4.14 UTILITIES AND SERVICE SYSTEMS

This chapter describes the existing utilities and service systems for the Project site and evaluates the potential environmental consequences of implementing the Project. Water supply, wastewater, solid waste, 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. Stormwater, as it relates to both water quality and capacity, is addressed in Chapter 4.8, Hydrology and Water Quality, of this Draft EIR.

4.14.1 WATER

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

4.14.1.1 ENVIRONMENTAL SETTING

Regulatory Setting

Federal Regulations

Federal Safe Drinking Water Act

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 U.S. 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.

UTILITIES AND SERVICE SYSTEMS

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 at the local area. 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.

California Senate Bills 610 and 221

The Senate Bill (SB) 610 and SB 221 amended State law to ensure better coordination between local water supply and land use decisions and confirm that there is an adequate water supply for new development. SB 610 is not applicable to General Plan Amendments that do not propose or authorize specific development projects. SB 221 only applies to residential subdivisions. Both statutes require that detailed information regarding water availability be provided to City of San Leandro decision-makers prior to approval of large development projects. SB 610 requires the preparation of a water supply assessment (WSA) for certain types of projects, as defined by Water Code Section 10912, which are subject to the California Environmental Quality Act (CEQA). Projects required to prepare a WSA are defined as follows:

- 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.
- Industrial, manufacturing, or 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).

[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.

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

The Water Conservation Act of 2009[2], 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 and requires new buildings to reduce water consumption by 20 percent. 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 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

[2] Department of Water Resources, Senate Bill SBX7-7 2009 Information, http://www.water.ca.gov/wateruseefficiency/sb7/, accessed July 28, 2014.

- 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 will all applicable provisions of the current edition of the California Plumbing Code.

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 - East Bay Municipal Utilities District (EBMUD) - adopted its 2010 UWMP in June 2011.

San Leandro General Plan

The City of San Leandro's General Plan was adopted by the San Leandro City Council in May 2002 and updated in 2011 to include the updated Housing Element. The General Plan includes goal, policies, actions, and implementation strategies with regards to conserving water and reducing water usage, as summarized in Table 4.14-1.

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 provisions from the Municipal Code help conserve water 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 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.

TABLE 4.14-1 WATER-RELATED GOALS AND POLICIES OF THE SAN LEANDRO GENERAL PLAN

Goal/Policy Number	Goals, Policies, and Actions Text	Implementation Strategies
Chapter 5, Open Space, Parks and Conservation		
Goal 27	**Resource Conservation.** Promote recycling, water conservation, and other programs which create a more sustainable environment.	
Policy 27.02	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 27.02-A: Urban Water Management Plan*** *Take the actions necessary to implement EBMUD's Urban Water Management Plan at the local level.* ***Action 27.02-B: Recycled Water use on Golf Courses*** *Coordinate with the Regional Water Quality Control Board, EBMUD, and other agencies to implement plans for recycled water delivery to Marina Park, the Monarch Bay (Tony Lema and Marina) Golf Courses, and other landscaped public areas in San Leandro.*	Capital Improvement Program Intergovernmental Coordination Public Education and Outreach Programs
Policy 27.03	DROUGHT-TOLERANT LANDSCAPING Encourage the use of native vegetation and drought tolerant non-native vegetation in landscaping plans.	Water Conserving Landscape Ordinance
Policy 27.04	DEVELOPMENT STANDARDS Maintain local planning and building standards that encourage 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.	Building Code Conditional Use Permits Development Review
Policy 27.05	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 27.05-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.* ***Action 27.05-B: Recycling Incentives*** *Explore incentive programs to promote recycling, including awards or monetary bonuses for exemplary recycling customers.*	City Operating Procedures Public Education and Outreach Programs
Chapter 8, Community Services and Facilities		
Goal 52	**Infrastructure**. Ensure that local water, sewer, storm drainage, and solid waste 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 52-01	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.	Capital Improvement Program Development Review

TABLE 4.14-1 WATER-RELATED GOALS AND POLICIES OF THE SAN LEANDRO GENERAL PLAN

Goal/Policy Number	Goals, Policies, and Actions Text	Implementation Strategies
Policy 52-02	FAIR SHARE COSTS Require future development to pay its fair share of the cost of improving the water, sewer, drainage, and other infrastructure systems needed to serve that development. Use fees and other appropriate forms of mitigation to cover the costs of upgrading public infrastructure. *Action 52.02-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.*	Development Review Impact/In-Lieu Fees
Policy 52-03	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.	Intergovernmental Coordination

Source: City of San Leandro 2002-2015 General Plan.

- Chapter 3-22, Bay Friendly Landscaping Requirements for City Projects, 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 StopWaste[3] 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.
- 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.

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

[3] 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.

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

Water service in San Leandro, including the Project site, is provided by East Bay Municipal Utility District (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.[4]

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 use by riparian and senior appropriators and other downstream obligations, including protection of public trust resources; and
- Variability in rainfall and runoff.

During prolonged droughts, the Mokelumne River supply cannot meet EBMUD's projected customer demands. To address this, EBMUD has completed construction of the Freeport Regional Water Facility[5] and the Bayside Groundwater Facility,[6] which are also discussed below in the EBMUD Water Supply Planning section of this assessment. EBMUD has obtained and continues to seek supplemental supplies.

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

[4] East Bay Municipal Utilities District (EBMUD), 2011. Urban Water Management Plan 2010, June.

[5] 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.

[6] 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.

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 limits. Pipelines in San Leandro range from 4 to 36 inches in diameter.

Within the Project site, the San Leandro Marina is serviced by an 8-inch domestic water main running under Monarch Bay Drive. This main intersects a 12-inch water main running down Fairway Drive, an 8-inch main running under Neptune Drive and a 6-inch main running under Marina Boulevard. An 8-inch service line exists under Mulford Point Drive and a 6-inch service line exists under Pescador Point Drive. The existing library facility is serviced by a 6-inch line under Aurora Drive.

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 other 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. 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. 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. 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 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.

