

APPENDIX E
WATER SUPPLY ASSESSMENT

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A. EXECUTIVE SUMMARY

The Water Supply Assessment (WSA) will provide information for use in the California Environmental Quality Act (CEQA) analysis for the proposed project. The requirements for the WSA are described in the California Water Code Sections 10910 through 10915, amended by the enactment of Senate Bill 610 (SB 610) in 2002. SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by the new project, as well as the reasonably foreseeable cumulative demand during normal year, single dry year, and multiple dry year conditions over the next 20 years.

This WSA builds on previous water demand projections created as part of the Bay Area Water Supply and Conservation Agency (BAWSCA) Regional Demand and Conservation Projections, which was completed in September 2014. The new demands from the BAWSCA study were approved by Estero Municipal Improvement District (EMID) and were used as a basis for the 2015 Urban Water Management Plan (UWMP) submitted by EMID in June 2016. The supply information is based on the 2015 UWMP, approved by the EMID Board of Directors on June 6, 2016. The most recent WSA adopted by the EMID Board of Directors in March 2019 was the Pilgrim Triton Master Plan Project Phase C.

All the development projects included in this WSA are within the service area of EMID. It is important to note that, though some projects were completed by the time this WSA was published (i.e., the projects were completed sometime between 2016 and 2019), there was not enough historical water use data to create an accurate, actual site water use estimate. In fact, some of the buildings were not fully occupied, landscape was not fully established, and a full year of water use was not available to ascertain water use trends through the various seasons. All future development projects are required to maximize the efficient use of water by installing water saving plumbing fixtures and drought tolerant landscaping to reduce water demand.

The process of determining water demand for developing project sites is a dynamic one, and by the next WSA submittal there will be more actual site data available under non-dry year conditions. EMID has completed the WSA based on the land use proposed for the projects listed below.

1. Lincoln Centre will require approximately 120 acre-feet per year (AFY) of additional water demand. Phase 1, consisting of 360,000 square feet (approximately 58 percent), of this project was completed in 2019. This project will be completed between years 2020 and 2025.

2. Gilead Integrated Corporate Campus Master Plan Project will require approximately 105 AFY of additional water demand. This project will be completed in various phases by 2030.
3. Pilgrim Triton Master Plan Project with the proposed change to Phase C will require approximately 128 AFY of additional water demand. This project will be completed in various phases by 2030.
4. Foster Square (formerly 15-Acres Project) will require approximately 56 AFY of additional water demand. This project is currently under construction and will be fully completed by 2020.
5. Tidelands (400 Mariners Island Boulevard, City of San Mateo) residential project required approximately 14 AFY of additional water demand. This project was completed in 2017.
6. TownePlace Suites (formerly Chess Hotel) required approximately 11 AFY of additional water demand. This project was completed in 2017.
7. Chess/Hatch Drive Offices Project will require approximately 15 AFY of additional water demand. This project will be completed between years 2025 and 2030.
8. 1297 Chess Drive (formerly Harry's Hofbrau) required approximately 2 AFY of additional water demand. This project was completed in 2017.
9. 1601 Beach Park Blvd will require approximately 5.5 AFY of additional water demand. This project will be completed by year 2025.
10. New Hotel in Metro Center (corner of Metro Center Boulevard and Shell Boulevard in the City of Foster City) will require approximately 9.6 AFY of additional water demand. This project will be completed between years 2020 and 2025.

The analysis determined that the EMID projects listed above will add a total of 467 AFY additional demand to the existing demand. Project and demand values are summarized in Table G-6. The evaluation concluded that EMID will have sufficient water supply to serve all the proposed projects as well as existing customers in the 20-year time horizon.

Prior to issuance of a use permit for project entitlements, utility analyses shall be performed by the project developer to determine whether existing transmission/distribution infrastructure has adequate capacity to deliver the needed water to the project sites. The costs of the improvements shall be the responsibility of the developer.

B. INTRODUCTION

1. Purpose and Authorization

The purpose of the Water Supply Assessment (WSA) is to determine whether there is adequate water supply to meet the water needs of the new proposed projects within the EMID service area. The WSA was developed by the collaborative efforts of the project team consisting of Urban Planning Partners, Maddaus Water Management Inc., and Foster City (EMID) Planning and Engineering Departments. Urban Planning Partners was the project manager; Maddaus Water Management provided estimating calculations for the water demand of the Pilgrim Triton Master Plan Project Phase C and assisted to compile the WSA report; Foster City and EMID staff provided information on all other development projects and demands contained within the report.

