

3.13 Utilities and Service Systems

This section describes the affected environment and regulatory setting for utilities and service systems. It also describes the impacts on utilities and service systems that would result from implementation of the Commonwealth Corporate Center Project (Project) and mitigation measures that would reduce these impacts. Cumulative impacts are discussed at the end of this section.

The documentation to support this analysis is included in Appendix 3.13. No comments were received in response to the Notice of Preparation (NOP) (Appendix 1) or during scoping meetings that addressed utilities.

Existing Conditions

Regulatory Setting

Federal

National Pollutant Discharge Elimination System. Refer to Section 3.9, *Hydrology and Water Quality*, for information regarding applicable National Pollutant Discharge Elimination System (NPDES) permits associated with the regulation of stormwater.

Safe Drinking Water Act. The U.S. Environmental Protection Agency (EPA) administers the Safe Drinking Water Act (SDWA), the primary federal law that regulates the quality of drinking water and establishes standards to protect public health and safety. The Department of Health Services (DHS) implements the SDWA and oversees public water system quality statewide. DHS establishes legal drinking water standards for contaminants that could threaten public health.

State

Urban Water Management Planning Act. Section 10610.4 of the California Urban Water Management Planning Act specifies that “Urban Water Suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.” The Menlo Park Municipal Water Department (MPMWD) adopted the 2010 Urban Water Management Plan (UWMP) and Update to the Water Shortage Contingency Plan in June 2011.¹

Senate Bill 610. Effective January 1, 2002, the State of California, through Senate Bill 610 (SB 610) requires that a city or county, and the associated public water system, prepare a Water Supply Assessment (WSA) for projects that meet certain criteria: (1) a project creating the equivalent demand of 500 residential units, (2) a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (sf) of floor space, or (3) a commercial office building employing more than 1,000 persons or having more than 250,000 sf of floor space. The Project meets the criteria for requiring a WSA because it would create employment for over 1,000 persons and would include more than 250,000 sf of floor space. The WSA that is required as part of the CEQA process must include, among other information, an identification of existing water supply assessments, water

¹ Menlo Park Municipal Water District. 2010 Urban Water Management Plan, 2011, website: http://www.menlopark.org/departments/pwk/MP_2010_UWMP_Final.pdf, accessed June 4, 2013.

rights or water service contracts relevant to the identified water supply for the project, and water received in prior years pursuant to those entitlements, rights, and contracts. A WSA was prepared for the Project by GHD (Appendix 3.13), the results of which are incorporated in this section. The WSA was approved by the City Council on December 17, 2013.

Senate Bill x7-7 2009 (Water Conservation Act of 2009). Effective January 1, 2010, Senate Bill x7-7 (SBx7-7) requires the state to achieve 20 percent reduction in urban per capita water use by December 31, 2020. In addition, SBx7-7 requires agricultural water management plans and efficient water management practices for agricultural water suppliers and promotes expanded development of sustainable water supplies at the regional level. The portion of SBx7-7 focused on urban water management establishes processes for urban water suppliers to meet the statewide water conservation targets. Further, SBx7-7 requires California Department of Water Resources (DWR) review and reporting on urban water management plans; creates a Commercial, Industrial, and Institutional (CII) Task Force to develop best management practices (BMPs) for water use in this sector; requires DWR to promote implementation of regional water resource management practices through increased incentives; and requires DWR, in consultation with the State Water Resources Control Board (State Water Board) to, develop or update statewide targets for recycled water, brackish groundwater desalination, and urban stormwater runoff.

California Integrated Waste Management Act (Assembly Bill 939). To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the state legislature passed Assembly Bill 939, the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties in California were required to divert 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995, and 50 percent by January 1, 2000.

Solid waste plans are prepared by each jurisdiction to explain how each city's AB 939 plan is integrated with its county plan. The plans must promote, in order of priority: source reduction, recycling and composting, and environmentally safe transformation and land disposal. The City/County Association of Governments of San Mateo County (C/CAG) is responsible for review and comment of a Countywide Integrated Solid Waste Management Plan (CIWMP) through their Solid Waste Advisory Committee.

Public Resources Code (PRC) Sections 41770 and 41822, and Title 14, California Code of Regulations (CCR) Section 18788 require that each city and county is required to review and revise, if necessary, the CIWMP at least once every 5 years. The 2009 CIWMP is the most recent iteration of the C/CAG's CIWMP.²

State Model Ordinance California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327). AB 1327 requires development projects to reserve adequate areas for collecting and loading recyclables. The City of Menlo Park (City), in its building code, similarly has requirements for including garbage and recycling enclosures in site design, including space for recycling containers and access for recycling and garbage collection trucks.

California Assembly Bill 341 (AB 341). AB 341 requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The purpose of the law is

² The County of San Mateo, Public Works Department, Five Year Countywide Integrated Waste Management Plan Review Report, San Mateo County, December 2009, website:
http://www.co.sanmateo.ca.us/bos.dir/BosAgendas/agendas2010/Agenda20100126/20100126_att1_54.pdf, accessed June 4, 2013.

to reduce GHG emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California.³

Building Energy Efficiency Standards (CCR Title 24). Building energy consumption is regulated under Title 24 of the CCR. The efficiency standards contained in this title apply to new construction, both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water, and lighting.

Local

Municipal Code, Chapter 12.44. Chapter 12.44⁴ of the City Municipal Code defines water-efficient landscaping standards that must be employed by new developments. All property owners of regulated projects shall complete and submit the landscape project application, comply with the landscape and irrigation maintenance schedule, and maintain landscape irrigation facilities to prevent water waste and runoff.

Municipal Code, Chapter 12.48. Chapter 12.48⁵ of the City Municipal Code specifies landfill diversion requirements of construction and demolition debris. Commercial construction projects of 5,000 sf or greater are required to divert at least 60 percent of total generated waste tonnage from landfills by using recycling, reuse, salvage, and other diversion programs. Before obtaining a building or demolition permit, project applicants must submit a form and obtain approval from the building division.

City of Menlo Park Climate Action Plan. The City's Climate Action Plan (CAP) recommends an extensive list of emission reduction strategies related to energy, water, and solid waste. Near term emission reduction strategies that would also result in the decreased use and/or generation of energy, water, and solid waste include, but are not limited to, an energy efficiency and renewable energy financing program, enhancements to recycling services, incentives for building practices that reduce energy consumption beyond current codes, and the MPMWD conservation programs.

City of Menlo Park General Plan. The following policies within the Open Space/Conservation Element of the General Plan are relevant to the Project.

Policy OSC1.11: Sustainable Landscape Practices. Encourage the enhancement of boulevards, plazas and other urban open spaces in high-density and mixed-use residential development, commercial and industrial areas with landscaping practices that minimize water usage.

Policy OSC4.1: Sustainable Building. Promote and/or establish environmentally sustainable building practices or standards in new development that would conserve water and energy, prevent stormwater pollution, reduce landfilled waste, and reduce fossil fuel consumption from transportation and energy activities.

Policy OSC4.5: Energy Standards in Residential and Commercial Construction. Encourage projects to achieve a high level of energy conservation exceeding standards set forth in the California Energy Code for Residential and Commercial development.

³ CalRecycle. Mandatory Commercial Recycling. Available:< <http://www.calrecycle.ca.gov/recycle/commercial/>> Accessed: December 10, 2013.

⁴ City of Menlo Park, Municipal Code, Title 12: Buildings and Construction, Chapter 12.44: Water-Efficient Landscaping, passed August 23, 2011, 2011, website: <http://www.codepublishing.com/CA/menlopark/> accessed June 4, 2013.

⁵ City of Menlo Park, Municipal Code, Title 12: Buildings and Construction, Chapter 12.48: Recycling and Salvaging of Construction and Demolition Debris, passed March 26, 2013, website: <http://www.codepublishing.com/CA/menlopark/>, accessed June 4, 2013.

Policy OSC4.6: Waste Reduction Target. Strive to meet the California State Integrated Waste Management Board per person target of waste generation per person per day through their source reduction, reuse, and recycling programs.

Policy OSC4.7: Waste Management Collaboration. Continue to support and participate in efforts such as the South Bayside Waste Management Authority, which provides waste reduction, recycling, and solid waste programs and solutions.

Policy OSC4.8: Waste Diversion. Develop and implement a zero waste policy, or implement standards, incentives, or other program that would lead the community towards a zero waste goal.

The following policy within the Safety Element of the General Plan is relevant to the Project.

Policy S1.27: Regional Water Quality Control Board (RWQCB) Requirements. Enforce stormwater pollution prevention practices and appropriate watershed management plans in the RWQCB general National Pollutant Discharge Elimination System requirements, the San Mateo County Water Pollution Prevention program and the City's Stormwater Management program. Revise, as necessary, City plans so the integrate water quality and watershed protection with water supply, flood control, habitat protection, groundwater recharge, and other sustainable development principles and policies.