4.14.1.2 STANDARDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the 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 Project would have sufficient water supplies available to the serve the Project from existing entitlements and resources, and would not require new or expanded entitlements.**

The City submitted a water supply assessment (WSA) for the Project to EBMUD, and requested the utility's consultation and review, by letter dated April 16, 2014.[7] In its letter, the City estimated that the Project would generate up to 115,800 gallons per day of water demand [see Appendix I].

[7] City of San Leandro, 2014. Letter from Sally Barros, Principal Planner, City of San Leandro, to David J. Rehnstrom, EBMUD, dated April 16, 2014, regarding City of San Leandro Shoreline Development Project, Request for Water Consultation and Review of Water Supply Assessment.

UTILITIES AND SERVICE SYSTEMS

EBMUD responded by letter[8], dated May 13, 2014, and indicated that pursuant to Sections 10910-10915 of the California Water Code (SB-610), the project meets the threshold requirement for an assessment of water supply availability based on the amount of water this project would require, a mixed-use project that would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project (see Appendix I). According to EBMUD, historical water use of the Project site excluding structures that are to remain is approximately 30,000 gallons per day (gpd). EBMUD estimated the project water demand would be approximately 130,000 gpd at build out, indicating the project would increase water demand by 100,000 gpd.

EBMUD's May 13, 2014 Water Supply Assessment letter stated "[T]he water demand for the City of San Leandro Shoreline Development Project is accounted for in EBMUD's water demand projections as published in EBMUD's 2010 Urban Water Management Plan."

Since the 1970s, water demand within EBMUD's service area has ranged from 200 to 220 mgd in non-drought years. The 2040 water demand forecast of 312 mgd for EBMUD's service area can be reduced to 230 mgd with the successful implementation of water recycling and conservation programs, as outlined in the 201 0 UWMP. Although current demand is lower than estimated in the demand study in the UWMP, as a result of the recent multi-year drought and the downturn in the economy, the UWMP still reflects a reasonable expectation for growth over the long term for demand in year 2040.

The EBMUD's May 13, 2014 Water Supply Assessment letter stated "[T]he City of San Leandro Shoreline Development Project will not change EBMUD's 2040 demand projection."

In summary, build out of the Project would not result in insufficient water supplies from EBMUD under normal year conditions. In addition, during single-dry year and multiple-dry years, with the proposed and existing water conservation regulations and measures in place, and with EBMUD's supplemental supply plans, build out of the Project would not result in a significant impact on water supply from EBMUD, and new or expanded entitlements would not be needed. 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
- City of San Leandro General Plan

Significance Before Mitigation: Less than significant.

[8] East Bay Municipal Utilities District (EBMUD), 2014. Letter from William R. Kirkpatrick, Manager of Water Distribution and Planning Division, EBMUD, to Sally Barros, Principal Planner, City of San Leandro, dated May 13, 2014, regarding Water Supply Assessment – City of San Leandro Shoreline Development Project.

UTIL-2 The 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.

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

The Project 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 would be installed to provide water service to structures proposed by the Project. For example, there would be construction of a new water line within the proposed new right-of-way (ROW) for Mulford Point Drive, which would be re-aligned at the Monarch Bay Drive intersection. The majority of the development will be along Mulford Point Drive and at the north end of Monarch Bay Drive. If the existing 8-inch mains in this area are insufficient in size to provide necessary fire protection demand to the additional buildings, for example, then larger lines would be added as part of the Project.

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 would be done in street ROW and subject to compliance with the City's regulations and standard conditions for new construction related to water lines, including the EBMUD's requirements for construction projects.[9] For example, these regulations and conditions would require the water line construction to include best management practices that require construction to water 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, General 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 52.01 (cited above) 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 52.02 - Fair Share Cost; Policy 52.03 – Coordination; and Action 52.02-A - Infrastructure Impact Fee and Rate Updates) ensure that development pays its fair share for needed improvements to the water distribution system. Implementation of these policies will ensure the impact of expanding or extending water distribution lines is less than significant.

In summary, in accordance with the discussion under Impact UTIL-1, and applicable regulations below, buildout of the Project 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*.

[9] EBMUD.2014. New water service regulations. https://www.ebmud.com/customers/new-service-installations/new-water-service-regulations. Accessed October 2, 2014.

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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
- City of San Leandro General Plan – Infrastructure Policies 52-01 (Development Impacts); 52-02 (Fair Share Costs); 52-03 (Coordination)

Significance Before Mitigation: Less than significant.

4.14.1.4 CUMULATIVE IMPACT DISCUSSION

UTIL-3	**The 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 Project in combination with other reasonably foreseeable projects in the surrounding area. The geographic scope of this cumulative analysis is the EBMUD service area. While the Project would contribute to an increased cumulative demand for water supply, the increased demand would not exceed the long-term supply under normal circumstances, as discussed above. Additionally, 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, county, and local water conservation ordinances in place, all jurisdictions would be required to conserve water use through establishing water efficiency measures. In addition, the General Plan includes policies and strategies that would ensure adequate water supplies are available for the residents of San Leandro. General Plan Policy 27-02, 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 27.02-A, Urban Water Management Plan, calls for taking actions necessary to implement EBMUD's Urban Water Management Plan at the local level. Action 27.02-B, Recycled Water, calls for use of recycled water on Golf Courses. 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. Together, these regulations, policies, and other considerations would ensure that cumulative impacts with respect to water supply 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

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. Therefore, the cumulative impact would be *less than significant*.

Significance Before Mitigation: Less than significant.

4.14.2 SANITARY WASTEWATER SERVICE (SEWER)

This section describes the existing conditions and potential impacts of the 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. The Alameda County permittees include Alameda County, the Alameda County Flood Control and Water Conservation District, and 14 cities, including San Leandro.

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 Regional Water Quality Control Boards (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

San Leandro Sewer System Management Plan

The City of San Leandro has developed a Sewer System Management Plan (SSMP) to properly manage, operate, and maintain all parts of the City's sanitary sewer collection system and to satisfy the requirements of the State Water Resources Control Board Order #2006-0003. The Sewer System Management Plan (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 General Plan

The General Plan includes goal, policies, actions, and implementation strategies with regard to wastewater collection, treatment, and recycling, as summarized in Table 4.14-2.

