.2: Fair Share Costs.** Require future development to pay its fair share of the cost of improving the water, sewer, storm drainage, and other infrastructure systems needed to serve that development. Development impact fees, development agreements, and other appropriate forms of mitigation should be used to cover the costs of upgrading or expanding public infrastructure.

- **Action CSF-6.2.A: Infrastructure Impact Fee and Rate Updates.** Regularly update fees and rates for sewer, solid waste, and other public services to ensure that revenues are sufficient to cover operating and maintenance costs.

- **Policy CSF-6.3: Coordination.** Coordinate local infrastructure planning with EBMUD, the Oro Loma Sanitary District, Alameda County, and other service providers to ensure that infrastructure remains adequate to serve existing and planned development.

- **Policy CSF-6.7: Storm Drainage.** Require storm drainage improvements for new development which ensure that stormwater runoff is adequately handled both on-site and off-site. Such regulations should fully implement state and federal clean water requirements. The City will also support
legislation to increase funding for local storm drainage improvements, including improvements aimed at water quality.

- **Policy CSF-6.8: Maintenance.** Ensure that sufficient funding is provided for the ongoing maintenance of City-owned facilities, including streets, street lights, traffic signals, landscaping, street trees, storm drains, public buildings and other infrastructure.

- **Action CSF-6.8.A: Financing and Assessment Districts.** Explore the use of special assessment districts, community benefit districts, enhanced infrastructure financing districts, and other financing tools to create reliable funding streams for the development, maintenance and operation of infrastructure in high growth areas of the city.

- **Policy EH-1.7: Reducing Flood Hazards.** Work collaboratively with County, State, and federal agencies to develop short- and long-term programs that reduce flood hazards in the City. At the local level, the City will regularly maintain its storm drainage system and ensure that those portions of San Leandro Creek under its jurisdiction remain clear of obstructions.

- **Action EH-1.7.A: Coordination With ACFCWCD.** Improve coordination with the Alameda County Flood Control and Water Conservation District to ensure that flood channels are regularly cleaned and maintained. This should include coordination of tree removal projects on ACFCWD land.

- **Action EH-1.7.B: Increase Flood Channel Capacity.** Work with Alameda County, State and federal agencies, and elected officials to improve flood control channel Line A Zone 2 (the Estudillo Canal) to reduce flood hazards, including reconstruction of golf course bridges to improve channel capacity. As appropriate and necessary, pursue measures to increase the capacity of other flood control facilities to reduce the number of adjacent San Leandro properties subject to flooding.

- **Policy EH-4.1: Urban Runoff Control.** Continue to implement water pollution control measures aimed at reducing pollution from urban runoff. These measures should emphasize best management practices by residents, businesses, contractors, and public agencies to ensure that surface water quality is maintained at levels that meet state and federal standards.

- **Action EH-4.1.A: Trash Capture Devices.** Develop a funding plan for the installation and maintenance of trash capture devices on City storm drains, in order to comply with the unfunded State mandate for 100 percent trash capture in local storm drain systems.

- **Action EH-4.1.B: Municipal Regional Permit Implementation.** As required by Section C3 of the Stormwater Municipal Regional Permit (also known as "C3" requirements), ensure that the City's development review procedures continue to include water quality protection measures. These include measures related to water supply, flood control, habitat protection, groundwater recharge, Bay-friendly landscaping, and sustainable development. In addition, the City will continue to require Stormwater Pollution Prevention Plans for qualifying projects and will ensure that such projects include appropriate measures to minimize the potential for water pollution.

- **Policy EH-4.2: Clean Water Education.** Promote the public information and participation provisions of the Alameda Countywide Clean Water Program.

- **Policy EH-4.5: Public Works Maintenance.** Continue, and if feasible expand, City Public Works maintenance activities, including scheduled street sweeping and cleaning of storm drains and culverts, to minimize pollution from surface runoff.
Policy EH-4.6: Illicit Discharges. Control illicit discharges into the City’s stormwater system through inspections, compliance evaluations, enforcement programs, and tracking activities.

Policy EH-4.11: Green Infrastructure. Consistent with the Municipal Regional Stormwater Permit for the San Francisco Bay Area, promote the increased use of green infrastructure as a means of improving stormwater quality. This shall include the incorporation of low impact development (LID) drainage design in public and private streets, parking lots, roofs, and other facilities. This also includes the use of best management practices to reduce impervious surfaces, including strategies using vegetation, soils, and natural processes to manage water and create a healthier urban environment.

Action EH-4.11.A: Green Infrastructure Plan. Develop and implement a Green Infrastructure Plan, as required by the Regional Water Quality Control Board. The Plan should include a mechanism to prioritize and map areas for planned and potential projects, projections for impervious surface reductions, a process for tracking and mapping completed projects, design guidelines and details for green infrastructure projects, an implementation program, and an evaluation of funding options to cover construction and ongoing maintenance.


Action EG-4.11.C: Green Infrastructure Outreach. Conduct outreach and education to gain support for green infrastructure plans and demonstrate the benefits of such plans, such as water quality improvement, flood control, greenhouse gas reduction, and safer pedestrian and bike access.

With implementation of these control measures and regulatory provisions to ensure adequate infrastructure and limit runoff from new development sites, the proposed Plan would not result in significant increases in runoff that could contribute to the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects. Therefore, implementation of the proposed Plan would have a less-than-significant impact with respect to stormwater infrastructure.

Significance before Mitigation: Less than significant.