West Bay Sanitary District Code of General Regulations. Under West Bay Sanitary District's (WBSD's) Code of General Regulations, a Class 3 permit is required for construction of sewer mains, pumping stations and other wastewater. The WBSD Manager or his representative shall examine the plans submitted under a Class 3 sewer permit to verify that they are in accordance with good engineering practices and in compliance with the standard specifications and policies of WBSD. Plans which have been so examined and approved will be submitted to the WBSD Board for approval, alteration, or rejection. After approval of the plans by the WBSD Board, actual construction may be started and all work shall be performed under the inspection of, and in accordance with the standard specifications of WBSD.

All work shall be inspected by WBSD when construction is completed but before use is made of the facilities constructed. Inspection shall be made at such other times as the WBSD Manager may require. Subsequent to the District Board's acceptance of a sewer system constructed pursuant to a Class 3 permit, but prior to connection of and discharge into the District's wastewater facilities, a Class 2 permit, required for non-residential sewer connections, must be obtained by the applicant. The applicant shall give 24 hours advance notice to the WBSD Manager that construction performed under a Class 2 sewer permit is ready for inspection. The applicant shall give 48 hours advance notice with respect to such construction performed under a Class 3 sewer permit.⁶

Environmental Setting

Water Supply, Storage, Treatment, and Distribution

Water Supply. The Project area is served by Menlo Park Municipal Water Department (MPMWD), which supplies water to an area of 4 square miles and a population of about 14,000 people. The remainder of the City is served by the California Water Services Company (Cal Water) and the O'Conner Tract Cooperative Water Company. MPMWD purchases wholesale water from the San Francisco Public Utilities Commission (SFPUC) Regional Water System (RWS). The SFPUC RWS is comprised of two regional water supply and conveyance systems: the Hetch Hetchy system and the Alameda and Peninsula system.

⁶ Bill Kitajima, West Bay Sanitary District, email communication, May 6, 2013.

SFPUC obtains approximately 94 percent of its water from Sierra Nevada snowmelt stored in the Hetch Hetchy reservoir, which is situated on the Tuolumne River in Yosemite National Park. The water from Hetch Hetchy travels more than 160 miles across California by gravity to reach Menlo Park. The remaining 6 percent of water supply comes from runoff in the Alameda and Peninsula watershed, which is captured in reservoirs within San Mateo and Alameda Counties.⁷ The Hetch Hetchy system delivers 260 million gallons per day (mgd) of water to 1.7 million San Francisco Bay Area (Bay Area) residents, businesses, and community organizations.⁸ The supply quantities for the SFPUC and MPMWD for normal rainfall years and for multiple dry years, are shown in Table 3.13-1.

Table 3.13-1. SFPUC System Wide and MPMWD Water Supply Quantities

Water Supply Sources	Average/Normal Water Year	Single-Dry Water Year	Multiple-Dry Water Years		
			Year 1	Year 2	Year 3
San Francisco PUC (to customer) (AFY)	206,121	170,946	170,946	148,429	148,429
Percent of Average/Normal Year		83%	83%	72%	72%
MPMWD	4,993.0	4,140.9	4,140.9	3,595.5	3,595.5
MPMWD Percent of Average/Normal Year		83%	83%	72%	72%

Source: GHD, Water Supply Assessment for the City of Menlo Park Commonwealth Corporate Center Project, prepared for the Menlo Park Municipal Water District, October 24, 2013.

On the San Francisco Peninsula, SFPUC uses Crystal Springs Reservoir, San Andreas Reservoir, and Pilarcitos Reservoir to capture local watershed runoff. In the Alameda Creek watershed, SFPUC uses the recently constructed Calaveras Reservoir and San Antonio Reservoir for water storage. In addition to capturing runoff, these facilities provide storage for Hetch Hetchy diversions and serve as an emergency water supply in the event of an interruption to Hetch Hetchy diversions.

Water Contracts and Agreements. The business relationship between San Francisco and its wholesale customers is largely defined by the current Water Supply Agreement (Agreement) between the City and County of San Francisco and wholesale customers in Alameda County, San Mateo County, and Santa Clara County entered into in July 2009. The new agreement replaced the Settlement Agreement and Master Water Sales Contract (MSA) from 1984 that expired June 2009. The agreement addresses the rate-making methodology used by San Francisco in setting wholesale water rates for its wholesale customers and also addresses water supply and water shortages associated with the SFPUC RWS. The agreement has a 25-year term and is supplemented by Individual Water Supply Contracts.⁹

The agreement provides for a 184 mgd “Supply Assurance” (expressed on an annual average basis) to SFPUC’s wholesale customers, subject to reduction to the extent and for the period made necessary by reason of water shortage, due to drought, emergencies, or by malfunctioning or rehabilitation of the

⁷ Bay Area Water Supply & Conservation Agency, “Hetch Hetchy Water System,” website: <http://bawasca.org/water-supply/hetch-hetchy-water-system/>, accessed October 29, 2013.

⁸ Bay Area Water Supply & Conservation Agency, “About,” website: <http://bawasca.org/about/>, accessed October 29, 2013.

⁹ Menlo Park Municipal Water District. 2010 Urban Water Management Plan, 2011, website: http://www.menlopark.org/departments/pwk/MP_2010_UWMP_Final.pdf, accessed June 4, 2013.

regional water system.¹⁰ Each member holds an Individual Water Supply Contract with SFPUC, and the agreement governs these contracts. Under the agreement and the Individual Water Supply Contract, each agency negotiates an Individual Supply Guarantee (ISG), described further under the *Menlo Park Municipal Water District* section, below.

Section 7.01 of the 1984 MSA states “Supply Assurance continues in effect indefinitely, even after expiration of the MSA in 2009,” and this is still the case in the new agreement. The condition is a reflection of case law, which holds that a municipal utility acts in a trust capacity with respect to water supplied to outside communities (*Durant v. City of Beverly Hills*, 39 Cal. App. 2d 133, 102 P.2d 759 (1940)); and *Hansen v. City of San Buenaventura*, 42 Cal. 3d 1172 (1986)). Entire communities have developed a reliance on these water supplies. Consequently, the Supply Assurance of up to 184 mgd will survive the termination of the agreement and the Individual Water Supply Contracts.

Water Supply Improvements. In order to enhance the availability of the SFPUC water supply system to meet identified service goals for water quality, seismic reliability, delivery reliability, and water supply, SFPUC has undertaken the Water System Improvement Program (WSIP), approved October 31, 2008. The WSIP includes a total delivery reliability goal of 265 mgd of supply with no greater than 20 percent rationing in any one year of a drought. In approving the Program Environmental Impact Report (PEIR) for the WSIP, SFPUC adopted a Phased WSIP Variant for water supply. This Phased WSIP Variant establishes a mid-term water supply planning milestone in 2018 at which point SFPUC will reevaluate water demands through 2030. Concurrent with the adoption of the Phased WSIP Variant by SFPUC, the Interim Supply Limitation (ISL) was also imposed by SFPUC, that limits the volume of water that member agencies and San Francisco can collectively purchase from RWS to 265 mgd, until at least 2018. According to the WSIP Regional Projects Quarterly Report for the third quarter of 2012–2013, planning, environmental, design, and construction activities are 99.9 percent, 94.7 percent, 95.7 percent, and 68.6 percent complete, respectively.

SFPUC committed to provide fishery flows below Calaveras Dam and Lower Crystal Springs Dam, as well as bypass flows below Alameda Creek Diversion Dam, by adopting project-specific approvals for the Calaveras Dam Replacement Project and the Lower Crystal Springs Dam Improvement Project, which are part of the WSIP. These fishery flows could potentially create a shortfall in meeting the SFPUC demands of 265 mgd and slightly increase SFPUC’s dry-year water supply needs. In the last few years, SFPUC has stated that current decreased levels of demand keep this from being an immediate problem. Recent deliveries were: 247.5 mgd in fiscal year (FY) 2006, 257 mgd in FY 2007, 254.1 mgd in FY 2008, 243.3 mgd in FY 2009, and 225.2 mgd in FY 2010. However, in the near future, the SFPUC must resolve these issues. SFPUC is working closely with its staff to develop strategies for meeting the service goal for delivery reliability. In Resolution No. 10-0175 adopted by SFPUC on October 15, 2010, staff was directed to provide information on how SFPUC has the capability to attain its water supply levels of service and contractual obligations. This directive was in response to concerns expressed by SFPUC and the wholesale customers regarding the effect on water supply as a result of the instream flow releases required resulting from the Lower Crystal Springs Dam Improvement Project and the Calaveras Dam Replacement Project.