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 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 conserve water resources and 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.

Existing Conditions

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

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. The City Water Pollution Control Division provides operation and maintenance of a Water Pollution Control Plant, 130 miles of pipeline from four to 33 inches in diameter, and 13 remote sewage lift stations.

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

UTILITIES AND SERVICE SYSTEMS

TABLE 4.14-2 WASTEWATER-RELATED GOALS AND POLICIES OF THE SAN LEANDRO GENERAL PLAN

Goal /Policy Number	Goals, Policies, and Actions	Implementation Strategies
Chapter 5, Open Space, Parks and Conservation		
Goal 27	**Resource Conservation.** Promote recycling, water conservation, and other programs which create a more sustainable environment.	
Policy 27.02	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 27.02-A: Urban Water Management Plan*** *Take the actions necessary to implement EBMUD's Urban Water Management Plan at the local level.* ***Action 27.02-B: Recycled Water use on Golf Courses*** *Coordinate with the Regional Water Quality Control Board, EBMUD, and other agencies to implement plans for recycled water delivery to Marina Park, the Monarch Bay (Tony Lema and Marina) Golf Courses, and other landscaped public areas in San Leandro.*	Capital Improvement Program Intergovernmental Coordination Public Education and Outreach Programs
Policy 27.05	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 27.05-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.* ***Action 27.05-B: Recycling Incentives*** *Explore incentive programs to promote recycling, including awards or monetary bonuses for exemplary recycling customers.*	City Operating Procedures Public Education and Outreach Programs
Chapter 8, Community Services and Facilities		
Goal 52	**Infrastructure**. Ensure that local water, sewer, storm drainage, and solid waste 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 52-01	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.	Capital Improvement Program Development Review
Policy 52-02	FAIR SHARE COSTS Require future development to pay its fair share of the cost of improving the water, sewer, drainage, and other infrastructure systems needed to serve that development. Use fees and other appropriate forms of mitigation to cover the costs of upgrading public infrastructure. ***Action 52.02-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.*	Development Review Impact/In-Lieu Fees
Policy 52-03	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	Intergovernmental Coordination

TABLE 4.14-2 WASTEWATER-RELATED GOALS AND POLICIES OF THE SAN LEANDRO GENERAL PLAN

Goal /Policy Number	Goals, Policies, and Actions	Implementation Strategies
	development.	
Policy 52-04	WASTEWATER COLLECTION AND TREATMENT Maintain efficient, environmentally sound, and cost-effective wastewater collection and treatment services in San Leandro. *Action 52.04-A: Infiltration/Inflow Capital Improvements* *Continue improvements to the City's wastewater collection system to correct infiltration and inflow problems. Ensure that high operating efficiency is retained in both the wastewater collection and treatment systems.*	Capital Improvement Program
Policy 52-05	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.	Capital Improvement Program Intergovernmental Coordination

Source: City of San Leandro 2002-2015 General Plan.

The City's Water Pollution Control Plant cleans about five million gallons of wastewater a day, with peak flows up to 23 million gallons per day during wet weather flow. The facility provides "secondary" wastewater treatment through physical, biological, and chemical processes. Treated effluent (water) is safely disposed of through a collectively owned[10] discharge pipe into the deep waters of the San Francisco Bay.

The City has developed a Sewer System Management Plan (SSMP) to properly manage, operate, and maintain all parts of the City's sanitary sewer collection system and to satisfy the requirements of the State Water Resources Control Board Order #2006-0003.[11] 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 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 to the connection with the public sewer. Maintenance and repair of service laterals are the responsibility of the property owner.

[10] East Bay Dischargers Authority is a Joint Powers Agency consisting of five local agencies, including the City of San Leandro.
[11] City of San Leandro Sewer Information, https://www.sanleandro.org/depts/pw/wpcp/sewer.asp, accessed July 29, 2014.

UTILITIES AND SERVICE SYSTEMS

Within the vicinity of the Project site, a 6-inch gravity sanitary system serves the west end of the Mulford Point Drive peninsula that drains the Marina office, a restroom building, a boater sewage pump-out facility, and the former Blue Dolphin Restaurant. The system drains to the "Blue Dolphin" lift station located just northeast of the former Blue Dolphin Restaurant. Sewage from the lift station is pumped via a 4-inch force main into another gravity system in Mulford Point Drive located about 300 feet east of the lift station.

The rest of the Project site is served via a gravity sewer system consisting of 6-inch and 8-inch pipes located under Mulford Point Drive and Pescador Point Drive, and near Monarch Bay Drive. This system serves Horatio's restaurant, El Torito restaurant, the San Leandro Yacht Club, Marina Inn, and the Spinnaker Yacht Club. These systems converge at a manhole near the intersection of Monarch Bay Drive and Mulford Point Drive. Beyond this manhole, an 8-inch gravity line runs north under the Marina 9-hole Golf Course until it terminates at the Neptune lift station near the intersection of Marina Boulevard and Neptune Drive. The pump station has three pumps rated at 900 gallons per minute (gpm) each, with 2,000 gpm capacity at max output, and pumps sewage via a 12-inch force main under Marina Boulevard to Nome Street and then via gravity to a main sewer interceptor in Doolittle Drive.[12]

There is also a six-inch gravity system line under Fairway Drive that drains sewage to the east towards Aurora Drive, and then gravity feeds down the eight-inch line on Aurora Drive and then to the Neptune Lift Station. This line will likely service the proposed residential housing development on the south portion of the Marina Golf Course as well as the new library/community center; the existing library is already connected to it.