Proposed Zoning Code Amendments

The proposed amendments to the Zoning Code would bring the Zoning Code into conformance with the proposed Plan. Proposed Zoning Code amendments that would allow increased development that could increase stormwater generation in San Leandro include increased building density and intensity (FAR) in commercial districts. The potential increase in development as a result of these Zoning Code amendments is captured in the buildout of the proposed Plan that is analyzed above. As described above, development under the proposed Plan could lead to stormwater runoff impacts associated with increased flow volumes, or result in substantial erosion or siltation, which could lead to the construction or expansion of stormwater facilities and associated environmental impacts. In addition, the proposed Zoning Code amendments include reductions in setbacks that could increase site coverage in the Downtown Area (DA) districts. However, proposed goals, policies, and actions of the proposed Plan, would ensure that stormwater runoff impacts from new development would be minimized. Therefore, impacts from the proposed Plan and associated Zoning Code amendments would be less than significant.
Significance before Mitigation: Less than significant.

4.14.4.4 CUMULATIVE IMPACTS

The proposed project, in combination with past, present, and reasonably foreseeable projects, would result in less-than-significant cumulative impacts with respect to stormwater infrastructure.

The analysis of cumulative stormwater infrastructure impacts considers the larger context of future development within the five watersheds that encompass the City of San Leandro, as based on the most recent ABAG projections. Cumulative impacts can occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable future projects in a similar geographic area. Cumulative impacts could result from incremental changes that contribute to drainage and stormwater infrastructure problems within the watershed or city.

As discussed previously, development within San Leandro would require conformance with State and local policies that would reduce hydrology and infrastructure construction impacts to less than significant levels. Any new development within the city would be subject on a project-by-project basis to independent CEQA review as well as City policies and ordinances, design guidelines, zoning codes, and other applicable City requirements that reduce impacts related to hydrology and stormwater drainage facilities. More specifically, potential changes related to stormwater flows, drainage, impervious surfaces, and flooding would be minimized by the implementation of stormwater control measures, retention, infiltration, and LID measures, and review by the City's Public Works Department to integrate measures to reduce potential stormwater drainage and flooding impacts.

All cumulative projects would be subject to similar permit requirements and would be required to comply with various City municipal codes and policies and County ordinances, as well as numerous water quality regulations that control construction related and operational discharge of pollutants in stormwater. The water quality regulations implemented by the San Francisco Bay RWQCB take a basin-wide approach and consider water quality impairment in a regional context. For example, the NPDES Construction Permit ties receiving water limitations and basin plan objectives to terms and conditions of the permit, and the MRP encompasses all of the surrounding municipalities to manage storm water systems and be collectively protective of water quality. For these reasons, impacts from future development within San Leandro related to stormwater infrastructure construction are not cumulatively considerable.

In addition, the implementation of goals and policies under the proposed Plan would require coordination with the ACFCFD to minimize potential impacts to hydrology and stormwater infrastructure from other projects within the watershed. Policy EH-1.7 promotes working collaboratively with the ACFCFD and various State and federal agencies to develop programs that reduced flood hazards in the City and Actions EH-1.7.A and EH-1.7.B promotes coordination with the ACFCFD to maintain flood control channels and increase flood channel capacity.

In combination with past, present, and reasonably foreseeable projects, proposed development and redevelopment within San Leandro would not result in a significant cumulative impact with respect to hydrology and stormwater infrastructure and are not cumulatively considerable. Therefore, the proposed Plan and associated Zoning Code amendments would result in a less-than-significant cumulative impact.
Significance before Mitigation: Less than significant.

4.14.5 ENERGY CONSERVATION

In order to assure that energy implications are considered in project decisions, Appendix F, Energy Conservation, of the CEQA Guidelines, requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. However, no specific thresholds of significance for potential energy impacts are suggested in the State CEQA Guidelines.

This section provides a general description of the existing regulatory setting and conditions addressing electric and natural gas services and infrastructure, and supply and demand in San Leandro, as well as potential impacts of the proposed Plan with regard to energy conservation.

4.14.5.1 ENVIRONMENTAL SETTING

Regulatory Framework

Federal Regulations


Signed into law in December 2007, this Act is an energy policy law that contains provisions designed to increase energy efficiency and the availability of renewable energy. The Act contains provisions for increasing fuel economy standards for cars and light trucks, while establishing new minimum efficiency standards for lighting as well as residential and commercial appliance equipment.

Energy Policy Act of 2005

Passed by Congress in July 2005, the Energy Policy Act includes a comprehensive set of provisions to address energy issues. The Act includes tax incentives for the following: energy conservation improvements in commercial and residential buildings; fossil fuel production and clean coal facilities; and construction and operation of nuclear power plants, among other things. Subsidies are also included for geothermal, wind energy, and other alternative energy producers.

Natural Gas Pipeline Safety Act of 1968

The Natural Gas Pipeline Safety Act of 1968 authorizes the Department of Transportation (DOT) to regulate pipeline transportation of flammable, toxic, or corrosive natural gas and other gases as well as the transportation and storage of liquefied natural gas. The Pipeline and hazardous materials Safety Administration (PHMSA) within DOT develops and enforces regulations for the safe, reliable, and environmentally sound operation of the nation's 2.6 million mile pipeline transportation system. DOT's and PHMSA's regulations governing natural gas transmission pipelines, facility operations, employee activities, and safety are found at 49CFR Part 40, 40CFR Part 190, 40CFR Part 191, 49CFR Part 192, 49CFR Part 193 and 49CFR Part 199.
National Energy Policy

Established in 2001 by the National Energy Policy Development Group, this policy is designed to help the private sector and state and local governments promote dependable, affordable, and environmentally sound production and distribution of energy for the future. Key issues addressed by the energy policy are energy conservation, repair and expansion of energy infrastructure, and ways of increasing energy supplies while protecting the environment.