2. Scope of Investigation

This WSA focuses on the development of the new hotel proposed for the southwest corner of Metro Center Boulevard and Shell Boulevard, in the Metro Center General Development Plan area. In addition, it focuses on the potential development at 1601 Beach Park Blvd, but also includes projects considered in the 2008 EIR, and projects proposed and in various planning stages after the EIR was approved on April 21, 2008 by the City Council.

3. Documents and Persons Consulted

Information in this report is supplemental to EMID's 2007 CEQA Water Use Analysis conducted for the Pilgrim Triton Master Plan Project published by EMID in February 2007 and the Pilgrim Triton Master Plan EIR,¹ supplemented by information on other proposed projects prepared by Foster City staff from January 2017 to August 2019.

C. PROJECT DESCRIPTIONS INCLUDED IN WSA

The following descriptions include the projects in this WSA that have been approved or proposed as well as those that are currently under construction or have yet to begin construction.

Lincoln Centre Life Sciences Research Campus Project: The approved project is on approximately 20 acres of land located in Foster City. Access to the site is from Lincoln Centre Drive, which currently terminates within the project site. It was previously developed with seven one- and two-story office/warehouse buildings totaling approximately 280,000 square feet. All seven buildings were demolished by the current owner and project applicant. The approved project would contain up to 595,000 gross square feet of life sciences research facilities in a campus setting, including up to 555,000 gross square feet of laboratory and office uses and a 40,000-square-foot

¹ LSA Associates. *Pilgrim-Triton Master Plan Environmental Impact Report*, March 2008.

building to house amenities for employees and visitors. Phase 1 consists of 320,000 square feet in two lab/office buildings and 40,000 square feet in one amenities building and was completed in early 2018. The actual amount approved for development will be dependent upon traffic studies and traffic capacity. This project will be fully completed between years 2020 and 2025.

Gilead Integrated Corporate Campus Master Plan Project: The approved project is on approximately 72 acres of land located in Foster City, within the Vintage Park Master Planned Development, owned by Gilead Sciences, Inc. In February 2010, the City approved the expansion of the 40-acre Gilead campus to add about 570,000 net new square feet of offices and labs. In 2013, the City Council approved an integrated Master Plan to incorporate land Gilead purchased from Electronics For Imaging. The resulting campus has a maximum build-out of 2,500,600 square feet and includes a mix of office buildings, laboratory buildings, cafeterias, manufacturing spaces, meeting spaces and a pilot lab. Two office/lab buildings (309 Velocity Way and 355 Lakeside Drive) and two parking garages within the approved integrated Master Plan have been completed since 2013. Additionally, two lab buildings, 324 and 357 Lakeside Drive, have been constructed as of 2018. This project will be completed in various phases by 2030.

Pilgrim Triton Master Plan Project: The approved project originally included 296,000 square feet of commercial/office space, a one-acre park, and 730 units of residential housing. The Project Phase C proposes to increase the land use from the originally planned 17 residential units to a total of 92 housing units. With a net increase of 75 residential units for Pilgrim Triton Phase C, the total number of residential units for the entire Master Plan area with the amendment would increase from 730 units to 805 units. The total amount of commercial/office space for the entire Master Plan area with the amendment would decrease from 296,000 square feet to 70,057 square feet. Phase C includes 70 for-sale townhouse units consisting of 2-, 3-, and 4-bedroom plans, and ranging in size from approximately 1,220 square feet to 2,050 square feet. Phase C also will include 22 workforce housing units that will be 1- and 2-bedroom units and range in size from approximately 760 square feet to 1,110 square feet. This project will be completed in various phases by year 2030.

Foster Square (formerly 15-Acres Project): The approved project is on approximately 15 acres located in Neighborhood 1 adjacent to the Foster City Civic Center and the Peninsula Jewish Community Center. The approved project consists of the following: 200 market rate senior units, 131 assisted living units, 24 memory care beds, 66 affordable housing units, and 30,000 square feet of retail. The assisted living, memory care and affordable housing components were completed in late 2016. The remainder of the project is currently under construction and will be completed in the next one to two years.