Unrelated to the systems described above, there is a 48-inch force main system owned by East Bay Dischargers Authority that runs under Monarch Bay Drive that transmits treated wastewater effluent from the City Water Pollution Control Plant located at the west end of Davis Street to a dechlorinization facility south of Estudillo Canal. Discharge is ultimately to the deep water of the San Francisco Bay through the East Bay Dischargers Authority (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).[13]

Wastewater discharge (effluent) from EBDA and its member agencies, including the City of San Leandro (Water Pollution Control Plant), 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 CBOD, CBOD percent removal, TSS, TSS percent removal and pH will be determined at each individual treatment plant (i.e., including the San Leandro Water Pollution

[12] Walker, Judith M. City of San Leandro, Administrative Analyst September 23, 2014.
[13] East Bay Dischargers Association (EBDA), http://www.ebda.org/. Accessed July 29, 2014.

Control 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. Thus, the EBDA had 53 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. As reported in the Order No. R2-2012-004 (NPDES No. CA0037869), the San Leandro Water Pollution Control Plant 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.[14] In 2010, the *actual* ADWF from the Plant was 4.9 mgd. Thus, the Plant had 2.5 mgd of unused permitted dry weather flow capacity in 2010.

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 EBDA's system for final de-chlorination and discharge to the EBDA Common Outfall. 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.

4.14.2.2 STANDARDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the 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 Project's potential impacts and cumulative impacts to wastewater collection and treatment facilities.

[14] The treatment plant also is permitted by the RWQCB to discharge up to 22.3 mgd Peak Daily Wet Weather Flow (PDWWF).

UTIL-4 Implementation of the Project would not exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board.

The San Leandro sewer collection system will serve the Project and direct wastewater to the San Leandro Water Pollution Control Plant (SLWPCP). The SLWPCP directs 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 and the EBDA outfall in an NPDES Permit (Order No. R2-2012-0004), adopted in 2012. The NPDES Order sets out a framework for compliance and enforcement applicable to operation of the SLWPCP and its effluent, as well as other entities contributing influent to the EBDA's common outfall.

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 Plant had 2.7 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. Thus, the EBDA had 53 mgd of excess unused permitted dry weather flow capacity in 2010.

The Water Supply Assessments performed by the City and EBMUD estimated that the Project would increase water demand by approximately 100,000 to 115,800 gallons per day (gpd). If it is conservatively assumed that all of this increased water demand becomes wastewater, then the Project will generate an increase of approximately 100,000 to 115,800 gpd of wastewater. This is not a significant increase compared to the excess permitted capacity available in 2010 at the SLWPCP. 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.

With continued compliance with applicable regulations listed below, projected wastewater generated from the Project would not exceed the wastewater treatment requirements or capacity of the San Leandro Water Pollution Control Plant, 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 Project, 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
- City of San Leandro General Plan – Infrastructure Policies 52-01 (Development Impacts); 52-02 (Fair Share Costs); 52-03 (Coordination); 52-04 (Wastewater Collection and Treatment); and 52-05 (Capacity).

Significance Before Mitigation: Less than significant.

UTIL-5	The 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.

Build out of the Project 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 Project would not exceed the design or permitted capacity of the wastewater treatment plants serving the Project (i.e., SLWPCP).

The Project would continue to be provided with wastewater collection and treatment services from the City of San Leandro Water Pollution Control Division. 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 proposed by the Project. For example, the existing "Blue Dolphin" lift station at the west end of Mulford Point Drive is inadequate to handle flows from the proposed hotel and restaurants, and will need to be replaced with a station of greater pumping and storage capacity. Although creation of new or extended wastewater pipes or lift stations/capacities could create short-term construction related environmental effects; 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 for sewer construction projects, including City permits/review for construction within public rights-of-way (e.g., grading permits, private development review, encroachment permits, etc.). 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, General 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. For example, the Sanitary Sewer Line Replacement and Repair Project 2012/2013, anticipated to be completed in Spring 2015, will replace or repair sewer mains, manholes or other aspects of the sewage collection system identified by video inspections to be defective or in need of repair.[15]. According to the SSMP, the City capital improvement program (CIP) process includes a system for evaluating the City's collection system, which requires a continuing number of improvements including collection system capacity upgrades, correcting structural problems, and modifications to pump/lift stations and the treatment plant.[16,17] In addition, General Plan Policies 52.01, 52.02, 52.03 and 52.04 (cited above) will ensure that development is not approved until it can be demonstrated that adequate wastewater

[15] City of San Leandro. 2014. Planned Projects. https://sanleandro.org/depts/transit/project/planned_projects.asp. Accessed October 2, 2014.

[16] City of San Leandro, 2009. Sewer System Management Plan, Volume I, July 2009.

[17] In 2011 the City (Water Pollution Control Division) began a major rehabilitation of the treatment plant.

collection capacity exists, or until a financial commitment to create such capacity has been secured. The Project would not affect the currently planned improvements and would not require additional improvements beyond those 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 - Standards for Utilities
- City of San Leandro General Plan – Infrastructure Policies 52-01 (Development Impacts); 52-02 (Fair Share Costs); 52-03 (Coordination); 52-04 (Wastewater Collection and Treatment); and 52-05 (Capacity).

Significance Before Mitigation: Less than significant.

UTIL-6	**The Project would not result in the determination by the wastewater treatment provider, which serves the Project that it does not have adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments.**

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. In 2010, the actual ADWF from the Plant was 4.9 mgd. Thus, the Plant had 2.7 mgd of unused permitted dry weather flow capacity in 2010.

The Water Supply Assessments performed by the City and EBMUD estimated the Project would increase water demand by approximately 100,000 to 115,800 gallons per day (gpd). If it is conservatively assumed that all of this increased water demand becomes wastewater, then the Project will generate an increase of approximately 100,000 to 115,800 gallons of wastewater. Thus, the Project's worst-case estimated increase in wastewater flow represents less than 5 percent of the excess capacity available in 2010 at the SLWPCP. 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 (but not increase capacity).

The EBMUD UWMP projected future water demand to increase approximately 6.5%[18] between 2015 and 2040 for its entire service area, which includes the city of San Leandro. The SLWPCP in 2010 had 32%

[18] 2040 adjusted (recycling and conservation) demand (230 mgd) minus 2010 adjusted demand (216 mgd) divided by 216 mgd = ~ 6.5 %.

excess wastewater capacity (2.5/7.6). Therefore, cumulative future wastewater demand also will be easily accommodated by the Plant, based on the conservative assumption that wastewater demand is equal to water demand, and given that EBMUD's May 13, 2014 Water Supply Assessment letter stated "[T]he water demand for the City of San Leandro Shoreline Development Project is accounted for in EBMUD's water demand projections as published in EBMUD's 2010 Urban Water Management Plan."