Various SFPUC activities are underway to resolve the shortfall problem. SFPUC has reported regularly on future water supply and demand balances, most recently in its 2012 Water Supply Development Report (December 3, 2012). In that report, SFPUC documented that it had implemented the Harding

¹⁰ Menlo Park Municipal Water District. 2010 Urban Water Management Plan, 2011, website: http://www.menlopark.org/departments/pwk/MP_2010_UWMP_Final.pdf, accessed June 4, 2013.

Park Recycled Water Project and was nearing completion of its Sharp Park Recycled Water Project, bringing new non-potable water supplies into the service area. The 2012 Water Supply Development Report also documents planning progress made by the Bay Area Water Supply Conservation Agency (BAWSCA). While this report supports the near-term reliability of the system, SFPUC continues to acknowledge the need to develop alternative supply strategies to make up for the instream flow reductions losses and to meet long-term demands beyond the 2018 ISL deadline.¹¹

The Interim Supply Allocations (ISA) refers to each individual wholesale customer's share of the ISL. On December 14, 2010, SFPUC established each agency's ISA through 2018. In general, SFPUC based the allocations on the lesser of the projected FY 2017-2018 purchase projections or the ISG for each agency. The ISA's are effective only until December 31, 2018, and do not affect the Supply Assurance or the ISGs. MPMWD's ISA is 4.1, mgd or approximately 4,590 acre-feet per year (AFY). As stated in the agreement, the wholesale customers do not concede the legality of some of the SFPUC's actions, including establishment of the ISA, and expressly retain the right to challenge these provisions, if and when imposed, in a court of competent jurisdiction.

The Agreement includes a Water Shortage Allocation Plan (WSAP) that addresses shortages of up to 20 percent of system-wide use. The Tier One Shortage Plan allocates water from the RWS between San Francisco and the wholesale customers during system-wide shortages of 20 percent or less. The WSAP also anticipated a Tier Two Shortage Plan, adopted by the wholesale customers, which would allocate the available water from the RWS among the wholesale customers.

The Tier One Shortage Plan replaced the prior Interim WSAP, adopted in 2000, which also allocated water for shortages up to 20 percent. The Tier One Plan also allows for voluntary transfers of shortage allocations between SFPUC and any wholesale customer and between wholesale customers themselves. The Tier One Plan will expire in 2034 at the end of the term of the Agreement, unless extended by SFPUC and the wholesale customers.

The Tier Two Plan, the second component of the WSAP, allocates the collective wholesale customer share among each of the 26 wholesale customers (that comprise the BAWSCA). The Tier Two Plan will expire in 2018 unless extended by the wholesale customers. This Tier Two allocation is based on a formula that takes multiple factors into account for each wholesale customer, including the ISG, the seasonal use of all available water supplies, and residential per capita use.

Bay Area Water Supply Conservation Agency. MPMWD is part of BAWSCA, created in 2003 through state legislation (AB 2058) to represent the interests of 24 cities and water districts and two private utilities in Alameda, Santa Clara, and San Mateo Counties that purchase water on a wholesale basis from SFPUC's regional water system.¹² In particular, there are two primary BAWSCA activities that impact MPMWD's water supply and demand projections: the Water Conservation Implementation Plan (WCIP) and the Long Term Reliable Water Supply Strategy.

In September 2009, BAWSCA completed the WCIP, which includes 37 potential demand management activities including 32 existing measures and 5 new measures that were defined and developed as part of the WCIP. It is an implementation plan for BAWSCA and its member agencies to attain the water use efficiency goals that BAWSCA's member agencies committed to in 2004 as part of the PEIR for SFPUC's

¹¹ GHD, *Water Supply Assessment for the City of Menlo Park Commonwealth Corporate Center Project*, prepared for the Menlo Park Municipal Water District, October 24, 2013.

¹² Bay Area Water Supply & Conservation Agency, "About," website: <http://bawasca.org/about/>, accessed October 29, 2013.

WSIP. The WCIP also identifies how BAWSCA member agencies can use water conservation as a way to continue to provide reliable water supplies to their customers through 2018 given SFPUC's 265 mgd ISL.

In addition, BAWSCA is developing the Long-Term Reliable Water Supply Strategy to meet the projected water needs of its member agencies and their customers through 2035 and to increase their water supply reliability under normal and drought conditions. Additional information regarding the WCIP and the Long-Term Reliable Water Supply Strategy can be found in the WSA, included in this Draft EIR as Appendix 3.13.

Menlo Park Municipal Water District. As part of the Individual Water Supply Contract that MPMWD holds with SFPUC, MPMWD has an ISG of 4.465 mgd (or approximately 4,993 AFY).¹³ Menlo Park purchased 2.95 mgd from SFPUC to meet customer needs in fiscal year 2011–2012, or about 100 percent of its allocation.¹⁴ Table 3.13-2 shows MPMWD's current and future water deliveries by customer sector.

Table 3.13-3 provides a summary of the existing and planned water supply sources for MPMWD. As shown, the current and projected MPMWD water demand (Table 3.13-2) is below MPMWD's projected water supply (Table 3.13-3).

Table 3.13-2. MPMWD Existing and Projected Water Deliveries by Customer Sector (in AFY)

Water Use Sectors	2010	2015	2020	2025	2030	2035
Single Family	1,171.0	1,053.9	959.0	962.4	965.7	969.1
Multi-Family	333.0	299.7	272.7	279.6	286.7	293.9
Commercial, Industrial, and Institutional (CII)	1,366.0	1,867.0	1,680.3	1,742.9	1,808.2	1,876.7
Landscape	436.0	428.0	400.0	400.0	400.0	400.0
Other	85.0	96.3	87.7	86.8	88.6	90.5
Total	3,910.0	3,744.9	3,399.7	3,471.7	3,549.2	3,630.2

Source: Menlo Park Municipal Water District, 2011, Urban Water Management Plan 2010.

Notes:

AFY = acre-feet/year; 1 acre foot = 325,850 gallons

¹³ Menlo Park Municipal Water District. 2010 Urban Water Management Plan, 2011, website: http://www.menlopark.org/departments/pwk/MP_2010_UWMP_Final.pdf, accessed June 4, 2013.

¹⁴ Bay Area Water Supply and Conservation Agency, *Annual Survey, FY 2011-2012*, May 2011.

Table 3.13-3. MPWMD Existing and Planned Sources of Water (in AFY)

Wholesale Sources	Contracted Volume	2015	2020	2025	2030	2035
San Francisco Public Utilities Commission	4,993	4,993	4,993	4,993	4,993	4,993
BAWSCA Long Term Strategy	-	-	-	-	-	-
Groundwater Supplies	-	-	-	-	-	-
Totals	4,993	4,993	4,993	4,993	4,993	4,993

Source: Menlo Park Municipal Water District, 2011, Urban Water Management Plan 2010.

Note:

AFY = acre-feet/year; 1 acre foot = 325,850 gallons

Water Treatment. The City purchases 100 percent of its treated water supplies from SFPUC as agreed upon in the Agreement and its ISG. The purchased water is treated at both the Sunol Valley Water Treatment Plant (WTP) and the Harry Tracy WTP. As of 2011, SFPUC is engaged in a variety of water treatment and distribution system improvements projects that comprise its WSIP and evolved out of its earlier Water System Master Plan (2000). The WSIP EIR evaluated the impacts associated with implementation of the WSIP, but individual projects would be subject to project-specific environmental review. In 2013, SFPUC completed construction for the expansion of the Sunol Valley WTP, which has the sustainable capacity¹⁵ to treat up to 160 mgd. The Harry Tracy WTP treats 120 mgd, and there are plans for expansion and upgrades to sustainably treat 180 mgd. As of 2013, the Harry Tracy WTP is forecasted to be completed in February 2015. Therefore, at capacity, SFPUC would be capable of treating up to 340 mgd. In addition, completed in 2012, SFPUC's Tesla Water Treatment Facility in Tracy, California, is the largest ultraviolet disinfection treatment plant in California, capable of producing 315 mgd.¹⁶ Therefore, after 2015, SFPUC would be able to treat up to 655 mgd.

Water Storage and Distribution. MPMWD's water distribution system is split into four different service area zones based on water pressure, as described below.

- The lower zone is located north and east of El Camino Real and serves primarily residential and small commercial land uses. The zone includes the Belle Haven, Bay Road, and Willows neighborhoods.
- The high pressure zone is located in northern Menlo Park between US 101 and the Bayfront Expressway and serves primarily industrial land uses. It includes the Bohannon Industrial Park and Tyco Properties.
- The upper pressure zone is located in western Menlo Park and is geographically and hydraulically disconnected from other zones. It serves primarily the Sharon Heights residential neighborhood, the Sharon Heights Golf Course, and the Stanford Linear Accelerator Lab.
- The Menlo Business Park zone is located along O'Brien Drive between Willow Road and University Avenue. It serves primarily light industrial land uses.