State Regulations

California Public Utilities Commission

In September 2008, the California Public Utilities Commission (CPUC) adopted the Long Term Energy Efficiency Strategic Plan, which provides a framework for energy efficiency in California through the year 2020 and beyond. It articulates a long-term vision, as well as goals for each economic sector, identifying specific near-term, mid-term, and long-term strategies to assist in achieving these goals. This Plan sets forth the following four goals, known as Big Bold Energy Efficiency Strategies, to achieve significant reductions in energy demand:

- All new residential construction in California will be zero net energy by 2020;
- All new commercial construction in California will be zero net energy by 2030;
- Heating, Ventilation and Air Conditioning (HVAC) will be transformed to ensure that its energy performance is optimal for California’s climate; and
- All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

With respect to the commercial sector, the Long Term Energy Efficiency Strategic Plan notes that commercial buildings, which include schools, hospitals, and public buildings, consume more electricity than any other end-use sector in California. The commercial sector’s five billion-plus square feet of space accounts for 38 percent of the state’s power use and over 25 percent of natural gas consumption. Lighting, cooling, refrigeration, and ventilation account for 75 percent of all commercial electric use, while space heating, water heating, and cooking account for over 90 percent of gas use. In 2006, schools and colleges were in the top five facility types for electricity and gas consumption, accounting for approximately 10 percent of state’s electricity and gas use.

The CPUC and the California Energy Commission (CEC) have adopted the following goals to achieve zero net energy (ZNE) levels by 2030 in the commercial sector:

- **Goal 1:** New construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.
- **Goal 2:** 50 percent of existing buildings will be retrofit to zero net energy by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.
- **Goal 3:** Transform the commercial lighting market through technological advancement and innovative utility initiatives.
California Building Code (California Code of Regulations, Title 24, Part 6)

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission in June 1977 and revised in 2008 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On May 31, 2012, the CEC adopted the 2013 Building and Energy Efficiency Standards, which went into effect on January 1, 2014. Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

CALGreen Building Code (California Code of Regulations, Title 24, Part 11)

On July 17, 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as “CALGreen”) was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations). CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011. The building efficiency standards are enforced through the local building permit process. The Code was updated again in 2013, effective January 1, 2014, except energy based measures whose implementation was delayed until July 1, 2014.

The purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories:

- Planning and design.
- Energy efficiency.
- Water efficiency and conservation.
- Material conservation and resource efficiency.
- Environmental quality.

The provisions of CALGreen apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure, unless otherwise indicated in this code, throughout the State of California. Compliance with the CALGreen Code is not a substitution for meeting the certification requirements of any green building program. CALGreen requires new buildings to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December
14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances. Though these regulations are now often viewed as “business-as-usual,” they exceed the standards imposed by all other states and they reduce GHG emissions by reducing energy demand.

**Governor’s Green Building Executive Order (S-20-04)**

In 2004, Executive Order (EO) S-20-04 was signed by the Governor, committing the State to take aggressive action to reduce state building electricity usage by retrofitting, building, and operating the most energy and resource-efficient buildings by taking all cost-effective measures described in the Green Building Action Plan for facilities owned, funded or leased by the State and to encourage cities, counties and schools to do the same. It also calls for State agencies, departments, and other entities under the direct executive authority of the Governor to cooperate in taking measures to reduce grid-based energy purchases for State-owned buildings by 20 percent by 2015, through cost-effective efficiency measures and distributed generation technologies. These measures should include, but are not limited to:

- Designing, constructing and operating all new and renovated State-owned facilities paid for with state funds as “LEED Silver” or higher certified buildings;
- Identifying the most appropriate financing and project delivery mechanisms to achieve these goals;
- Seeking out office space leases in buildings with a U.S. EPA Energy Star rating; and
- Purchasing or operating Energy Star electrical equipment whenever cost-effective.

**State Greenhouse Gas Regulations**

The Governor’s GHG Reduction Executive Order S-3-05 was signed on June 1, 2005, and set GHG reduction targets for the State. Soon after, AB 32, the Global Warming Solutions Act (2006) was passed by the California state legislature on August 31, 2006, to place the State on a course toward reducing its contribution of GHG emissions. In response to AB 32, the California Air Resources Board (CARB) developed a Scoping Plan outlining California’s approach to achieving the goal of reducing GHG emissions to 1990 levels by 2020. The final Scoping Plan was adopted by CARB on December 11, 2008. CARB approved the first 5-year Update to the Climate Change Scoping Plan on May 22, 2014, as required by AB 32. For a detailed discussion on these regulations, see Chapter 4.6, Greenhouse Gas Emissions, of this Draft EIR.

**Renewable Portfolio Standard (Senate Bill X1-2)**

Signed by Gov. Edmund G. Brown, Jr., in 2011, SB X1-2 directs CPUC’s Renewable Energy Resources Program to increase the amount of electricity generated from eligible renewable energy resources per year to an amount that equals at least 20 percent of the total electricity sold to retail customers in California per year by December 31, 2013, 25 percent by December 31, 2016 and 33 percent by December 31, 2020. SB X1-2 codifies the 33 percent by 2020 renewable portfolio standard (RPS) goal established pursuant to the Global Warming Solutions Act of 2006. This new RPS applies to all electricity retailers in the state including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must adopt the new RPS goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and the 33 percent requirement being met by the end of 2020.
California Energy Benchmarking and Disclosure

Assembly Bill 1103 (2007) requires that electric and gas utilities maintain records of the energy consumption data of all nonresidential buildings to which they provide service and that by January 1, 2009, upon authorization of a nonresidential building owner or operator, an electric or gas utility shall upload all of the energy consumption data for the specified building to the US EPA Energy Star Portfolio Manager in a manner that preserves the confidentiality of the customer. This statute further requires a nonresidential building owner or operator disclose Energy Star Portfolio Manager benchmarking data and ratings, for the most recent 12-month period, to a prospective buyer, lessee, or lender. Enforcement of the latter requirement began on January 1, 2014.

On October 8, 2015, the Governor signed AB 802 which would revise and recast the above provisions. The new law directs the Energy Commission to establish a statewide energy benchmarking and disclosure program, and enhances the Commission’s existing authority to collect data from utilities and other entities for the purposes of energy forecasting, planning and program design. Among the specific provisions, AB 802 would require utilities to maintain records of the energy usage data of all buildings to which they provide service for at least the most recent 12 complete months. Beginning no later than January 1, 2017, the bill would require each utility, upon the request and the written authorization or secure electronic authorization of the owner, owner’s agent, or operator of a covered building, as defined, to deliver or provide aggregated energy usage data for a covered building to the owner, owner’s agent, operator, or to the owner’s account in the Energy Star Portfolio Manager, subject to specified requirements. The bill would also authorize the commission to specify additional information to be delivered by utilities for certain purposes.