Tidelands (400 Mariners Island Boulevard, City of San Mateo): The completed project consists of a 76-unit residential development on approximately 3 acres of property

located at the southwest corner of E. Third Avenue and Mariners Island Boulevard in the City of San Mateo. EMID is responsible for providing water to the project site. This project was completed in 2017.

TownePlace Suites (formerly Chess Hotel): The completed project is on approximately 1.7 acres of land located in Foster City, within the Vintage Park Neighborhood. The project replaced a 9,385-square-foot, one-story, unoccupied restaurant with a new 69,222-square-foot, five-story, 115-room hotel. The project site is located off Vintage Park Drive and Chess Drive at 1299 Chess Drive. This project was completed in 2017.

Chess/Hatch Drive Office Project: The approved project would redevelop approximately 190,000 square feet of low-scale one- and two-story commercial/industrial buildings on approximately 12 acres with up to 800,000 square feet of office space in three multi-story buildings up to 10 stories in height served by a combination of at-grade parking lots and a parking structure. The approved Master Plan would require the demolition of 11 existing buildings. This project will be completed between years 2025 and 2030.

1297 Chess Drive (formerly Harry's Hofbrau): The completed project redeveloped the former Harry's Hofbrau restaurant (approximately 8,841 square feet on a 1.5-acre site) located at 1297 Chess Drive in the Vintage Park neighborhood to a retail restaurant building of approximately 11,692 square feet and about 550 square feet of outdoor dining space. The restaurant space includes a Habit Burger at 2,555 square feet, a Mod Pizza at 2,600 square feet, and a Panera Bread at 4,643 square feet. The site also includes a FedEx at 1,894 square feet. This project was completed in 2017.

1601 Beach Park Blvd: The proposed project consists of a 31-unit residential development. The proposal includes demolition of an existing church building to construct 31 condominium-style townhomes and site improvements on an approximately 1.35-acre site located at 1601 Beach Park Boulevard. The subject site is located at the northwest corner of Beach Park Boulevard and Gull Avenue. As proposed, the 31 townhomes include a mix of three (3) unit types, all of which have four (4) bedrooms. EMID would be responsible for providing water to the project site. As of October 2019, an environmental analysis for the development is under way. Though a Use Permit application (for site design/architecture, etc.) has yet to be submitted, the project is considered likely to be entitled and constructed. The project is being pursued under an aggressive timeline, estimated to begin within the next two years or so and completed between years 2020 and 2025.

New Hotel in Metro Center: The proposed project involves the development of an approximately 83,000 square-foot, six-story hotel on an approximately 1.36-acre vacant lot at the corner of Metro Center Boulevard and Shell Boulevard in the City of Foster City. There is no building to be demolished, but there is existing irrigation at site. The project site is located in a primarily commercial neighborhood, although a multifamily

condominium complex is situated directly adjacent to the project site, to the south. Other land uses adjacent to the project site include offices, hotels, and large-scale retail. The most recent proposal for the hotel includes 154 guest rooms², a restaurant, meeting space, and a rooftop bar, in addition to several features generally associated with short-stay hotels, including a fitness center, lobby lounge, and a guest laundry room. It is envisioned that the hotel will serve the local and regional market as an upscale destination, anticipated to be affiliated with Marriott brands AC Hotels or Aloft. The building would be constructed on a raised podium above the surface-level parking. The proposed development would provide approximately 140 parking spaces, new drive aisles, landscaping, and covered outdoor seating areas. Auto access to the site would be provided via driveways on Shell Boulevard and Metro Center Boulevard. This project will be completed between years 2020 and 2025.

D. EMID AND ITS WATER SUPPLY SOURCE

1. EMID

EMID manages the distribution, operation, and maintenance of the City of Foster City's water supply system. The City's sources of water, water treatment facilities, and water distribution system are described below. EMID also supplies water to residents in part of the City of San Mateo (Mariner's Island area).

EMID purchases all its water from the San Francisco Public Utility Commission (SFPUC) as a contractual member of the Bay Area Water Supply and Conservation Agency (BAWSCA). The SFPUC's water system consists of three regional water supply and conveyance systems: the Hetch Hetchy system, the Alameda system, and the Peninsula system. The Hetch Hetchy system is supplied by runoff from the upper Tuolumne River watershed on the western slope of the central Sierra Nevada Mountains. The Alameda system includes conveyance facilities connecting the Hetch Hetchy aqueducts and the Alameda water sources to the Peninsula system. The Peninsula system includes water facilities that connect the EMID and other Peninsula customers to the SFPUC distribution system and the Bay Division Pipelines. EMID does not have any groundwater or recycled water sources to supplement its supply.