¹⁵ *Sustainable capacity* is the highest flow rate at which a treatment plant can be expected to operate, given normal source water conditions, while meeting regulatory water quality and routine maintenance requirements.

¹⁶ San Francisco Public Utilities Commission, News, "San Francisco, Federal and State Officials to Dedicate California's Largest Ultraviolet Water Treatment Facility," July 19, 2011, website: <http://www.sfwater.org/Index.aspx?page=17&recordid=24>, accessed October 29, 2013.

The high pressure zone is hydraulically disconnected from the other zones with inter-tie capabilities. The upper pressure zone is hydraulically and geographically separated from the other zones. The Project site is located in the high pressure zone.¹⁷

Existing Water Demand on Project Site

The Jefferson Site is currently developed with a 20,462-sf warehouse, which would be demolished upon implementation of the Project. The 4-year average annual water use for the Jefferson Site from 2009 through 2012 was 0.00071 mgd, or 0.8 AFY.¹⁸

The Commonwealth Site is currently developed with a single-story industrial building and associated structures totaling approximately 217,396 sf. The Commonwealth Site includes small areas of irrigated landscaping. The water use for the Commonwealth Site dropped significantly in the years 2011 and 2012 compared to previous years due to site use changes. The water consumption at the Commonwealth Site in 2012, when the NOP was filed, is considered the baseline, and was 6.7 AFY, or 0.006 mgd.¹⁹

The total existing water demand for the Project site (the Jefferson Site and Commonwealth Site) is 0.00671 mgd or 2.45 million gallon per year (approximately 7.5 AFY). When the Commonwealth Site was under operation by Diageo prior to 2011, the water use was approximately 18.5 million gallons per year (approximately 57 AFY).²⁰ However, since the Diageo facility was decommissioned at the time that the Project NOP was released (which is considered baseline conditions, as noted above), this information is provided for comparison purposes only and is not considered in the analysis.

Wastewater Collection and Treatment

WBSD collects wastewater from customers within the City (including the Project site), Atherton, and Portola Valley, and areas of East Palo Alto, Woodside, and unincorporated San Mateo and Santa Clara Counties. WBSD transports wastewater via main line trunk sewers to the Menlo Park Pumping Station (MPPS) located at Bayfront Expressway and Marsh Road, west of the Project site. From there, wastewater is transported to the South Bayside System Authority (SBSA) Regional Treatment Plant, located at the eastern end of the Redwood Shores peninsula in Redwood City, approximately 6 miles northwest of the City. WBSD operates a separate sanitary sewer and stormwater conveyance system.

The Project site is served by WBSD's 54-inch gravity sewer main at a manhole along Commonwealth Drive. Wastewater generated at the Project site is conveyed via WBSD's 54-inch trunkline along Commonwealth Drive approximately 0.7 mile to the Menlo Park Pump Station at Bayfront Expressway and Marsh Road, north of the Project site. The wastewater is then conveyed along a force main to the SBSA Regional Treatment Plant.²¹ The SBSA Regional Treatment Plant is permitted by the RWQCB to discharge treated wastewater into San Francisco Bay (Bay). The SBSA Regional Treatment Plant is

¹⁷ Menlo Park Municipal Water District. 2010 Urban Water Management Plan, 2011, website: http://www.menlopark.org/departments/pwk/MP_2010_UWMP_Final.pdf, accessed June 4, 2013.

¹⁸ GHD, *Water Supply Assessment for the City of Menlo Park Commonwealth Corporate Center Project*, prepared for the Menlo Park Municipal Water District, October 24, 2013.

¹⁹ GHD, *Water Supply Assessment for the City of Menlo Park Commonwealth Corporate Center Project*, prepared for the Menlo Park Municipal Water District, October 24, 2013.

²⁰ Fabian Nodal, Engineering Strategy Manager, Diageo Americas. 2012. Electronic communication with Rich Truempler, Sobrato Organization. May 16, 2012.

²¹ Bill Kitajima, West Bay Sanitary District, email communication, May 6, 2013.

jointly owned and operated by WBSD and the Cities of Redwood City, Belmont, and San Carlos as a joint powers authority (JPA). Under SBSA's NPDES permit, the regional treatment plan has a permitted dry weather capacity of 27 mgd and peak wet-weather-capacity of 71 mgd. In 2008, SBSA began the implementation of its Conveyance System Master Plan, which is a 10-year capital improvement program (CIP) intended to accommodate projected increases in wastewater flows through 2030. Renovation and refurbishing of SBSA facilities under the CIP will increase treatment capacity to 29 mgd during dry weather and 80 mgd during peak wet weather.²²

The current water use (baseline conditions) at the Project site is approximately 7.5 AFY. Although a portion of the existing water demand is likely used for landscaping and is discharged into the stormwater system, it is conservatively assumed that all water used at the Project site will enter the wastewater system. The baseline conditions for water use reflect the operational Jefferson Site and the nonoperational Commonwealth Site. For comparison, the wastewater discharge was approximately 32,467 gpd when the Commonwealth Site was under operation by Diageo prior to 2011.²³ However, since this is not considered baseline conditions, this information is not considered in the analysis.

SBSA puts its entire wastewater stream through primary, secondary, and post-secondary treatment in order to comply with RWQCB requirements for discharge to the Bay. SBSA treats some of its effluent to meet recycled water standards for unrestricted beneficial reuse per California Code of Regulations, Title 22. Certain sections of the SBSA's service area, excluding MPMWD's service area, accept highly treated wastewater for reuse. Table 3.13-4 illustrates the existing and planned wastewater flows and recycled water capabilities.

Table 3.13-4. SBSA Existing and Projected Wastewater Collection and Treatment and Recycled Water Delivery Capability (mgd)^a

Type of Wastewater	2010	2015	2020	2025	2030
SBSA Wastewater Collected & Treated in Service Area	15.09	15.79	16.50	17.20	17.85
SBSA Volume That Meets Recycled Water Standard	100%	100%	100%	100%	100%

Source: Menlo Park Municipal Water District, 2011, Urban Water Management Plan 2010.

Notes:

^a Values were originally in acre-feet (AFY) and were converted using a factor of 1 AFY=0.00089274 million gallons per day (mgd).

During wet weather events, when wastewater flows exceed SBSA's capacity, flows are temporarily diverted to a 10-million-gallon equalization basin near the connection of the WBSD sewer collection system to SBSA's system at the end of Marsh Road near Bayfront Park.²⁴ This temporary holding pond is owned and maintained by WBSA and can receive excess flows from WBSD or other member agencies of the JPA. WBSD's entitled allocation of the SBSA plant dry weather flow capacity is approximately 7.975 mgd. The WBSD's current average dry weather flow is 3.60 mgd and the daily peak wet weather flow is

²² South Bayside System Authority (SBSA), SBSA Announces \$339 Million, 10-Year Capital Improvement Program, Press Advisory, May 9, 2008.

²³ Bill Kitajima, West Bay Sanitary District, email communication, April 2, 2013.

²⁴ Bill Kitajima, West Bay Sanitary District, email communication, May 6, 2013.

14.4 mgd.²⁵ As such, there is available capacity in the WBSD's entitled allocation of wastewater to the SBSA to accommodate growth within the WBSD's service area. Further, as described above, the SBSA is in the process of ensuring that future wastewater treatment demands are met through implementation of the CIP.

Solid Waste Collection and Disposal

The Shoreway Environmental Center (Shoreway), located at 333 Shoreway Road in San Carlos, serves as a regional solid waste and recycling facility for the receipt, handling, and transfer of solid waste and recyclables collected from the RethinkWaste service area. The South Bayside Waste Management Authority (RethinkWaste), a JPA with 12 member agencies, owns the facility. The members of RethinkWaste include the Cities of Belmont, Burlingame, East Palo Alto, Foster City, Menlo Park, Redwood City, San Carlos, San Mateo; the Towns of Atherton and Hillsborough; the County of San Mateo; and the West Bay Sanitary District. Residential and commercial solid waste and recyclable materials that are collected by the franchise hauler, Recology San Mateo County, and are taken to Shoreway for processing and shipment. The facility is operated by South Bay Recycling (SBR) under a 10-year contract with RethinkWaste as of January 1, 2011.²⁶

Shoreway opened in September 2011 with a three-phase improvement project that included traffic improvements, a new state-of-the-art materials recovery facility (MRF), an expanded Transfer Station, a new Environmental Education Center, and a "Green Building" for administrative offices. The site operations are regulated by a number of local and state agencies with regular facility inspections. The facility is separately permitted by the California State Integrated Waste Management Board (CIWMB) to receive 3,000 tons per day of solid waste and recyclables. As of January 1, 2011, Recology provides recycle, compost, and garage collection services for the 93,000 RethinkWaste residences and 10,000 businesses.²⁷

Materials are consolidated and loaded into large transfer trailers at Shoreway for shipment offsite to Ox Mountain/Corinda Los Trancos Landfill in Half Moon Bay (Ox Mountain), to other landfills, and to recycling facilities for construction/demolition waste and organics materials. In total, Ox Mountain is permitted to receive 3,588 tons per day with a remaining capacity of over 44 million cubic yards. It is anticipated that Ox Mountain will reach capacity in 2018.²⁸

In 2012 (the most recent data available), the City shipped approximately 26,771.71 tons of waste to landfills and disposal facilities.²⁹ Effective July 1, 2012, AB 341 requires that all businesses that generate 4 or more cubic yards of garbage per week to recycle.