Local Regulations

City of San Leandro Municipal Code

The City of San Leandro Municipal Code is a primary tool that shapes the form and character of physical development in San Leandro. The Municipal Code identifies site development regulations, and other general provisions that ensure consistency between the General Plan and proposed development projects. The Municipal Code is organized by Title, Chapter, Article and Section. The current Municipal Code is up to date through Ordinance 2014-006 and the June 2014 code supplement. The following provision from the Municipal Code helps minimize energy use and conserve resources in San Leandro.

- **Chapter 3-7.** The City’s Construction and Demolition Debris Waste Reduction and Recycling Requirements, requires projects with valuations over $100,000 (adjusted every five years from 2008) to recycle 100 percent of asphalt and concrete and 50 percent of remainder of construction and demolition debris.

- **Chapter 3-19.** The City’s Green Building Ordinance, requires a minimum Leadership in Energy & Environmental Design (LEED) rating of “Silver” for construction projects valued at over $3 million on City-owned facilities. (LEED is a rating system created by the U.S. Green Building Council that ranks different levels of design and construction aimed at improving a building’s energy efficiency.) The ordinance promotes healthy and efficient City facilities through design, construction, and operation, and helps the City reduce its energy consumption and carbon emissions. Green buildings use recycled-content materials, consume less energy and water, have better indoor air quality, and use
fewer natural resources than conventional buildings. The chapter finds that the most immediate and meaningful way to advance this cause is to include green building elements in City projects, and to encourage private projects to include green building elements.

**City of San Leandro Green Building Checklist**

A Green Building Checklist to ensure compliance with the 2013 California Green Building Standard Code, also known as CALGreen, is listed on the City’s web site for both residential and commercial projects. Starting January 1, 2014, new construction, additions, and alterations are subject to CALGreen requirements. The checklist must be submitted with and incorporated into the plan sets, and any items that are marked on the checklists must then be referenced and detailed in the plans.

**Voluntary Green Building Guidelines for Private Development**

In 2006, the San Leandro City Council endorsed several leading guidelines developed by outside organizations for commercial and residential green building practices as well as sustainable landscaping. The endorsed guidelines include: 1) Build it Green GreenPoint Rated Guidelines (residential); 2) US Green Building Council (LEED) Guidelines (commercial); and 3) Sustainable Landscaping Guidelines. The guidelines are available on the City’s web site. To help private developers and homeowners implement green building measures, several City of San Leandro staff members have completed technical training in green building, and the City maintains an informational kiosk showcasing green building materials and techniques in its Permit Center on the first floor of City Hall.

**City of San Leandro Climate Action Plan**

The City Council adopted the San Leandro Climate Action Plan in December 2009. Since January 2010 various City departments have carried out energy upgrades with federal Stimulus funds, as well as other federal, State and City resources. In 2013, the City proposed a Final Climate Action Plan will be transformed into a Sustainability Element for the General Plan at a future update.77

The Climate Action Plan and GHG reduction measures and actions are structured around the four general categories of GHG emissions, as identified by the GHG inventory. They are:

- Energy use in buildings (Commercial/industrial, and residential).
- Transportation and land use.
- Waste.
- Municipal operations.

The first three categories focus on programs and actions to influence the behavior of households and businesses in the community. Municipal operations encompass City facilities, fleet and waste operations, as the City has unique opportunities to directly control these emissions.

The City has taken various actions to date that reduce GHG emissions (and conserve energy). The City joined 1,000 other U.S. cities, signing the U.S. Mayor’s Climate Protection Commitment. The City has also joined the Alameda County Climate Protection Project and the U.S. Green Building Council, sponsored by StopWaste. San Leandro is a member of the countywide Energy Joint Powers Agency which is staffed by StopWaste.

**Existing Conditions**

Pacific Gas and Electric Company (PG&E) provides “grid” electricity and natural gas services to the City of San Leandro. PG&E is a publicly traded utility company which generates, purchases, and transmits energy under contract with the CPUC. PG&E owns and maintains above- and below-ground networks of electric and gas transmission and distribution facilities throughout the city. Both gas and electrical service is available throughout the Project site.

PG&E’s service territory is 70,000 square miles in area, roughly extending north to south from Eureka to Bakersfield, and east to west from the Sierra Nevada mountain range to the Pacific Ocean.

**Electricity**

PG&E’s total service territory electricity distribution system consists of 141,215 circuit miles of electric distribution lines and 18,616 circuit miles of interconnected transmission lines. PG&E electricity is generated by a combination of sources such as coal-fired power plants, nuclear power plants, and hydroelectric dams, as well as newer sources of energy, such as wind turbines and photovoltaic plants or “solar farms.” “The Grid,” or bulk electric grid, is a network of high-voltage transmission lines that link power plants with the PG&E system. The distribution system, comprised of lower voltage secondary lines, is at the street and neighborhood level, and consists of overhead or underground distribution lines, transformers, and individual service “drops” that connect to the individual customer.

PG&E produces or buys its energy from a number of conventional and renewable generating sources, which travel through PG&E’s electric transmission and distribution systems. The power mix PG&E provided to customers in 2014 consisted of non-emitting nuclear generation (21 percent), large hydroelectric facilities (8 percent) and eligible renewable resources (27 percent), such as wind, geothermal, biomass, solar and small hydro. The remaining portion came from natural gas/other (24 percent) and unspecified power (21 percent). Unspecified power refers to electricity that is not traceable to specific generation sources by any auditable contract trail. In addition, PG&E has plans to increase the use of renewable power. For instance, PG&E purchases power from customers that install small scale renewable generators (e.g., wind turbines or photovoltaic cells) up to 1.5 megawatts in size. In 2013, PG&E served 23.8 percent of their retail electricity sales with renewable power. PG&E currently has 31.3 percent renewable energy under contract for 2020.