With continued compliance with applicable regulations listed below, wastewater generated from the Project would not exceed the capacity of the San Leandro Water Pollution Control Plant, or the permitted capacity specified in the San Francisco RWQCB's Order No. R2-2012-0004 (NPDES No. CA0037869). Therefore, the Project would not result in the determination by the wastewater treatment provider that it does not have adequate capacity to serve the Project's projected demand in addition to the provider's 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
- City of San Leandro General Plan – Infrastructure Policies 52-01 (Development Impacts); 52-02 (Fair Share Costs); 52-03 (Coordination); 52-04 (Wastewater Collection and Treatment); and 52-05 (Capacity).

Significance Before Mitigation: Less than significant.

4.14.2.4 CUMULATIVE IMPACT DISCUSSION

UTIL-7	**The 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 Project in combination with reasonably foreseeable growth within the SLWPCP and EBDA service areas.

Buildout of the Project would generate a minor increase in the volume of wastewater delivered for treatment at SLWPCP and eventual discharge through EBDA's common outfall. This increase represents less than 5 percent of the *excess* available treatment capacity and less than 1.6 percent (115,800 gpd/7.6 mgd) of the *total* available treatment capacity at the SLWPCP in 2010. The increased Project wastewater flow represents less than 0.11 percent (115,800 gpd/107.9 mgd) of the EBDA's permitted average daily dry weather flow. Based on the current excess wastewater treatment capacity of SLWPCP and excess discharge capacity 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 and EBDA[19]. 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 produced by the 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 SSMP and would be treated according to the wastewater treatment requirements documented in the referenced NPDES permit for SLWPCP and EBDA, and enforced by the San Francisco RWQCB.

Therefore, with continued compliance with applicable regulations listed below, cumulative development combined with the Project 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
- 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
- City of San Leandro General Plan – Infrastructure Policies 52-01 (Development Impacts); 52-02 (Fair Share Costs); 52-03 (Coordination); 52-04 (Wastewater Collection and Treatment); and 52-05 (Capacity).

Significance Before Mitigation: Less than significant.

[19] According to the respective 2010 UWMPs, the project increased water demand from 2010 to 2035/2040 for the EBMUD (~ 6.5%), Alameda County Water District (ACWD) (16%), and the water suppliers to the LAVWMA (30%) – 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 (49%; 107.8-54.8/107.8). [Wastewater demand is conservatively assumed to be equivalent to water demand.]

4.14.3 SOLID WASTE

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 2013, the statewide residential per capita disposal rate was 4.4 pounds per resident per day, and the statewide employee per capita disposal rate was 10.2 pound per employee per day.[20]

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.

[20] Calrecycle, California's Statewide Per Resident, Per Employee, and Total Disposal Since 1989, http://www.calrecycle.ca.gov/lgcentral/GoalMeasure/DisposalRate/Graphs/Disposal.htm, accessed on July 31, 2014.

Global Warming Solutions Act of 2006, Scoping Plan[21]

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 5 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.

CAL Green 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.

[21] CalRecycle, http://www.calrecycle.ca.gov/Recycle/Commercial/. Accessed on July 31, 2014.

Local Regulations

City of San Leandro General Plan

The City continues to promote recycling and reduce the amount of solid waste placed in landfills. The General Plan includes goal, policies, actions and implementation strategies with regards to solid waste collection, recycling and disposal, as summarized in Table 4.14-3.

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[22] 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.

[22] City of San Leandro, Green Building Checklists, http://www.sanleandro.org/depts/cd/bldg/bldggreen.asp , accessed July 31, 2014.

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TABLE 4.14-3 SOLID WASTE-RELATED GOALS AND POLICIES OF THE SAN LEANDRO GENERAL PLAN

Goal /Policy Number	Goals, Policies, and Actions	Implementation Strategies
Chapter 5, Open Space, Parks and Conservation		
Goal 27	**Resource Conservation.** Promote recycling, water conservation, and other programs which create a more sustainable environment.	
Policy 27.01	RECYCLING Actively promote recycling, composting, and other programs that reduce the amount of solid waste requiring disposal in landfills. ***Action 27.01-A: Source Reduction and Recycling Programs*** Implement the Source Reduction and Recycling programs necessary to divert 75 percent of San Leandro's wastestream from landfills by 2010. ***Action 27.01-B: Waste Reduction Programs*** *Encourage special bulky waste pick-up events, citywide garage sales, programs offering rebates for inefficient appliances or polluting vehicles, and other waste collection activities that reduce pollution, excessive resource consumption, and improper waste disposal.* ***Action 27.01-C: Commercial and Multi-Family Residential Programs*** *Expand recycling programs serving multi-family dwellings and commercial-industrial customers, and develop new recycling programs that target construction and demolition debris and old computers. These programs should include a significant public information and education component aimed at local businesses and should be coordinated through the Chamber of Commerce and other business organizations.* ***Action 27.01-D: Food Waste Recycling*** *Implement a food waste recycling program.* ***Action 27.01-E: Public Education*** *Expand public education on recycling, particularly for apartment dwellers . Promote school programs that educate children about recycling.*	Solid Waste Management Program
Policy 27.05	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 27.05-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.* ***Action 27.05-B: Recycling Incentives*** *Explore incentive programs to promote recycling, including awards or monetary bonuses for exemplary recycling customers.*	City Operating Procedures Public Education and Outreach Programs
Chapter 8, Community Services and Facilities		
Goal 52	**Infrastructure**. Ensure that local water, sewer, storm drainage, and solid waste 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 52-01	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.	Capital Improvement Program Development Review
Policy 52-02	FAIR SHARE COSTS Require future development to pay its fair share of the cost of improving the	Development Review

TABLE 4.14-3 SOLID WASTE-RELATED GOALS AND POLICIES OF THE SAN LEANDRO GENERAL PLAN

Goal /Policy Number	Goals, Policies, and Actions	Implementation Strategies
	water, sewer, drainage, and other infrastructure systems needed to serve that development. Use fees and other appropriate forms of mitigation to cover the costs of upgrading public infrastructure. *Action 52.02-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.*	Impact/In-Lieu Fees
Policy 52-03	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.	Intergovernmental Coordination

Source: City of San Leandro 2002-2015 General Plan.