²⁵ Bill Kitajima, West Bay Sanitary District, email communication, May 6, 2013.

²⁶ RethinkWaste, South Bayside Waste Management Authority. 2013. "Shoreway Overview." Available: <<http://www.rethinkwaste.org/shoreway-facility>> Accessed: November 1, 2013.

²⁷ RethinkWaste, South Bayside Waste Management Authority. 2013. "Shoreway Overview." Available: <<http://www.rethinkwaste.org/about/about-us>> Accessed: November 1, 2013.

²⁸ California Department of Resources Recycling and Recovery (CalRecycle). 2013. "Facility/Site Summary Details: Corinda Los Trancos Landfill (Ox Mtn) (41-AA-0002)." Available: <<http://www.calrecycle.ca.gov/SWFacilities/Directory/41-AA-0002/Detail/>> Accessed: April 22, 2013.

²⁹ California Department of Resources Recycling and Recovery (CalRecycle). 2012. "Jurisdictional Diversion/Disposal Rate Detail." Available: <<http://www.calrecycle.ca.gov/LGCentral/Reports/DiversionProgram/JurisdictionDiversionDetail.aspx?JurisdictionID=299&Year=2012>> Accessed: December 10, 2013.

Storm Drainage System

The City's Public Works Department constructs, operates, and maintains the storm drainage system for the City, including the Project area. The storm system drainage area is located within the northerly drainage area of the City, and similar to surface runoff, ultimately discharges to the lower Bay. Stormwater from the Project site is collected via the street network at Jefferson Drive and conveyed via an existing 36-inch storm drain leading to the Bay. A small portion of the Jefferson Site discharges directly to Jefferson Drive over two existing driveway aprons. The average stormwater runoff rate from the Commonwealth Site and Jefferson Site combined was calculated and is presented in the stormwater report for the Project (Appendix 3.9). The existing total lot runoff rate for a 10-year storm event (Q_{10}) from these sites, based on an impervious area of 540,577 sf and a pervious area of 37,895 sf, the existing runoff from the Project site is 19.43 cubic feet per second (cfs).³⁰

Natural Gas and Electricity

With a relatively mild Mediterranean climate and strict energy efficiency and conservation requirements, California has lower energy consumption rates than other parts of the country. According to the Department of Energy (DOE), per capita energy use in California is approximately 70 percent of the national average, the third lowest state in the nation.³¹ California has the lowest annual electrical consumption rates per person of any state and uses 20 percent less natural gas per person. Per capita, transportation energy use in the state is near the national average. Nevertheless, with a population of approximately 35 million residents, the state is the tenth largest consumer of energy in the world.

The City is located in a coastal climate zone (Climate Zone 3 in the Title 24 Climate Zone designation mapping), and with the moderating influence of the Bay, requires less energy for heating and cooling than other parts of the State. Pacific Gas and Electric (PG&E) delivered 4,535 million kilowatt hours (kWh) to customers in San Mateo County in 2011. Approximately 64 percent of this power, approximately 2,919 million kWh, was sold to non-residential accounts.³² For the baseline conditions for this analysis, electricity usage at the Jefferson Site was approximately 2,635.83 kWh per year. Because the Commonwealth Site has been unoccupied in recent years, for the purposes of this Draft EIR, existing electricity demand is zero.

In 2011, PG&E delivered 227 million therms of natural gas to San Mateo County, with about 41 percent, approximately 91 million therms of natural gas, sold to non-residential customers.³³ The existing development at the Project site is served by a natural gas pipeline. The occupants of the Jefferson Site used approximately 120 therms of natural gas in 2012. As identified above, the existing buildings at the Commonwealth Site have not been occupied in recent years. Under existing conditions, the Commonwealth Site buildings are currently not using natural gas, although natural gas infrastructure is in place.

³⁰ Kier & Wright Civil Engineers & Surveyors. 2013. Stormwater Report for 151 Commonwealth Drive and 164 Jefferson Drive, Menlo Park, California. Project No. A11089-2. April 12. Santa Clara, California.

³¹ US Department of Energy. US Energy Information Administration. "State Profile and Energy Estimates - California". 2012. Available: < <http://www.eia.gov/state/?sid=CA> > Accessed November 1, 2013.

³² California Energy Commission (CEC), Electricity Consumption by County, 2011, website: <<http://www.ecdms.energy.ca.gov/elecbycounty.aspx>>, Accessed July 1, 2013.

³³ California Energy Commission (CEC), Electricity Consumption by County, 2011, website: <<http://www.ecdms.energy.ca.gov/gasbycounty.aspx>>, Accessed July 2, 2013.

PG&E provides natural gas and electric service within 70,000 square miles of northern and central California, including the City and Project site. PG&E's service area extends from Eureka to Bakersfield (north to south), and from the Sierra Nevada to the Pacific Ocean (east to west). PG&E purchases both gas and electrical power from a variety of sources, including other utility companies. PG&E obtains its energy supplies from power plants and natural gas fields in northern California and from energy purchased outside its service area and delivered through high voltage transmission lines. PG&E operates a grid distribution system that channels all power produced at the various generation sources into one large energy pool for distribution throughout the service territory.

The baseline conditions for the Project include the existing energy demand for the Jefferson Site. The Commonwealth Site is currently unoccupied. The Jefferson Site is currently operational and has an existing electricity use of 2,635.83 kWh per year and gas use of 120 therms per year. When the Commonwealth Site was under operation by Diageo prior to 2011, the electricity use was approximately 4.5 million kWh per year and the gas use was 138,000 therms per year.³⁴ As discussed above, since the Diageo facility was no longer operational at the time of the NOP release for the Project, this information will not be included in further analysis.

Environmental Impacts

This section describes the impacts relating to utilities and service systems associated with the Project. It describes the methods used to determine the impacts of the Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion. As discussed above, the former utilities usage at the Commonwealth Site when the Diageo facility was in operation is not included further in this analysis. For informational purposes only, refer to the above sections for the former utilities usage at the Commonwealth Site.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (Regional Water Board),.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Have insufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed.
- Result in a determination by the wastewater treatment provider that 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.

³⁴ Fabian Nodal, Engineering Strategy Manager, Diageo Americas. 2012. Electronic communication with Rich Truempler, Sobrato Organization. May 16, 2012.

- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Violate federal, state, and local statutes and regulations related to solid waste.

Methods for Analysis

Baseline conditions considered in the following analysis differ between the Commonwealth Site and the Jefferson Site. Because the Commonwealth Site has not been operational since July 2011, it is considered vacant with utilities usage at zero. However, the exception is that there is an existing (2012) water demand due to continued irrigation at the site; this demand was generated as recently as 2012 (6.7 AFY, or 0.006 mgd). The baseline for which water demand impacts are measured at the Commonwealth Site assumes this existing water use. However, the Jefferson Site is occupied; therefore, it demands water and energy and generates wastewater, stormwater, and solid waste. Refer to Section 3.0, *Environmental Impact Analysis*, for further details regarding baseline conditions.

Water Supply. The analysis in this section focuses on the nature and magnitude of the change in levels of water use compared with existing and projected water use in the MPWMD service area. To determine potential impacts, future water consumption was estimated from demand projection calculations and quantitative evaluation of data for existing land uses, approved projects, and proposed development, including that proposed for the Project area. The primary resources used for this analysis include the WSA for the Project (October 2013), the City's 2010 UWMP (adopted June 2011), the SFPUC 2010 UWMP (adopted June 2011), and the SFPUC WSIP (established in 2002). In order to estimate the water use in the buildings, separate methodologies were used for the office, cafeteria, and shower areas and the areas proposed for R&D and uses. For the office, cafeteria, and shower areas, water use estimates have been developed based on building occupancy and fixture use. This methodology follows the methodology presented in the 2010 California Green Building Standards Codes (Cal Green), which the City adopted effective January 1, 2012. The Cal Green codes are the adopted standard for equating building occupancy to water use, using a formula that includes occupancy, fixture flow rates, frequency of fixture use, and duration of fixture use. For the portion of the first floors that are anticipated to be developed in R&D uses, water use may be more intensive than that predicted by the Cal Green methodology. In order to take this into account, indoor water use for these areas has been calculated using a square footage factor of 0.155 gallons per sf per day, which reflects the historical water use pattern for this type of facility in the City. Additionally, compliance with the City's Water Efficient Landscape Ordinance will be analyzed.