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78 In addition to the actions described above, the City received $732,400 in American Recovery and Reinvestment Act (ARRA) funds, which were spent on energy efficiency programs available to residents, as well as upgrades to municipal facilities (HVAC, lighting, street light conversion to LED, etc.), per comments from Debbbie Pollart, City of San Leandro, April 21, 2016.


Utilities and Service Systems

PG&E’s projected annual electricity demand growth between 2012 and 2024 is 1.25 percent.\textsuperscript{81} Energy providers in the State project demand by assuming future economic growth and take into account projects such as the proposed San Leandro General Plan Update.

Natural Gas

PG&E’s natural gas (methane) pipe delivery system includes 42,141 miles of distribution pipelines, and 6,438 miles of transportation pipelines. Gas delivered by PG&E originates in gas fields in California, the US Southwest, US Rocky Mountains, and from Canada. Transportation pipelines send natural gas from fields and storage facilities in large pipes under high pressure. The smaller distribution pipelines deliver gas to individual businesses or residences.

PG&E gas transmission pipeline systems serve approximately 4.2 million gas customers in northern and central California. The system is operated under an inspection and monitoring program. The system operates in real time on a 24-hour basis, and includes leak inspections, surveys, and patrols of the pipelines. A new program, the Pipeline 2020 program, aims to modernize critical pipeline infrastructure, expand the use of automatic or remotely-operated shut-off valves, catalyze development of next-generation inspection technologies, develop industry-leading best practices, and enhance public safety partnerships with local communities, public officials, and first responders.

Several PG&E gas transmission pipelines run beneath the city. One line trending approximately north-south runs the length of the city roughly aligned with Washington Avenue and San Leandro Boulevard. A second line runs the length of the City to the west of and roughly parallel to the aforementioned line, approximately aligned with the Union Pacific Railroad right-of-way and parallel to Menlo Street. A third line crosses the two aforementioned lines, roughly aligned with Fairway Drive and Alladin Avenue.\textsuperscript{82} Distribution pipelines are located throughout the EIR Study Area.

4.14.5.2 Thresholds of Significance

As previously discussed, Appendix F, Energy Conservation, of the CEQA Guidelines, requires a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy; however, no specific thresholds of significance for potential energy impacts are published in the State CEQA Guidelines or are established by the City of San Leandro. Therefore, this EIR analysis determined that impacts would be significant if the proposed Plan, upon buildout, would result in a substantial increase in natural gas and electrical service demands that would require the new construction of energy supply facilities and transmission infrastructure or capacity enhancing alterations to existing facilities, paralleling the threshold determinations for other utility and service systems under Appendix G. To further the intent of Appendix F, relevant, potential impacts listed in that appendix are also incorporated in the evaluation.


Appendix F lists the following possible impacts to energy conservation that should be considered to the extent they are applicable and relevant to a particular project:

1. The project’s energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials maybe discussed.

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.

3. The effects of the project on peak and base period demands for electricity and other forms of energy.

4. The degree to which the project complies with existing energy standards.

5. The effects of the project on energy resources.

6. The project’s projected transportation energy use requirements and its overall use of efficient transportation alternatives.

The analysis included in Section 4.14.5.3 below focuses on discussions related to possible impact numbers 2, 4, 5, and 6 listed above. Focus on these potential impacts was done because they are relevant and applicable to the programmatic analysis in this DEIR, and the development allowed under the proposed project does not represent a unique or energy-intensive use that would be substantially different than other similar projects.

4.14.5.3 IMPACT DISCUSSION

This section analyzes the proposed project’s potential impacts and cumulative impacts to electric and natural gas services and infrastructure, supply and demand, and energy conservation.

**UTIL-13** Implementation of the proposed project would not result in a substantial increase in natural gas and electrical service demands, and would not require new energy supply facilities and transmission infrastructure or capacity enhancing alterations to existing facilities.

The proposed Plan would substantially affect energy supply and conservation if it would allow development that would result in a substantial increase in natural gas and electrical service demands that would require the new construction of energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities.

The development allowed with buildout of the proposed Plan would result in a long-term increase in energy demand, associated with the operation of lighting and space heating/cooling in the added building space, and vehicle travel. In addition, construction activities associated with development require the use of energy (e.g., electricity and fuel) for various purposes such as the operation of construction equipment and tools, as well as excavation, grading, demolition, and construction vehicle travel.

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83 Appendix F provides electricity and gas use inputs to greenhouse gas generation estimates. Total electricity use is projected to increase from 487,751,630 Kwh in 2015 to 607,254,929 Kwh in 2035 under the proposed Plan; a 25 percent increase in electricity use over 20 years. Total natural gas use is projected to increase from 26,451 therms in 2015 to 32,511,466 therms in 2035 under the Plan; a 23 percent increase in natural gas use over 20 years.
Proposed General Plan Update

Energy Efficiency Standards Impacts

Development under the proposed Plan would comply with existing state and local energy efficiency standards and guidelines that conserve energy. For example, new buildings and additions in California are subject to compliance with the energy efficiency standards of Title 24 of the California State Building Code.

In addition, the City's Green Building Ordinance, Chapter 3.19 of the Municipal Code, promotes healthy and efficient City facilities through design, construction, and operation, and helps the City reduce its energy consumption and carbon emissions. It also requires a minimum LEED rating of "Silver" for construction projects valued at over $3 million on City-owned facilities.

Also, the City’s Climate Action Plan and GHG reduction measures and actions, which also serve to conserve energy, are structured around the four general categories of GHG emissions, as identified by the GHG inventory:
- Energy use in buildings (Commercial/industrial, and residential).
- Transportation and land use.
- Waste.
- Municipal operations.