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.[23] 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.

Solid waste removal services for the Project site are provided by Alameda County Industries (ACI), a private hauler under a franchise agreement with the City of San Leandro. Solid waste is transported via truck to the transfer station at ACI's property 610 Aladdin Avenue. Solid waste is trucked from the transfer station to numerous landfills serving San Leandro.

CalRecycle reports that in 2013 a total of 165,366 tons of solid waste from San Leandro was disposed at 21 different landfills.[24] Ninety-five percent (95%) of San Leandro's solid waste in 2013 went to five of those facilities: Altamont Landfill & Resource Recovery (33,472 tons, or 20.24%); Forward Landfill, Inc. (39,092 tons, or 23.64%); Newby Island Sanitary Landfill (23,725, or 14.35%); Potrero Hills Landfill (19,683 tons, or 11.90%); and Vasco Road Sanitary Landfill (40,825 tons, or 24.69%).

[23] City of San Leandro, Green Building Guidelines, http://www.sanleandro.org/depts/cd/bldg/bldggreen.asp, accessed on July 31, 2014.

[24] CalRecycle Jurisdiction Disposal by Facility, http://www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=OriginJurisdictionIDs%3d447%26ReportYear%3d2013%26ReportName%3dReportEDRSJurisDisposalByFacility. Accessed on July 31, 2014.

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.[25]

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 8,668.00 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.

Newby Island Landfill

The Newby Island Sanitary Landfill is a subsidiary of Republic Services, and is located at 1601 Dixon Landing Road in the city of Milpitas. This Class III landfill was established in 1938 and has an area of 342 acres. This landfill's total capacity is 50.8 million cubic yards; as of 2000, the landfill's total estimated used capacity was 32.5 million cubic yards, or 64 percent of the landfill's total capacity. The remaining capacity was 18,274,953 cubic yards, as of October 16, 2006. The permitted daily disposal capacity is 4,000 tons per day, and the landfill is anticipated to have sufficient overall capacity until June 2025, its estimated closure date.

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.

[25] CalRecycle, "Facility Site summary Details: Altamont Landfill and Resource Recovery Facility (01-AA-0009)" http://www.calrecycle.ca.gov/SWFacilities/Directory/01-AA-0009/Detail/. Accessed on July 31, 2014.

4.14.3.2 STANDARDS OF SIGNIFICANCE

According to Appendix G, Environmental Checklist, of the CEQA Guidelines, the 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 Project would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs.

In 2013, CalRecycle reported that 95 percent of the City's solid waste disposal waste went to a total of five landfills. Table 4.14-4 compares the maximum daily capacity and estimated closure date for each of the five facilities.

TABLE 4.14-4 LANDFILLS EXISTING DAILY CAPACITY AND ESTIMATED CLOSURE DATE

Landfill Facility	Daily Capacity (tons/day)	Estimated Closure Date
Altamont Landfill	11,500	1/1/2025
Forward Sanitary Landfill	8,668	1/1/2020
Newby Island Landfill	4,000	6/1/2025
Potrero Hills Landfill	4,330	2/14/2048
Vasco Road Sanitary Landfill	2,250	8/31/2019

The City of San Leandro disposal rate per *resident* in 2011 was 4.0 pounds of solid waste per person per day (ppd), which was below the CalRecycle target of 8.7 ppd per resident. The disposal rate per business *employee* in the City in 2012 was 9.1 ppd, which was below the CalRecycle target rate of 18.2 ppd per employee.[26] CalRecycle also reports the City's per capita disposal rates in 2012 were 6.6 ppd for residents and 14.9 ppd for employees; however these 2012 data are still awaiting review by the agency[27]. The city of San Leandro's disposal rates for both residents and employees have been below target[28] rates since 2007.

[26] CalRecycle, Jurisdiction Diversion Post 2006, http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx. Accessed on July 31, 2014.

[27] 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 October 4, 2014.

[28] 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.

UTILITIES AND SERVICE SYSTEMS

In Section 4.11.3 of this Draft EIR it is estimated the Project will generate an increase of 970 residents and 822 jobs. For analysis purposes, if solid waste generation is assumed to be the actual 2012 San Leandro per capita generation rates of 6.6 ppd for residents and 14.9 ppd for employees, the total solid waste generated by the Project's residents and workers is estimated to be 18,650 pounds per day, or 9.3 tons per day.[29]

For analysis purposes this EIR assumes double the estimated rate of solid waste generated by the project residents and workers to account for visitors to the Project site (e.g., restaurants, hotels, recreation, etc.). This results in a total estimated solid waste generation rate for the Project of 18.6 tons per day, which is far less than one percent of the smallest daily capacity of the five landfills providing disposal services to the City (2,250 tons/day for Vasco Sanitary Landfill), as shown in Table 4.14-4. As such, the Project would have a less-than-significant impact with regard to daily capacity at each of the landfill facilities.

Four of the five 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 4.14-4. However, one of the five is not estimated to close until 2048 (Potrero Hills Landfill). In addition, there are 21 landfills that received waste from the City in 2013 and, if one or more of the five landfills on Table 4.14-4 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.

With continued compliance with applicable regulations listed below, leading to increased recycling and waste diversion, anticipated rates of solid waste disposal from the Project 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
- CAL Green 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 General Plan – Policies 27-01 (Recycling) and 27-05 (Conservation Practices).

Significance Before Mitigation: Less than significant.

UTIL-9 The Project would comply with federal, State, and local statutes and regulations related to solid waste.

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.

[29] 970 x 6.6 = 6,402 pounds, plus 822 x 14.9 = 12,248 pounds; totaling 18,650 pounds per day, or 9.3 tons per day.