EMID receives the already treated water from SFPUC and distributes it to its customers. EMID has only one main source of water supply, a 24-inch transmission main that is connected to SFPUC's 54-inch Crystal Springs No. 2 line. The connection point is in the City of San Mateo on Crystal Springs Road. As a retailer, EMID has no direct control over its water supply and treatment.

² During preparation of this Draft EIR, the number of hotel rooms was increased from 154 to 156 rooms after completion of this water supply assessment. However, the addition of two rooms would have a negligible effect on the results of the water supply assessment and would not change the findings.

EMID has 4 at-grade water storage tanks with a total capacity of 20 million gallons for emergencies and peak and fire flow demand. Booster pumps are necessary to pump water from the storage tanks into the distribution system. The booster pump station has two electrical pumps and four engine drive pumps. The engine driven pumps are powered by natural gas with propane backup.

2. Supply Source and Contractual Provisions

In 1934, San Francisco combined the Hetch Hetchy system and the Spring Valley system to create the SFPUC system. The rights to local diversions were originally held by the Spring Valley Water Company, which was formed in 1862. The SFPUC is owned and operated by the City and County of San Francisco. EMID does not hold any existing water rights and all its water supply assurances come through the contract with SFPUC. In 1984, SFPUC executed a Settlement Agreement and Master Water Sales Contract (Contract) with the members of BAWSCA. The Contract is governed by the Master Sales Agreement (MSA), which expired in June 2009. In August of 2009, BAWSCA and its member agencies signed a new Water Supply Agreement and Individual Water Sales Contract with San Francisco. The Contract runs through June 30, 2034 and it guarantees a supply assurance of 184 million-gallons-per-day (MGD) to BAWSCA member agencies. The supply assurance to EMID is 5.9 MGD or 6,608 AFY.

In 2015, EMID purchased 4,459 AFY of water from SFPUC.³ Compared to historical use, SFPUC purchases have declined due to a decrease in water demand and the recent California extreme drought.

3. Water Supply Improvement Program

To enhance the ability of the SFPUC's water supply system to meet identified service goals for water quality, seismic reliability, delivery reliability, and water supply, the SFPUC is undertaking a Water System Improvement Program (WSIP). The WSIP will deliver capital improvements aimed at enhancing the SFPUC's ability to meet its water service mission of providing high quality water to its customers in a reliable, affordable, and environmentally sustainable manner.

The origins of the WSIP are rooted in the "Water Supply Master Plan" dated April 2000. Planning efforts for the WSIP gained momentum in 2002 with the passage of San Francisco ballot measures Propositions A and E, which approved the financing for the water system improvements. Also in 2002, Governor Gray Davis signed Assembly Bill No. 1823, the Wholesale Regional Water System Security and Reliability Act. The AB 1823 imposed various state-mandated programs on the wholesale regional water systems. One of the mandates is for SFPUC to adopt the WSIP.

³ Erler & Kalinowski, Inc. *2015 Urban Water Management Plan for the Estero Municipal Improvement District*, June 2016.

SFPUC's website describes the WSIP as follows:

"The Water System Improvement Program (WSIP) is a \$4.8 billion, multi-year capital program to upgrade the SFPUC's regional and local water systems. The program will deliver capital improvements that enhance the SFPUC's ability to provide reliable, affordable, high quality drinking water in an environmentally sustainable manner to 2.7 million people in the greater Bay Area. The program consists of 87 projects – 35 local projects located within San Francisco and 52 regional projects, spread over seven counties from the Sierra foothills to San Francisco. The current forecasted date to complete the overall WSIP is December 2021.

As of August 1, 2018, the WSIP is approximately 96 percent complete. For the local projects 34 are complete and the Lake Merced Pump Station Essential Upgrades in construction. For the regional projects seven are in construction and 40 projects are in close-out or have been completed."⁴

4. Emergency Connections

In addition to the 24-inch transmission main, EMID has two separate 12-inch emergency supply connections with California Water Service Company (which serves the City of San Mateo) and with Mid-Peninsula Water Agency (formerly called Belmont County Water District, which serves the City of Belmont, San Carlos, and part of Redwood City). EMID has agreements with both agencies that allow EMID to use these connections during emergency situations. Both the California Water Service Company and the Mid-Peninsula Water Agency are members of BAWSCA.