Wastewater. It is assumed that 100 percent of the water consumed indoors at the Project site would become wastewater conveyed to the SBSA Regional Treatment Plant. The wastewater demands of the Project are compared to the available capacity of WBSD sanitary sewer system and the SBSA Regional Treatment Plant to assess the potential for significant environmental impacts.

Solid Waste. Solid waste generation information for the Project is based on standard solid waste generation rates from CalRecycle. The Project's solid waste generation is then compared to available capacity at solid waste facilities that serve the Project area (Shoreway and Ox Mountain).

Stormwater. Analysis of potential impacts on the City's storm drainage system is based on information provided by Kier & Wright Civil Engineers and is included as relevant stormwater technical information in Appendix 3.9 of this Draft EIR. Refer to Section 3.9, *Hydrology and Water Quality*, for further information regarding the Project's impact on stormwater runoff.

Energy Services. Energy services were assessed based on information provided by the Sobrato Organization (Project Sponsor).

Impacts and Mitigation Measures

Impact UT-1: Water Supply. The Project would not exceed water supplies available under normal year conditions to serve the Project from existing entitlements. (LTS)

The Project's water demand has been calculated assuming office uses on floors two through four of both buildings and R&D uses on the first floors of both buildings. The water demand associated with this mix of uses at the Project site presents a conservative scenario of the types of tenants that could occupy the buildings, since water demand factors associated with R&D is typically higher than that of general office uses.

The Project's total demand for indoor and outdoor water use combined is estimated to be 28.5 AFY, including 23.0 AFY for indoor uses and 5.5 AFY for landscape use. Assuming the 0.8 AFY of existing water use on the Jefferson Site and 6.7 AFY of existing water use at the Commonwealth Site, the total new (net) demand on MPMWD's supply is 21 AFY or approximately 0.02 mgd. Table 3.13-5 provides the existing and proposed water demand for the Project.

Table 3.13-5. Existing and Proposed Water Demand

	Gallons Per Year	AFY	mgd
Proposed Total Indoor Water Use	7,478,839	23.0	0.020
Proposed Landscape Water Use	1,783,602 ^a	5.5	0.005
Existing Water Use, Commonwealth Site	-2,171,444	-6.7	-0.006
Existing Water Use, Jefferson Site	-259,182	-0.8	-0.001
Total Demand	6,825,815	21.0	0.019

Source: GHD, *Water Supply Assessment for the City of Menlo Park Commonwealth Corporate Center Project*, prepared for the Menlo Park Municipal Water District, October 24, 2013.

Notes:

^a. In compliance with the City's Water Efficient Landscape Ordinance.

The WSA concluded that, under normal and single dry year conditions, MPMWD's supplies are sufficient to meet the Project demands together with the demands of the previously proposed projects with approved WSAs. Under multiple dry year scenarios, supply slightly exceeds demand in the first year of a multiple dry year scenario. In the second and third years of the multiple dry year scenario, demand exceeds supply by 4 to 6 percent over the course of a 20-year planning period. MPMWD has a water shortage contingency plan in place that allows it to achieve demand reductions of up to 50 percent. Therefore, any reductions that could be required to manage supply restrictions in multiple year droughts can be achieved by MPMWD. Therefore, operation of the Project would have a **less-than-significant** impact on the existing water supplies and would not require the expansion of existing entitlements.

Impact UT-2: Impacts on Water Treatment Facilities. The Project would not require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (LTS)

As described above, MPMWD purchases 100 percent of its treated water supplies from SFPUC. The purchased water is treated at the Sunol Valley WTP and the Harry Tracy WTP. The Harry Tracy WTP has a peak capacity of 140 mgd and sustainable capacity of 120 mgd. As part of the WSIP, the Harry Tracy WTP would be expanded to sustainably treat 180 mgd and the Sunol Valley WTP was recently expanded to sustainably treat 160 mgd. When the Harry Tracy WTP is operating at capacity, along with the Sunol Valley WTP, SFPUC would be capable of supplying up to 340 mgd. Furthermore, the newly constructed SFPUC Tesla Water Treatment Facility in Tracy, California, (part of the WSIP) will be the largest ultraviolet disinfection treatment plant in California, capable of producing 315 mgd. Therefore, after 2015, SFPUC would be able to deliver up to 655 mgd of treated water.

The Project would acquire its water supply from MPMWD. Implementation of the Project would result in approximately 21 AFY, or 0.019 mgd, of additional water demand from the MPMWD. As described in Impact UT-1, MPMWD has capacity within its ISG of 4,993 AFY, or 4.465 mgd, to accommodate the additional water demand that would result from operation of the Project. Operation of the Project would not require MPMWD to purchase additional water supplies from SFPUC and, therefore, would not require SFPUC to deliver additional water supplies over its normal-year system-wide target of 265 mgd. As of 2011, the SFPUC's RWS has sufficient capacity in its water treatment facilities to meet its daily system-wide demands (BAWSCA and City of San Francisco). Furthermore, at the time the Project is operational, the water treatment facility improvement projects described previously would all be complete and SFPUC would be capable of treating up to 655 mgd. Therefore, implementation of the Project would not require the expansion of existing water treatment facilities or the construction of new facilities. The Project would have a *less-than-significant* impact with regard to existing water treatment facilities.

Impact UT-3: Wastewater Generation. The Project would not exceed wastewater treatment requirements of the San Francisco Bay Regional Water Board, require or result in the construction of new wastewater treatment facilities or the expansion of new facilities, or result in a determination by the South Bayside System Authority that it has inadequate capacity to serve the Project's expected demand and existing entitlements. (LTS)

It is estimated that 100 percent of indoor water demand at the Project would become wastewater conveyed to the SBSA Regional Treatment Plant. Implementation of the Project would result in the generation of approximately 0.020 mgd of wastewater associated with indoor uses. As previously described, the existing 54-inch diameter trunkline that runs along Commonwealth Drive serves the Project site. WBSD currently has the capacity to accommodate the increase in wastewater generation that would result from the Project.³⁵

As discussed above in *Methods for Analysis*, it is assumed that 100 percent of the water consumed indoors at the Project site would become wastewater conveyed to the SBSA Regional Treatment Plant. Therefore, the baseline wastewater rate for this analysis is approximately 7.5 AFY. As described above, WBSD's average daily flow during dry weather is approximately 3.60 mgd, compared to WBSD's dry weather allocation of approximately 7.975 mgd. Wastewater discharge from the Project site would

³⁵ Bill Kitajima, West Bay Sanitary District, email communication, May 6, 2013.

constitute less than 1 percent of WBSD's remaining available capacity entitlements from SBSA.³⁶ Therefore, WBSD's available capacity entitlements from SBSA would be sufficient to accommodate the projected wastewater flow that would result from implementation of the Project. Because the SBSA Regional Treatment Plant would have adequate capacity to process the wastewater generated from the Project, implementation of the Project would not exceed the wastewater treatment requirements of the RWQCB, and the impact is *less than significant*.

Impact UT-4: Solid Waste Generation. The Project would comply with federal, state, and local statutes and regulations related to solid waste and would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs. (LTS)

Operation of the Project would increase the number of existing employees at the Project site by an additional 1,300 employees, thereby increasing the generation of solid waste. According to the City's current disposal rates as reported to CalRecycle, employees in the City generate approximately 5.6 pounds per employee per day.³⁷ Using this rate, the Project would generate approximately 6,890 pounds of solid waste per day or approximately 813 tons per year.³⁸ Table 3.13-6 shows existing and projected solid waste generation rates for the Project site.

Table 3.13-6. Existing and Projected Solid Waste Generation Rates for the Project Site (tons/yr)

	Existing Solid Waste Generation	Projected Solid Waste Generation	Net New Solid Waste Generation
Jefferson Site	8.4	--	-8.4
Commonwealth Site	--	813	813
Total (Project)	8.4	813	804.6

Source: CalRecycle, *Jurisdiction Diversion/Disposal Rate Detail*.

Note: Generation rates are based on a per employee solid waste generation rate of 5.3 pounds/employee/day.

As described under *Existing Conditions* above, waste generated at the Project site would be collected by Recology San Mateo and hauled to the Shoreway Environmental Center. Shoreway is permitted to receive 3,000 tons of refuse per day and currently receives approximately 1,500 tons per day. Once collected and sorted at Shoreway, solid waste is transported to the Ox Mountain Sanitary Landfill. The landfill is permitted to receive 3,588 tons per day, or approximately 1.3 million tons per year, and has a remaining capacity of over 44 million cubic yards. Solid waste generated by operation of the Project would represent less than 1 percent of the permitted capacity of Shoreway and Ox Mountain. As such, Shoreway and the Ox Mountain would have sufficient capacity to serve the Project, resulting in a *less-than-significant* impact.