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

Therefore, in accordance with the applicable regulations listed below, development of the Project 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
- CAL Green 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 General Plan – Policies 27-01 (Recycling) and 27-05 (Conservation Practices).

Significance Before Mitigation: Less than significant.

4.14.3.4 CUMULATIVE IMPACT DISCUSSION

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

The buildout of the Project will increase the quantity of solid waste for disposal. Although AB 939 established a goal for all California cities to provide at least 15 years of ongoing landfill capacity, growth from other projects within the City, and from other cities in the region, may exceed that which was taken into account when calculating landfill capacity. Also, because four of the five landfill facilities, which take approximately 95 percent of the City's solid waste (in 2013) 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 to accommodate existing or increased population and employment levels.

However, one of the main five landfills serving the City is not estimated to close until 2048 (Potrero Hills Landfill). In addition, there are 21 landfills that received waste from the City in 2013. If one or more of the main five landfills 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 growth in San Leandro with the Project is less than that anticipated by regional ABAG projections. In addition, the City's General Plan anticipated the growth in housing and employment proposed as a part of the Project. Therefore, considering that the amount of growth anticipated would not exceed ABAG projections and that the anticipated growth was adequately planned for in the City's General Plan, the 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 Project, 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
- CAL Green 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 General Plan – Policies 27-01 (Recycling) and 27-05 (Conservation Practices).

Significance Before Mitigation: Less than significant.

4.14.4 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. This section provides a general description of the regulatory setting addressing existing electric and natural gas services and infrastructure, and supply and demand in San Leandro.

4.14.4.1 ENVIRONMENTAL SETTING

Regulatory Framework

Federal Regulations

Energy Independence and Security Act of 2007

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.

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:

1. All new residential construction in California will be zero net energy by 2020;
2. All new commercial construction in California will be zero net energy by 2030;
3. Heating, Ventilation and Air Conditioning (HVAC) will be transformed to ensure that its energy performance is optimal for California's climate; and
4. 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 the building's water use baseline 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.

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% of the total electricity sold to retail customers in California per year by December 31, 2013, 25% by December 31, 2016 and 33% 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.

UTILITIES AND SERVICE SYSTEMS

Local Regulations

City of San Leandro General Plan

The City continues to promote energy conservation. The General Plan includes goal, policies, actions and implementation strategies with regards to energy are summarized in Table 4.14-5.

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% of asphalt and concrete and 50% 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.

TABLE 4.14-5 ENERGY-RELATED GOALS AND POLICIES OF THE SAN LEANDRO GENERAL PLAN

Goal/Policy Number	Goals, Policies, and Actions	Implementation Strategies
Chapter 5, Open Space, Parks and Conservation		
Goal 28	**Energy.** Promote the efficient use of energy and a reliable long-term energy supply for San Leandro residents and businesses.	
Policy 28.01	CONSERVATION ADVOCACY Strongly advocate for increased energy conservation by San Leandro residents and businesses, and ensure that the City itself is a conservation role model. **Action 28.01-A: Energy Retrofits of Public Facilities** *Pursue the retrofitting of City facilities to improve energy efficiency, including the development of solar heating systems for public swimming pools and the installation of low wattage lighting. Perform additional retrofitting in the future in the event new technology or new renewable energy sources become available.*	Annual Budget City Operating Procedures Public Education and Outreach Programs
Policy 28.02	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. ***Action 28.02-A: Land Use Regulations*** *Review local land use regulations (including the zoning code, building code, and subdivision ordinances) to ensure that there are no obstacles to the use of solar power or the development of alternative energy sources, and to include guidelines that promote solar access in new subdivisions.*	Building Code (Title 24) Design Guidelines Development Review Zoning
Policy 28.03	WEATHERIZATION 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. ***Action 28.03-A: Incentives for Energy Retrofits*** *Establishes incentives for energy retrofits upon the sale or purchase of a residence.*	Building Code Program Development Public Education and Outreach Programs
Policy 28.04	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. A***ction 28.04-A: Solar Access Ordinance*** *Adopt a solar access ordinance which protects opportunities for solar heating of San Leandro residences.* ***Action 28.04-B: Solar Panel Siting Guidelines*** *Adopt guidelines for the placement of solar heating panels on San Leandro residences and establish a fee reduction or fee waiver policy for persons installing solar heating systems that meet these guidelines. The guidelines should ensure that the visual impacts of solar panels (from the street and surrounding properties) are minimized.*	Building Code Development Review Municipal Code and Ordinances Zoning

TABLE 4.14-5 ENERGY-RELATED GOALS AND POLICIES OF THE SAN LEANDRO GENERAL PLAN

Goal/Policy Number	Goals, Policies, and Actions	Implementation Strategies
Policy 28.05	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 28.05-A: Realtor and Lender Programs* *Work with local realtors and lenders to distribute information on local energy retrofit programs, "energy star" products, energy-efficient mortgages, energy related tax credits, and local contractors providing retrofit and weatherization services.* *Action 28.05-B: Public Information* *Develop and disseminate information to San Leandro residents and businesses on energy conservation. Work with the School Districts to provide similar information to school children and their families.*	Public Education and Outreach Programs Public/Private Partnerships
Policy 28.06	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. *Action 28.06-A: Energy Municipalization* *Closely monitor the state and national energy situation to develop appropriate local responses. The City should keep open the option of creating a municipal energy department responsible for purchasing and delivering power to local customers.* *Action 28.06-B: Rolling Blackout Warning System* *Work with local business and homeowner organizations to develop early notification and warning systems prior to planned power outages (e.g., "rolling blackouts").*	Public/Private Partnerships

Source: City of San Leandro 2002-2015 General Plan.

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. A Final Climate Action Plan will be transformed into a Sustainability Element for the General Plan at a future update.[30]

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. 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 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 hydro-electric 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.

[30] City of San Leandro, 2014. Presentation to City Council on Climate Action Plan Update, http://www.sanleandro.org/civicax/filebank/blobdload.aspx?blobid=14971, accessed August 4, 2014.