5. Service Area Information and Population and Employment Projections

EMID, currently serving a population of approximately 37,000, is located midway between San Francisco and San Jose. It is ten miles south of the San Francisco International Airport. The service area of EMID consists of the City of Foster City and the Mariner's Island area of the City of San Mateo. Most customers are residential users with a broad cross-section of offices, commercial businesses, and a small number of industrial businesses.

Today, the City of Foster City is almost built-out with several redevelopment projects in various stages of planning. At 100 percent buildout of the EMID service area, the population served by EMID is expected to be approximately 40,000 and employment is anticipated to grow to almost 36,000. Table G-1 shows the projected population and

⁴ SFPUC website, accessed September 6, 2019. Online: <http://www.sfwater.org/index.aspx?page=115>

employment in 5-year increments anticipated until the year 2035. The percent increases for the population and employment growth are also shown in the table.

This WSA uses the population and employment projections contained in the EMID 2015 UWMP⁵.

TABLE G-1 EMID CURRENT AND PROJECTED POPULATION AND EMPLOYMENT PER 2015 UWMP

	2015 ¹	2020	2025	2030	2035	2040
Service Area Population	36,231	37,200	37,800	38,400	39,000	39,600
Service Area Employment	23,533	28,488	29,744	32,749	34,805	35,910
% Population Increase		2.6	1.6	1.6	1.5	1.5
% Employment Increase		21.1	4.4	10.1	6.3	3.2

¹ 2015 data is based on actual numbers.

6. EMID Water Supply Projections

The SFPUC has the capacity to meet the demands of its retail and wholesale customers in wet and normal years. The Water Supply Agreement provides for a 184 MGD or 206,106 AFY supply assurance to BAWSCA member agencies. SFPUC’s annual supply assurance to EMID, going forward, is 5.9 MGD or 6,608 AFY as shown in Table G-2. Although the Master Agreement and accompanying Water Supply Contract expire in 2034, the supply assurance (which quantifies San Francisco’s obligation to supply water to its individual wholesale customers) survives their expiration and continues indefinitely.

TABLE G-2 ANNUAL SUPPLY ASSURANCE FROM SFPUC

Water Supply Source	2015 ¹	2020	2025	2030	2035	2040
SFPUC, MGD	4.0	5.9	5.9	5.9	5.9	5.9
SFPUC, AFY	4,463	6,608	6,608	6,608	6,608	6,608

¹ 2015 data is based on actual numbers.

According to SFPUC’s Water System Improvement Program, this amount is subject to further reductions in the event of drought, water shortage, earthquake, rehabilitation, or maintenance of the system. Table G-3 shows SFPUC’s projected deliveries to EMID for a single dry year and for five consecutive dry years, based on the 2015 UWMP allocations. The SFPUC’s plan calls for a 26 percent supply reduction of the normal year supply in the first year followed by 34 percent reductions of the normal year supply for the next

⁵ Erler & Kalinowski, Inc. *2015 Urban Water Management Plan for the Estero Municipal Improvement District*, Table 2-1 and Table 2-2, June 2016.

4 years. The percent reductions would be the same for any given five consecutive dry years. During the periods of supply reductions, EMID will have to implement the Water Shortage Contingency Plan to reduce demand. The EMID’s Water Shortage Contingency Plan describes the triggering levels and actions to be considered for each stage of demand reduction. As detailed in the next section, EMID Water Supply Shortage Contingency, the plan has five stages with each stage set to respond to increasingly more severe conditions. Therefore, the system demand will decrease to meet the reduced allocations by SFPUC.

TABLE G-3 EMID PROJECTED ANNUAL SUPPLY ALLOCATIONS FOR A SINGLE AND MULTIPLE DRY YEARS

Water Supply Source	Normal Year	Single Year				
		Year 1	Year 2	Year 3	Year 4	Year 5
SFPUC, AFY	6,614	4,888	4,394	4,394	4,394	4,394
% Reduction		26%	34%	34%	34%	34%