³⁶ 7.975 mgd dry weather allocation – 3.60 mgd average daily flow = 4.375 mgd of remaining capacity. (0.020 mgd generated by Project / 4.375 mgd)* 100 = 0.46 percent

³⁷ CalRecycle. *Jurisdiction Diversion/Disposal Rate Detail*. Menlo Park, 2012.

<http://www.calrecycle.ca.gov/LGCentral/Reports/DiversionProgram/JurisdictionDiversionDetail.aspx?JurisdictionID=299&Year=2012>. Accessed December 18, 2013.

³⁸ Assumes 260 working days per year.

Impact UT-5: Stormwater Generation. The Project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities. (LTS)

Surface runoff from the Project Site is collected via the street network at Jefferson Drive and conveyed via an existing 36-inch storm drain leading to the lower Bay. A small portion of the Jefferson Site discharges directly to Jefferson Drive over two existing driveway aprons. The new development would have a larger landscaped area relative to existing conditions, and biotreatment measures would be incorporated. These features would result in a net decrease in the amount of runoff and associated pollution leaving the Project site. Specifically, as discussed in Section 3.9, *Hydrology and Water Quality*, there would be a 20 percent reduction in impervious surfaces relative to existing conditions (from 540,577 sf to 430,278 sf). There would be an approximate 291 percent increase in pervious surfaces (from 37,895 sf to 148,194 sf) following Project implementation. The overall effect of these changes would be an approximate 13.3 percent reduction in the total volume of stormwater runoff at the Project site.³⁹ Because of the decrease in stormwater runoff, the Project site would not exceed the capacity of existing or planned stormwater drainage systems, and the impact is *less than significant*. Refer to Section 3.9, *Hydrology and Water Quality*, for more information regarding stormwater runoff.

Impact UT-6: Energy Demand. The Project would not exceed existing gas and electric supplies. (LTS)

Gas and electric service to the Project site would be provided to meet the needs of the Project site as required by California Public Utilities Commission (CPUC), which obligates PG&E to provide service to its existing and potential customers. Since development at the Project site would meet Title 24 conservation standards and would be served by PG&E, the Project site would not directly require the construction of new energy generation or supply facilities. Further, the Project site is currently zoned M-2 and designated Limited Industry. Development of the Project site would comply with the City's programmed land use designation; however, the two proposed buildings would exceed the 35-foot maximum height limit in the M-2 Zoning District. In order to comply with the M-2 zoning, the increase in height from 35 feet (allowed) to 61.3 feet (proposed) would require rezoning the Project site to M-2(X). In designating a particular land use, the City anticipates a corresponding demand on energy services. Because the Project would comply with the existing land use designation, the associated energy demand would be within the City's forecasts as well. Therefore, development of the Project site would not result in adverse environmental impacts related to energy demand; the impact would be *less than significant*.

Cumulative Impacts

The geographic context for a discussion of cumulative impacts on utilities is the service area of the utility provider. The geographic context for cumulative impacts on wastewater treatment is the WBSD and SBSA service area. The geographic context for cumulative impacts on water supply is MPMWD's service area. The geographic context for cumulative impacts on solid waste is the Ox Mountain Landfill and Shoreway Environmental Center service areas. With regard to storm drainage, the geographic context would be the City, which oversees the City's storm drain system. Additionally, the geographic context for cumulative impacts on electricity and natural gas is PG&E's service area in northern California.

³⁹ Kier & Wright Civil Engineers & Surveyors. 2013. Stormwater Report for 151 Commonwealth Drive and 164 Jefferson Drive, Menlo Park, California. Project No. A11089-2. April 12. Santa Clara, California.

Impact C-UT-1: Cumulative Water Demand. The Project, in combination with other development within the City, would not require or result in the construction of new water treatment facilities or the expansion of existing facilities. (LTS)

Tier 1

Tier 1 cumulative projects within the MPMWD's service area consist of the Menlo Gateway Project, the Facebook Campus Project, the 1283 Willow Road Project, and the 2484 Sand Hill Road Project. Together, these projects could develop up to 1,392,724 sf of office/retail/commercial uses. This growth would increase the demand for water supplied by MPMWD. MPMWD's 2010 UWMP provides water use projections through 2035 for its service area. As noted, above, MPMWD will not only meet but exceed its 2015 reduction target.

According to the WSA, in the City's 2010 UWMP, MPMWD projected that demands in the commercial, industrial, and institutional (CII) sector would increase from 1,366.0 AFY (1.219 mgd) in 2010 to 1,876.7 AFY (1.675 mgd) in 2035, an increase of 510.7 AFY, or 0.456 mgd. These projections were made before the approval of the Project, the Tier 1 Menlo Gateway Project, and the Tier 1 Facebook Campus Project. The proposed Project would result in a net increase of 21 AFY (0.02 mgd). The Menlo Gateway Project will add a demand of 153 AFY (0.137 mgd). The Facebook Campus Project will add a demand of 119.4 AFY (0.107 mgd). Together these three projects add a total of 293.4 AFY (0.26 mgd), which is within the CII sector's projected growth as described in the 2010 UWMP.

Because the other development projects (single-family residential, multi-family residential, and non-residential) are primarily infill development projects, and over 90 percent of these projects are either completed, under construction or approved, it is assumed that these cumulative development projects are encompassed by the growth factors used in the City's UWMP to estimate future water demand. Further, it is assumed that these projects would be constructed by 2035 (the end date for the WSA and UWMP projections). The SBx7-7 water demand targets described above equate to a service area demand of approximately 3.3 mgd in 2015, 3.0 mgd in 2020, and 3.2 mgd in 2035. The Project would demand a net of 18,780 gpd, which represents less than 1 percent of the projected citywide 2035 demand. Therefore, the Project, in combination with other development within the MPMWD service area, would have sufficient water supplies available during normal year conditions under its ISG of 4.465 mgd. During multiple dry years, the Water Shortage Contingency Plan would ensure that the water supply from SFPUC would be adequate in the second and third year of multiple year droughts. Therefore, there is no significant cumulative impact from Tier 1 projects combined with the Project.

As described under Impact UT-1, MPMWD has sufficient capacity in its ISG to accommodate the water demand of the Project under normal year and single dry year conditions. As described under Impact UT-2, the Project would not result in the need for the expansion of existing water treatment facilities. According to the WSA, the City's total water demand in the year 2035 is approximately 3.241 mgd (3,630.2 AFY), at which point it is assumed that the cumulative projects considered in this analysis would be constructed and would be contributing to overall water demand at that time. Completion of the Tesla Water Treatment Facility and expansion of the Sunol Valley WTP and Harry Tracy WTP would allow the SFPUC to deliver up to 655 mgd. The MPMWD's projected demand in 2035 is well within the capacity of its ISG and the MPMWD could serve the cumulative projects with its existing entitlements. The Project, in combination with other development within the City, would increase water demand, but there are sufficient water supplies available to serve the cumulative projects from existing entitlements under normal, dry and multiple dry years, and the increased demand would not require or result in the

construction of new water treatment facilities or the expansion of existing facilities. Therefore, the Project's cumulative impact on water supply and treatment would be *less than significant*.

Tier 2

The Tier 2 projects illustrated in Figure 3.0-1 in Section 3.0 consist of programmatic land use plans or large development projects that are either outside the City, somewhat speculative, or in the early stages of project planning. As shown in Table 3.0-2 in Section 3.0, Tier 2 projects could result in more than 5,000 residential units and over 2.7 million sf of non-residential uses. Future development is programmed through a large-scale planning document, and when buildout may occur is not necessarily reasonably foreseeable. Although these projects are speculative, it is expected that any future development will increase the demand for water supply and treatment. If the development exceeds MPMWD's existing entitlements and water treatment capacity, this could be a significant cumulative impact. The Project would demand 18,780 gpd, which represents less than 1 percent of the projected citywide 2035 demand. This incrementally small increase in demand would not be cumulatively considerable, and the Project's cumulative impact with respect to water treatment and demand with the Tier 2 projects would be *less than significant*.

Impact C-UT-2: Cumulative Wastewater Generation. The Project, in combination with other development within the West Bay Sanitary District service area, would not exceed wastewater treatment requirements, require or result in the construction of new wastewater treatment facilities or the expansion of existing facilities, or exceed expected demand and existing entitlements. (LTS)

Tier 1

As of 2013, WBSD uses about 45 percent of its dry weather capacity entitlement from SBSA, with a remaining available allocation of approximately 4.375 mgd of average daily dry weather wastewater flows. The Project is forecasted to generate an average daily demand of approximately 0.10 mgd of wastewater, which is about 1 percent of the City's current allocation at SBSA. Existing wastewater flows from WBSD on an annual average basis total approximately 3.60 mgd.