The first three categories of GHG emissions focus on programs and actions to influence the behavior of households and businesses in the community. Municipal operations encompass City facilities, fleet and waste operations, as the City has unique opportunities to directly control GHG emissions (and conserve energy).

Because the proposed Plan complies with existing energy standards, impacts would be less than significant.

Construction Energy Impacts

As discussed in Section 4.6, Greenhouse Gas Emissions, the EPA adopted the Heavy-Duty National Program to establish fuel efficiency and GHG emission standards in the heavy-duty highway vehicle sector, which includes combination tractors (semi-trucks), heavy-duty pickup trucks and vans, and vocational vehicles (including buses and refuse or utility trucks). These standards include targets for gallons of fuel consumed per mile beginning in model year 2014. These standards are being extended through model year 2018 via current rulemaking by the EPA. While construction activities require a commitment of energy sources, these efficiency standards improve energy security and innovation in clean energy technology and further the goal of conserving energy in the context of project development. As a result, the propose Plan would result in a less-than-significant impact.

Operational Energy Impacts

New development allowed under the proposed Plan would be constructed using energy efficient modern building materials and construction practices, in accordance with CPUC’s Long Term Energy Efficiency Strategic Plan (2008), and the City’s Green Building Ordinance (Chapter 3-19) and Green Building

Checklist. The new buildings also would use new modern appliances and equipment, in accordance with the 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). In addition, development under the proposed Plan would be required to comply with the current CALGreen Building Code, which requires the use of recycled construction materials, environmentally sustainable building materials, building designs that reduce the amount of energy used in building heating and cooling systems as compared to conventionally built structures, and landscaping that incorporates water efficient irrigation systems. The City’s Construction and Demolition Debris Waste Reduction and Recycling Requirements (Municipal Code, Chapter 3-7) establishes a more stringent requirement on recycling asphalt and concrete materials – 100 percent. Re-use of these materials as road base reduces energy consumption associated with new production of these materials. To the extent demolition materials are used on-site, further reductions in energy consumption are achieved as the need for off-site transport of materials is reduced.

In addition, as outlined below, the proposed Plan includes goals, policies, and actions that reflect the potential mitigation measures identified in Section D, Appendix F, Energy Conservation, of the CEQA Guidelines; and ensure energy conservation and GHG reduction is practiced in San Leandro.

- **Goal OSC-8: Energy.** Promote the efficient use of energy and the increased use of renewable energy by San Leandro residents and businesses.

- **Policy OSC-8.1: Conservation and Energy Efficiency.** Strongly advocate for increased energy conservation by San Leandro residents and businesses, and ensure that the City itself is a conservation role model.

- **Action OSC-8.1.A: Climate Action Plan Implementation.** Implement the energy efficiency measures outlined in the San Leandro Climate Action Plan, and periodically update these measures to reflect new Code requirements, emerging technology, completed actions, and new opportunities. Among the measures identified are locally adopted energy efficiency standards, a third party or municipal financing program for energy efficiency, a revolving loan for energy efficiency improvements, and various education and outreach strategies.

- **Action OSC-8.1.B: Energy Retrofits of Public Facilities.** Continue the retrofitting of City facilities and infrastructure to reduce energy consumption and costs. This should include conversion of the City’s streetlight system to LED lighting, study of the feasibility of solar energy at the wastewater plant, and future retrofits in response to new technology and energy resources.

- **Policy OSC-8.2: Planning and Building Practices.** Encourage construction, landscaping, and site planning practices that minimize heating and cooling costs and ensure that energy is efficiently used. Local building codes and other City regulations and procedures should meet or exceed state and federal standards for energy conservation and efficiency, and support the City’s greenhouse gas reduction goals.

- **Policy OSC-8.3: Weatherization and Energy Upgrades.** Promote the weatherization and energy retrofitting of existing homes and businesses, including the development of solar space heating and water heating systems, and the use of energy-efficient lighting, fixtures and appliances.

- **Policy OSC-8.4: Local Energy Resources.** Accommodate the use of local alternative energy resources, such as solar power, wind, methane gas, and industrial waste heat (cogeneration). Ensure that alternative energy infrastructure is compatible with surrounding land uses and minimizes environmental impacts on the community.
Action OSC-8.4.A: Community Choice Aggregation. Continue to explore Community Choice Aggregation, an approach to energy procurement in which the City would partner with other jurisdictions to secure alternative energy supply contracts.

Action OSC-8.4.B: Design Guidelines for Wind Turbines. Develop design guidelines for wind turbines and other wind energy facilities, and encourage the use of such facilities in the city, where aesthetic and environmental concerns can be sufficiently addressed.


Policy OSC-8.5: Public Information and Education. Promote public information and education on energy conservation and retrofit programs, in part through partnerships with the agencies offering such programs.

Action OSC-8.5.A: Realtor and Lender Program. Work with local realtors and lenders to distribute information on local energy retrofit programs, “Energy Star” products, energy-related tax credits, and local contractors providing retrofit and weatherization services.

Action OSC-8.5.B: Public Information. Develop and disseminate information to San Leandro residents and businesses on energy conservation and renewable energy opportunities, including advantageous financing programs for residents and businesses. Work with the School Districts to provide similar information to school children and their families.

Policy OSC-8.6: Reducing Peak Demand. Encourage innovative responses to reduce peak demands on the electric power grid, such as flexible work shifts and the development of local power sources.