7. EMID Water Supply Shortage Contingency

The EMID Water Shortage Contingency Plan (WSCP) was adopted in June 2016 in response to the Urban Water Management Planning Act, requiring all California urban water retailers supplying water to more than 3,000 customers, or supplying more than 3,000 AFY of water, to adopt a water shortage contingency plan as part of the Urban Water Management Plan. The objective of this legislation is to prompt every water agency to plan for droughts and to prepare a series of responses based upon the severity and length of drought. EMID’s Water Shortage Contingency Plan includes five (5) stages of increasingly restrictive actions that would be implemented in response to water supply reductions. As required by CWC Section 10632(a), this includes preparing and planning for up to a 50 percent supply reduction. In the amended WSCP adopted in 2018, EMID has elected to refine their Water Shortage Contingency Plan to more aggressively implement reductions in a Stage 2 Drought to achieve 15 percent water savings compared to the previous 10 percent targeted goal. This revised approach to Stage 2 will add to the reliability and resiliency of being more responsive to early dry year conditions as they start to increase above the normal monthly water demands in the EMID service area.

Stage I: This is the normal stage that includes mandatory prohibitions in force at all times with the intent to eliminate water waste. This stage is a continuing effort to conserve water regardless of water supply conditions. It includes actions such as: (a) the enforcement of current plumbing code regulations requiring the installation of high efficiency fixtures in new construction; (b) ongoing public outreach; and (c) EMID’s continued implementation of demand management measures.

Stage II: This stage is triggered by a declaration of the EMID Board of Directors in accordance with Chapters 8.59 and 8.60 of the EMID code, upon the determination that the SFPUC or another governing authority (e.g., the SWRCB) has required a voluntary or mandatory reduction in water use of up to 15 percent due to water supply shortages or an emergency. This stage includes actions such as: (a) reduction in the frequency of water main flushing where possible; (b) no more than three (3) days per week outdoor irrigation of ornamental landscapes or turf using potable water; (c) increased public outreach, including information regarding fines or penalties for non-compliance; and (d) free water use surveys to the top 20 percent of water users in each customer category.

Stage III: This stage is triggered by a declaration of the EMID Board and will result in mandatory water conservation with a goal of reducing water demand 16 to 20 percent due to water supply shortages or emergency. This stage involves actions that include: (a) increased public outreach; particularly to the top 10 percent water users in each category, including a dedicated customer service hotline; (b) scheduling staff for enforcement and customer service training with the potential to hire additional or temporary staff where necessary; (c) the implementation of a drought surcharge on water rates as legally permitted; (d) and a limit of two (2) days per week outdoor irrigation of ornamental landscapes or turf using potable water.

Stage IV: This stage is triggered by a declaration of the EMID Board and will result in mandatory water conservation with a goal of reducing water demand 21 percent to 30 percent due to water supply shortages or emergency. This stage involves actions that include: (a) expanding public outreach (e.g., hosting public events and workshops); (b) increasing enforcement and water waste patrols; (c) changing to monthly metering and billing; prohibiting vehicle washing except at facilities using recycled or recirculating water; (d) and limiting outdoor irrigation of ornamental landscapes or turf using potable water to one (1) day per week (unless an exception is granted). The routine flushing of water mains will be suspended during this stage except when necessary to address immediate health or safety concerns.

Stage V: This stage is triggered by a declaration of the EMID Board and will result in mandatory water conservation with a goal of reducing water demand 31 percent to 50 percent due to water supply shortages or emergency. This stage involves actions such as: (a) increased public outreach and development of water budgets for all accounts, including appropriate notice to those accounts, where water use shall not exceed these water budgets established by EMID for each customer; and (b) turf irrigation is always prohibited during this stage and existing irrigation systems shall not be expanded.

Table G-4 shows the 3-year estimated minimum water supply from SFPUC to EMID as a three-year worst-case supply projection (e.g., in a case of drought or other causes of reduced water supply) based on the 2015 Urban Water Management Plan allocation provided for EMID based on the BAWSCA Drought Implementation Plan.

TABLE G-4 PROJECTED DELIVERIES FOR THREE MULTIPLE DRY YEARS

	One Critical Dry Year	Current Deliveries During Multiple Dry Years		
		Year 1	Year 2	Year 3
SFPUC System-Wide Shortage ¹	10%	10%	22%	22%
Wholesale Allocation, MGD	152.6	152.6	132.5	132.5
EMID Allocation Factor ²	2.9%	3%	3%	3%
EMID Allocation, AFY	4,888	4,888	4,394	4,394
EMID Allocation, MGD	4.36	4.36	3.92	3.92
Allocation as % of 5.9 MGD Assurance	74%	74%	66%	66%

¹ See Table 1 in Appendix H of the EMID 2015 Urban Water Management Plan.