In order to comply with SBx7-7, the City must reach a 10 percent reduction in water use by 2015 and a 20 percent reduction by 2020. As previously mentioned, for the purposes of this analysis, a 1:1 ratio of water use to wastewater generation is assumed. As of 2010, residential water demand totaled 1.342 mgd, and CII sector demand totaled 1.219 mgd. By 2035, the UWMP estimates that residential water demand would decrease by 0.351 mgd, and the CII sector demand would increase by 0.456 mgd (including water demand associated with the Project), representing an overall increase of 0.105 mgd over 2010 conditions. Assuming a 1:1 water use to wastewater generation ratio, Tier 1 cumulative growth within the City would represent approximately 1 percent of WBSD's remaining wastewater flow allocation from SBSA. Therefore, WBSD's current wastewater entitlement from SBSA would be sufficient to accommodate wastewater generated by Tier 1 cumulative development projects. Because cumulative wastewater flows would be within the WBSD's existing wastewater entitlement, the Project in combination with cumulative development would not cause the SBSA Regional Treatment Plant to process more than its RWQCB permitted treatment capacity.

The Project, in combination with other development within the WBSD service area, would not exceed wastewater treatment requirements, require or result in the construction of new wastewater treatment facilities or the expansion of existing facilities, or result in a determination by the South Bayside System Authority that it has inadequate capacity to serve the Project's expected demand and existing

entitlements. Consequently, the Project's contribution to wastewater generation would not be substantial and the cumulative impact would be *less than significant*.

Tier 2

The Tier 2 projects illustrated in Figure 3.0-1 in Section 3.0 consist of programmatic land use plans or large development projects that are either outside the City, somewhat speculative, or in the early stages of project planning. Future development is programmed through a large-scale planning document and buildout is not necessarily reasonably foreseeable. Although these projects are speculative, it is expected that any future development will increase the demand for wastewater treatment and conveyance capacity. If the development exceeds the provider's existing entitlements and wastewater treatment capacity, this could be a significant cumulative impact. The Project's incrementally small, approximately 1 percent increase in wastewater generation would not be cumulatively considerable, and the Project's cumulative impact with respect to wastewater treatment with the Tier 2 projects would be *less than significant*.

Impact C-UT-3: Cumulative Solid Waste Generation. The Project, combined with other development within the RethinkWaste's service area, would not exceed service area solid waste disposal capacity and would be expected to comply with federal, state, and local statutes and regulations related to solid waste. (LTS)

Tier 1

Data presented in the 5-Year Countywide Integrated Waste Management Plan for San Mateo County shows that solid waste disposal for Menlo Park decreased from 58,927 tons in 1998 to 32,653 tons in 2008, representing a 45 percent decrease. Similarly, solid waste disposal at Ox Mountain Landfill decreased from 925,158 tons in 1998 to 665,924 in 2008, representing a 27 percent decrease. As of 2013, Ox Mountain has a remaining capacity of about 44.6 million cubic yards and is anticipated to close in 2018. This estimate is based on current disposal and diversion rates and assumptions about future development within the landfill service area. It is assumed that the Tier 1 cumulative projects fit within the future solid waste disposal projections used to estimate the remaining lifespan of Ox Mountain, as they are consistent with ABAG growth projections. Further, according to the City's Climate Action Plan, expanded recycling services began in January 2011. It is expected that the expanded recycling services will increase the diversion of bottles, cans, paper, and plastic by approximately 15 percent. In addition, Chapter 12.48 of the City's Municipal Code requires that commercial development projects of 5,000 sf or greater divert at least 60 percent of a given project's anticipated debris. This ordinance would apply to the cumulative projects that would result in development of 5,000 sf or more. In light of these considerations, there would be sufficient landfill capacity to accommodate solid waste until the landfill's approximated closing date of 2018, and there would be no significant cumulative impact. The City would continue to require the Project and other foreseeable development to minimize solid waste disposal to Ox Mountain through recycling and other diversion practices, as well as enforce compliance with the State Model Ordinance California Solid Waste Reuse and Recycling Access Act of 1991 and California AB 341. The Project would generate approximately 804.6 tons of solid waste per year, or approximately 3.1 tons per day⁴⁰. This solid waste generation represents less than one percent of the remaining, available daily capacity at the Shoreway Environmental Center and less than one percent of the available daily capacity at Ox Mountain. Therefore, the Project would have a *less-than-significant* cumulative impact on solid waste disposal services.

⁴⁰ Assumes 260 working days per year.

Tier 2

The Tier 2 projects illustrated in Figure 3.0-1, Section 3.0, consist of programmatic land use plans or large development projects that are either outside the City, somewhat speculative, or in the early stages of project planning. Future development is programmed through a large-scale planning document and buildout is not necessarily reasonably foreseeable. Although these projects are speculative, it is expected that any future development will increase the demand for solid waste disposal capacity. If the development generates solid waste that exceeds the available capacity of the servicing landfills, this could be a significant cumulative impact. The Project's incrementally small contribution to solid waste would not be cumulatively considerable, and the Project's cumulative impact with respect to solid waste with the Tier 2 projects would be *less than significant*.

Impact C-UT-4: Cumulative Stormwater Generation. The Project, in combination with cumulative development in the City, would not require the construction or expansion of stormwater facilities. (LTS)

Tier 1

Cumulative development of the Tier 1 projects in the City would primarily consist of infill and redevelopment, which would not substantially increase impervious surfaces in the City. Therefore, there would be no significant cumulative impact on the storm drain system. The Project would neither increase demand on the City's storm drainage system nor would it result in the construction of new facilities or expansion of existing facilities because the Project area is expected to result in less stormwater runoff than under existing conditions. As described in Section 3.9, Hydrology and Water Quality, the Project would be subject to the provisions contained in the San Mateo Countywide Municipal NPDES Permit (Municipal Stormwater NPDES Permit). Provision C.3 of the Municipal Stormwater NPDES Permit requires that the Project implement a Stormwater Management Plan that includes limitations on increases in peak runoff discharge rates in addition. Further, as described under Impact UT-5 above, implementation of the Project would reduce the amount of impervious cover at the Project site, thereby increasing stormwater retention and reducing peak discharges to the City's storm drain system. Tier 1 projects that would include 10,000 sf or more would also have to comply with the Municipal Stormwater NPDES Permit and the provisions therein. Therefore, the Project's cumulative impact would be *less than significant*.

Tier 2

The Tier 2 projects illustrated in Figure 3.0-1, Section 3.0, consist of programmatic land use plans or large development projects that are either outside the City, somewhat speculative, or in the early stages of project planning. Future development is programmed through a large-scale planning document and buildout is not necessarily reasonably foreseeable. Although these projects are speculative, it is expected that any future development will not substantially increase the amount of impervious surfaces in the region, since the region is primarily built out. The Project's cumulative impact combined with Tier 2 projects would be *less than significant*.

Impact C-UT-5: Cumulative Energy Demand. The Project, in combination with other development served by PG&E, would not exceed existing gas and electric supply capacity. (LTS)**Tier 1**

All cumulative development would be required to comply with California's Title 24 energy conservation standards for new construction. Consequently, the Project, in combination with other cumulative development in the City, would not be expected to wastefully use gas and electricity. Existing and planned gas and electric service would be provided to meet the needs of the cumulative development customers as required by the CPUC, which obligates PG&E to provide service to its existing and potential customers. Since the Project and future cumulative development would comply with Title 24 conservation standards and would be served by PG&E, new development would not directly require the construction of new energy generation or supply facilities directly attributable to growth in the City, and there would be no substantial adverse environmental impacts related to energy demand. Therefore, the Project's cumulative impact would be *less than significant*.

Tier 2

The Tier 2 projects illustrated in Figure 3.0-1, Section 3.0, consist of programmatic land use plans or large development projects that are either outside the City, somewhat speculative, or in the early stages of project planning. Future development is programmed through a large-scale planning document and buildout is not necessarily reasonably foreseeable. Although these projects are speculative, it is expected that any future development will increase the demand for natural gas and electricity, but would also be expected to comply with Title 24 requirements. As natural gas and electricity providers are on-demand utilities (i.e., they expand their infrastructure to meet growth needs), future expansions of service would be provided or further energy-consumption measures would be implemented. The cumulative impact would not be significant. The Project would reuse existing buildings and construct some new buildings, but would not substantially increase the demand for natural gas and electricity in the PG&E service area. The Project's cumulative impact with respect to natural gas and electricity demand with the Tier 2 projects would be *less than significant*.