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 2012 consisted of non-emitting nuclear generation (21 percent), large hydroelectric facilities (11 percent) and eligible renewable resources (19 percent), such as wind, geothermal, biomass, solar and small hydro. The remaining portion came from natural gas/other (27 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.[31]

PG&E's projected annual electricity demand growth between 2012 and 2024 is 1.25 percent.[32] Energy providers in the State project demand by assuming future economic growth and take into account projects such as the San Leandro Shoreline Development Project.

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.

The PG&E gas *transmission* pipelines nearest to the Project site are located approximately 0.5 mile to the east on Fairway Drive and parallel to Menlo Street on the Union Pacific Railroad right-of-way.[33] *Distribution* pipelines are located throughout the Project site.

4.14.4.2 STANDARDS OF SIGNIFICANCE

Appendix F, Energy Conservation, of the CEQA Guidelines, requires a discussion of the potential energy impacts of proposed projects; however, no specific thresholds of significance for potential energy impacts

[31] California Public Utilities Commission (CPUC), 2014. California Renewables Portfolio Standard (RPS), http://www.cpuc.ca.gov/PUC/energy/Renewables/index.htm, accessed on August 4, 2014.

[32] California Energy Commission (CEC), 2013. California Energy Demand 2014-2024 Preliminary Forecast, CEC-200-2013-004-SD-V2, May 2013.

[33] Pacific Gas & Electric (PG&E), 2014. Gas Transmission System Map web page, http://www.pge.com/en/safety/systemworks/gas/transmissionpipelines/index.page, accessed on August 4, 2014.

are suggested 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 Project, 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. This parallels the threshold determinations for other utility and service systems under Appendix G of the State CEQA Guidelines. To further the intent of Appendix F, relevant, potential impacts listed in Appendix G are also incorporated in the evaluation.

Appendix F lists several impacts to energy conservation that may result from projects that are similar to the San Leandro Shoreline Development Project. These potential impacts represent a range of impacts, however, when assessing the potential impacts the analysis included in section 4.14.4.3, below focuses on discussions related to numbers 2, 4, and 5. Focus on these potential impacts was done because the Project does not represent a unique or energy-intensive use that would be substantially different than other development projects.

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.

4.14.4.3 IMPACT DISCUSSION

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

UTIL-11	Implementation of the Project would result in an increase in energy consumption.

The Project, upon buildout, would result in the following: 150,000-square-foot office campus; 200 room hotel; 15,000-square-foot conference center; 354 housing units; 3 new restaurants (totaling 21,000 square feet); 2,500-square-foot community library; and parking structure (approximately 800 parking spaces). Other amenities include parkland, boat docks, pedestrian piers and pedestrian/bicycle paths.

The proposed increase in development 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.

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 through 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 project would result in a *less-than-significant* impact.

Operational Energy Impacts

Proposed new development would be constructed using energy efficient modern building materials and construction practices, in accordance with CalGreen Building Code, 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, the Project 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 (e.g., 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, Mitigation Measure GHG-1E would require the Project to achieve either the Build-it-Green GreenPoint Rated or US Green Building Council's Leadership in Energy and Environmental Design (LEED) standards that are endorsed by the City. Furthermore, Mitigation Measure GHG-1F requires the Project to include individual habitable residential and non-residential structures to be 15 percent more energy efficient than the current Building and Energy Efficiency Standards. The 15-percent reduction in building envelope energy use would be based on the current Building and Energy Efficiency Standards (Title 24, Part 6, of the California Building Code) that is in place at the time building permits are submitted to the City.

As an infill development effort, the Project inherently furthers objectives of energy conservation by focusing activities in areas of existing infrastructure and services. Other design features that incorporate energy efficiency principles include the 2-mile public, waterfront promenade with a Class I bike path, a Class II bike path on Monarch Bay Drive, the small boat launch facility, and kayak/paddleboard storage

area. These elements all promote non-motorized transportation within and to the development, thereby potentially reducing energy consumption that would otherwise be related to motorized vehicle use (i.e., automobiles).

In addition, there are several General Plan policies, actions and strategies that ensure energy conservation is practiced in San Leandro. Compliance with the CALGreen Building Code and the other applicable state and local energy efficiency measures, cited above, would ensure that significant energy conservation and savings would be realized in the proposed new development. 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 Project site. 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 Project site are not anticipated to be significant and, to the extent they may be necessary, are anticipated infrastructure improvements and part of the Project. 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.). Failure to include mitigation measures included in Section 4.6, Greenhouse Gas Emissions that would serve to reduce energy consumption would increase potential impacts and would result in a *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. As discussed, the Project would potentially generate about 9,408 trips on a typical weekday of which 8,752 are new external vehicular trips. Of the external trips, 1,040 trips would occur during the weekday morning peak hour and 1,060 trips during the weekday evening peak hour. The Project is also projected to generate 909 trips during the Saturday midday hour of which 860 are new external trips.

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. In addition, Mitigation Measure GHG-1A and GHG-1B require residential developments to include electric vehicle charging with garages and electric vehicle charging stations would be required for hotel and office land uses. A failure to include these mitigation measures would increase potential impacts and would result in a *significant impact*.

Renewable Energy Impacts

The 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 Project's size and location within an urban development, buildout of the 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 such as the Project is anticipated in the energy projections of 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:

- National Energy Policy Act of 2005
- California (CEC's) 2006 Appliance Efficiency Regulations
- California Global Warming Solutions Act of 2006, Scoping Plan
- CAL Green 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 General Plan – Policies 28.01 (Conservation Advocacy), 28.02 (Planning and Building Practices), 28.03 (Weatherization), 28.04 (Local Energy Resources), 28.05 (Public Information and Education), and 28.06 (Reduce Peak Demand).
- City of San Leandro Climate Action Plan

Impact UTIL-11: Implementation of the Project would result in an increase in energy consumption.

Mitigation Measure UTIL-11: Implementation of Mitigation Measures GHG-1A through GHG-1F would increase energy conservation and reduce impacts resulting from energy generation.

Significance After Mitigation: Less than significant.