² Water supply available to EMID during a normal year is assumed to be equal to EMID’s Individual Supply Guarantee. The EMID’s allocation factor and the supply available to EMID during dry year types were provided by BAWSCA Tier 2 Allocations (see Appendix H of EMID’s 2015 Urban Water Management Plan). The values were obtained per application of the Tier 1 and Tier 2 allocation processes described in the City’s Water Supply Agreement and the BAWSCA Drought Implementation Plan.

Abbreviations:

EMID = Estero Municipal Improvement District
 MGD = million gallons per day
 SFPUC = San Francisco Public Utilities Commission

References:

- (1) SFPUC, 2016. Regional Water System Long-Term Supply Reliability 2015-2040, letter to BAWSCA, January 5, 2016.
- (2) BAWSCA, 2016. UWMP Tier 2 Drought Implementation Plan Scenarios, email message to BAWSCA member agencies, dated January 6, 2016.

E. WATER DEMAND PROJECTIONS

1. Future System Demand Projections

Table G-5 shows the future system demand projections and the difference (excess supply allocation) until 2040. As shown, available supplies are sufficient to meet system demand projections in a normal year.

TABLE G-5 FUTURE SYSTEM DEMAND PROJECTIONS (WITHOUT ADDITIONAL PROJECTS)¹

	2015 ²	2020	2025	2030	2035	2040
SFPUC Supply, AFY	6,610	6,610	6,610	6,610	6,610	6,610
Demand Projections with Passive and Active Conservation Savings, AFY	4,459	4,450	4,444	4,514	4,582	4,628
Annual Excess	2,151	2,160	2,166	2,096	2,028	1,982
Percent Excess	33%	33%	33%	32%	31%	30%

¹ Table values are consistent with the EMID 2015 UWMP.

² 2015 data is based on actual demand numbers found in the EMID 2015 UWMP.

2. Net Additional Demand from Proposed Projects

This section presents background information on the proposed projects in addition to their net additional demand. All the development projects are within the service area of EMID. It is important to note that though some projects were completed by the time this WSA was published (completed sometime between 2016 and 2019), there was not enough actual historical water use data to create an accurate site demand estimate. In fact, some of the buildings were not fully occupied, landscape was not fully established, and a full year of water use was not available to ascertain water use trends through the various seasons. The process of determining water demand for developing project sites is a dynamic one, and by the next WSA submittal there will be more actual site data available under non-dry year conditions. EMID has completed the WSA based on the land use proposed for the projects listed below.

Lincoln Centre Life Sciences Research Campus Project: The project proposes that 70 percent of the gross square footage be developed for office uses and 30 percent be developed for laboratory uses. To ensure that maximum water demand is studied, the WSA analysis of water supply impacts also evaluated a variant that would be 30 percent office and 70 percent laboratory. The latter would require more water and was used to compute the net project demand for the proposed project to be 120 AFY. This project will be completed between years 2020 and 2025.

Gilead Integrated Corporate Campus Master Plan Project: EMID Staff has determined that the existing land use at 355 Lakeside Drive and 309 Velocity Way is similar to the land use for the proposed research and development (R&D) and office space buildings, respectively. Therefore, the historical consumption data for these sites were used as a basis to project water demand for the proposed R&D (laboratory) space and office space. The consumption data shows that 25 gallons of water per year (GPY) for each square foot of R&D space and 13 GPY for each square foot of office space is needed. Based on the calculations, approximately 74 AFY will be required for the R&D buildings and 63 AFY for the office space. The project also includes the demolition of 14 buildings, which will consume approximately 33 AFY. Therefore, the net project demand for the proposed project is Gilead Integrated Corporate Campus Master Plan Project is approximately 105 AFY. This project will be completed in various phases by 2030.

Pilgrim Triton Master Plan Project: The estimated water use for the 713 residential units (excluding the 17 townhouses already approved in Phase C) and the proposed 70 townhouses in Phase C is 164 gallons per day (GPD) per unit. The methodology used to estimate the water use per townhouse and residential unit involves calculating a total estimated indoor use plus a total estimated outdoor use. The indoor use was calculated by first estimating the number of people living in a residence and then using the typical average indoor water use of 55 GPD per person. The outdoor water use was calculated based on the estimated square footage of turf and shrubs and a standard watering factor for the planting types as well as a regional evapotranspiration rate. The

evapotranspiration rate provides the number of inches of water needed to irrigate each planting type in inches of water per year. The evapotranspiration rate is then multiplied by the square footage of plantings to get a total estimated water use for the site. The outdoor water use was divided between all the residential units to get an estimated outdoor water use in GPD per unit. The indoor and outdoor estimates were added together to yield the total estimated water use per residential unit.