Compliance with the CALGreen Building Code and the other applicable state and local energy efficiency measures, cited above, would ensure that the project would not include wasteful, inefficient and unnecessary consumption of energy and that significant energy conservation and savings would be realized in the new development allowed under the proposed Plan. Even with the energy saving practices in place, it is possible that new electrical connections, switches and/or transformers might be required to serve new structures and/or carry additional loads within the city. However, the short-term construction-related potential environmental impacts (e.g., noise, air emissions, traffic impacts) from possible new electrical connections/switches/transformers within the city are not anticipated to be significant and, to the extent they may be necessary for individual development projects, are anticipated infrastructure improvements and/or would be evaluated under CEQA review for the individual projects. In addition, most of the work would be in existing public rights-of-way or facilities, and would be subject to compliance with applicable regulations and standard conditions of approval for construction projects, including City permits/review for construction within public rights-of-way (e.g., grading permits, private development review, encroachment permits, etc.). The measures discussed above would serve to reduce energy consumption would decrease potential impacts and would result in a less than significant impact.

Transportation Energy Impacts

Chapter 4.13, Transportation and Traffic, provides an evaluation of the expected traffic and transit trips generated by the Project. Implementation of the proposed Plan would result in increased vehicle traffic. Total daily VMT are forecast to increase from 4,102,665 without the Project in 2015 to 4,829,878 with the Project in 2035. However, VMT per capita is forecast to decrease to 24.0 miles per service population per
day in 2035 with the project, compared to 24.7 miles per service population per day in 2015 under existing conditions. As discussed in Section 4.13.1.1, Regulatory Framework, SB 743 requires impacts to transportation network performance be viewed through a filter that promotes the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. SB 743 identified possible alternative metrics, including VMT and VMT per capita, which can help identify how projects (land development and infrastructure) affect GHG emissions (and energy conservation).

As discussed above and in Chapter 4.6, Greenhouse Gas Emissions, the EPA adopted standards that include targets for gallons of fuel consumed per mile beginning in model year 2014. These standards are being extended through model year 2018 through current rulemaking by the EPA. While future transportation would require a commitment of energy sources, these efficiency standards improve energy security and innovation in clean energy technology and further the goal of conserving energy in the context of project development allowed by the proposed Plan.

*Plan Bay Area* is the Bay Area’s SCS, adopted to reduce GHG emissions from land use and transportation, as required by SB 375. ABAG and MTC are currently in the process of preparing an update to the nine-county RTP/SCS, Plan Bay Area 2035, to reflect the updated priorities of the Bay Area. The housing, population, and employment forecasts prepared by ABAG will be integrated into the scenario modeling tools used to develop Plan Bay Area 2035 in order to build upon earlier efforts to develop an efficient transportation network and grow in a financially and environmentally responsible way. The update will identify long-term goals to reduce GHG emissions from cars and light-duty trucks, house the region’s projected population, improve public health, maintain the region’s transportation infrastructure, and preserve open space.84

Development under the proposed Plan will be infill development that inherently conserves transportation energy. As explained in Section 4.6.1.1, above, the *Plan Bay Area* land use concept plan for the region concentrates the majority of new population and employment growth in the region in locally-designated PDAs. PDAs are transit-oriented, infill development opportunity areas within existing communities. In San Leandro, *Plan Bay Area* includes several PDAs:85

- Downtown Transit Oriented Development (City Center) PDA
- East 14th Street Mixed Use Corridor PDA
- Bay Fair BART Transit Village (Transit Town Center) Potential PDA

The proposed Plan would encourage development consistent with the goals and objectives for these PDAs, though Bay Fair is a potential PDA and in the process currently of creating a TOD Specific Plan near BART and Bayfair Center to enable the area to become a full PDA.

As summarized below, the proposed Plan also includes policies that, once adopted, would reduce energy use (and GHG emissions) from transportation sources to the maximum extent practicable.

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Pol T-1.10: Reduced Trip Generation. Encourage local employers to develop programs that promote ridesharing, flextime and telecommuting, bicycle use, and other modes of transportation that reduce the number and distance of vehicle trips generated.

Policy T-2.1: Complete Streets Serving All Users and Modes. Create and maintain “complete” streets that provide safe, comfortable, and convenient travel through a comprehensive, integrated transportation network that serves all users.

Policy T-2.8: Car-Sharing and Bike-Sharing. Encourage car-sharing, bike-sharing and other programs that reduce the need for individual car ownership. Such programs should be focused in the Downtown area and near the city’s two BART stations.

Policy T-3.1: Citywide Bikeway System. Develop and maintain a bikeway system that meets the needs of both utilitarian and recreational users, reduces vehicle trips, and connects residential neighborhoods to employment and shopping areas, BART stations, schools, recreational facilities and other destinations throughout San Leandro and nearby communities.

Policy T-3.3: Designing for Multiple User Groups. Recognize the dual needs of experienced cyclists relying on bicycles for commute trips and daily travel and less experienced cyclists using bicycles principally for recreation. Where needed, develop facilities designed to serve each user group, with recreational routes primarily using low-volume streets and off street bike paths.

Policy T-3.5: Accommodation of Bicycles and Pedestrians. Require new development to incorporate design features that make walking, bicycling, and other forms of non-motorized transportation more convenient and attractive. Facilities for bicycles and pedestrians, including secured bicycle parking, clearly marked crosswalks, well-lit streets and sidewalks, landscaping, and street furniture should be provided within new employment areas, shopping destinations, multi-modal transportation facilities, and community facilities.

Policy T-3.6: Pedestrian Environment. Improve the walkability of all streets in San Leandro through the planning, implementing, and maintaining of pedestrian supportive infrastructure.

Policy T-3.7: Removing Barriers to Active Transportation. Reduce barriers to walking and other forms of active transportation such as incomplete or uneven sidewalks, lack of wheelchair ramps and curb cuts, sidewalk obstructions including cars parked on sidewalks, trail gaps, wide intersections, and poor sidewalk connections to transit stops.

Policy T-3.8: Education on Walking and Biking Benefits. Raise awareness of the benefits of walking and biking, such as reduced noise, energy consumption, congestion and parking demand; improved air quality; and opportunities for exercise and a healthy lifestyle.

Pol T-4.1: Coordination with Service Providers. Work collaboratively with AC Transit and BART to ensure that public transit service remains safe, reliable, and affordable, and to improve service frequency and coverage within San Leandro neighborhoods and employment centers.

Policy T-4.2: Integration of Schedules. Support efforts by BART and AC Transit to integrate their schedules to reduce the loss of time associated with intermodal connections.

Policy T-4.3: Shuttle Buses. Continue existing shuttle services and ensure they remain as a viable alternative to driving. Shuttles should connect the City's BART stations with major employment centers, residential areas, schools, shopping, health and other activity centers.
• **Policy T-4.4: Coordination of Shuttle Services.** Promote the consolidation of private shuttle services to provide more efficient and comprehensive service between the City’s employment centers and major public transit facilities, and to make the expansion of such service more viable. Where shuttle service is provided, it should supplement rather than compete with conventional public transit service.

• **Policy T-4.5: Passenger Amenities.** Encourage amenities, such as shelters, lighting, and real-time information on bus arrivals and departures to increase rider safety, comfort and convenience.

• **Policy T-4.6: Barrier Free Transit.** Work with local public transit providers and social service agencies to eliminate barriers to personal mobility and more completely meet the transportation needs of persons with disabilities.

• **Policy T-4.8: Legislation and Pricing Strategies.** Support legislation and pricing strategies which make public transit more economical and affordable than driving.

• **Policy T-4.9: BART Station Provisions for Bicycles and Pedestrians.** Ensure that all BART stations and major bus routes are served by the bicycle and pedestrian systems. Bicycle and pedestrian connections between the Downtown San Leandro and Bay Fair BART stations and the surrounding neighborhoods, business districts, and community institutions should be improved, with special attention to the at-grade railroad crossings and connections through the parking lots.

• **Policy T-5.2: Evaluating Development Impacts.** Use vehicle miles traveled (VMT) as the primary metric for evaluating the transportation impacts of new development proposals. Traffic impact studies may also consider the total number of trips generated and the resulting impact on traffic volumes and congestion (e.g., “Level of Service”), but VMT shall provide the primary basis for determining appropriate mitigation measures.

• **Policy T-5.7: Technology and Roadway Efficiency.** Use technology, including smart phone applications, roadway sensors, and real time data on congestion, travel time, and parking supply to create a more efficient transportation system, and to maximize the benefits of the existing road system before investing in its expansion.

• **Policy T-5.8: Electric and Low Emission Vehicles.** Plan for a substantial increase in the number of electric vehicles and other low-emission or zero-emission vehicles on city streets. This should include the development of electric vehicle charging stations at the BART stations, in large parking structures and parking lots, at City facilities (including City parking facilities), in high-employment workplaces, and at other destinations around the city.

• **Policy T-5.9: Autonomous (Driverless) Vehicles.** Monitor the development of autonomous vehicle technology, and actively take part in regional discussions regarding the potential effects of these vehicles on local and regional traffic flow.

• **Policy T-6.1: Traffic Calming Strategies.** Use a variety of approaches to slow down or “calm” traffic on San Leandro streets, based on the specific conditions on each street. Emphasize approaches that improve conditions for pedestrians and bicyclists and enhance neighborhood aesthetics.

• **Policy T-6.5: Truck Routes.** Designate appropriate San Leandro streets as truck routes so that industrial traffic is channeled away from residential areas. The selection of truck routes should consider neighborhood impacts, freeway access, truck parking needs, turning radii requirements, and the locations of businesses generating the largest volumes of truck traffic.
These policies and strategies, which encourage use of alternative modes of transportation, would strengthen support for future development within San Leandro’s PDAs, consistent with the objectives of Plan Bay Area.

The measures summarized above would decrease potential GHG emissions and increase efficient transportation options, and would result in a less-than-significant impact.

Utility-Scale Energy Impacts

The proposed Project would be within the 70,000-square-mile PG&E service territory for electricity and natural gas generation, transmission and distribution. Due to the proposed Project’s size and location within an urban development, buildout of the proposed Project would not significantly increase energy demands within the service territory and would not require new energy supply facilities or transmission infrastructure. In addition, development in accordance with the proposed Plan is anticipated in the energy projections of PG&E and other energy providers within the State. As a result, new energy supply facilities and transmission infrastructure, or capacity-enhancing alterations to existing facilities, would not be required. Therefore, with consideration of the applicable regulations listed below, impacts related to energy conservation and utility electrical and gas facilities would be less than significant.

Applicable Regulations:
- California (CEC’s) 2006 Appliance Efficiency Regulations
- California Global Warming Solutions Act of 2006, Scoping Plan
- CALGreen Building Code
- City of San Leandro Green Building Checklist
- City of San Leandro Municipal Code, Chapter 3-19, The City's Green Building Ordinance
- City of San Leandro Climate Action Plan

Significance before Mitigation: Less than significant.

Proposed Zoning Code Amendments

The proposed amendments to the Zoning Code would bring the Zoning Code into conformance with the proposed Plan. Proposed Zoning Code amendments that would allow increased growth that could increase energy usage in San Leandro include increased building density, intensity (FAR), and heights in commercial districts. The potential increase in growth as a result of these Zoning Code amendments is captured in the buildout of the proposed Plan that is analyzed above. As described above, development under the proposed Plan would comply with existing energy standards, construction efficiency standards, the CALGreen Building Code and the other applicable state and local energy efficiency measures, the goals and objectives for PDAs in Plan Bay Area, and applicable regulations listed above. In addition, the proposed Plan includes goals, policies, and actions that promote energy conservation and efficiency. Therefore, impacts from the proposed Plan and associated Zoning Code amendments would be less than significant.

Significance before Mitigation: Less than significant.
4.14.5.4 CUMULATIVE IMPACTS

UTIL-14 The proposed project, in combination with past, present, and reasonably foreseeable development, would result in less-than-significant impacts with respect to energy conservation.

The discussion under UTIL-13 described the proposed project’s impacts in relationship to the PG&E service territory for natural gas and electricity and therefore includes a discussion of cumulative impacts.

Significance before Mitigation: Less than significant.