The workforce housing units will range in size from approximately 760 square feet to 1,110 square feet and are estimated to require a total of 2 AFY, based on 84 GPD per workforce housing unit. The estimated water use for the workforce housing units was calculated using the methodology described previously for townhouses with typical water use of 55 GPD per person for indoor use and the same evapotranspiration rates for outdoor use. The workforce housing indoor water use per unit (164 GPD) is lower than the townhouse water use per unit (84 GPD) because the estimated average number of people living in a workforce housing unit is less than in a townhouse. The office space will require approximately 3 AFY based on water use data from Gilead Sciences at 309 Velocity Way, where similar land uses estimate a demand use factor of 13 GPY per square foot. The park will require approximately 1 AFY. And according to the water consumption data for the existing buildings, approximately 21 AFY of water was consumed on the site (in non-drought year 2007).

The approved Pilgrim Triton Master Plan would be 126 AFY. However, with the proposed shift to more residential and less commercial, the net project water demand for the proposed Pilgrim Triton Master Plan with Amendment project was estimated to increase by 2 AFY. The total net water demand would increase to 128 AFY, including the following estimates for each land use:

- 2.9 AFY for 70,057 square feet of office space
- 0.6 AFY for 1 acre of park space
- 143.5 AFY for 783 residential units
- 2.1 AFY for the proposed 22 workforce units
- -21 AFY credit for existing buildings to be demolished

This project will be completed in various phases by year 2030.

Foster Square (formerly 15-Acres Project): A demand factor of 93 GPD/unit, based on year 2016-2017 water use data from the Atria at 707 Thayer Lane in Foster City, yields a demand of 36.9 AFY for the 155 senior care housing (assisted living units) and 200 senior independent condominium units combined. The 66 affordable senior apartments, fully occupied since 2016, require approximately 12.8 AFY based on 173 GPD/unit. The estimated water use factor of 173 GPD/unit was calculated using the methodology described previously for the Pilgrim Triton Master Plan Project, except a typical landscaping area was assumed as detailed landscaping plans were not available. The 30,000 square foot commercial space located below the senior apartments and assisted

living facility will require 1.23 AFY based on the large office space with cooling tower water use factor of 13 GPY per square foot derived from the 2016-2017 water use data from Gilead Sciences 309 Velocity Way. An additional 10 percent of office and residential demand is assumed for irrigation. The 15-Acres Project will require approximately 56 AFY of additional water demand. This project is currently under construction and will be fully completed by year 2020.

Tidelands (400 Mariners Island Boulevard, City of San Mateo Residential Project):

The water consumption for the 76 residential units is 12.8 AFY based on an estimated water use of 151 GPD/apartment. This estimate does not include irrigation and is based on the annual average water use of over 150 apartments from December 2012 through December 2016 for 3 Plaza View Lane in the Pilgrim Triton development. A 10 percent additional demand for outside landscaping, yield the total demand for the project at approximately 14 AFY. This project was completed in 2017.

TownePlace Suites (formerly Chess Hotel): This proposed 115-room hotel will require approximately 12.3 AFY based on a water demand factor of 77 GPD/room derived from 2012-2017 water use data from the Crowne Plaza Hotel at 1221 Chess Dr. The Crowne Plaza water use includes irrigation, 0.5 GPM faucet aerators, 50 percent 1.6 gallon per flush (GPF) toilets, 50 percent 1.28 GPF toilets, on-site laundry, and amenities like conference rooms and a pool. Since the TownePlace Suites is unlikely to have on-site laundry and will have 100 percent low-flush toilets the demand factor was reduced by 20 percent. 1.2 AFY of demand based on 2009, 2010, and 2011 consumption for the Black Angus Restaurant which has been demolished is subtracted from the demand for proposed hotel to calculate net site demand of approximately 11 AFY. This project was completed in 2017.

Chess/Hatch Drive Office Project: Historical 2016-2017 consumption data from Gilead Sciences at 309 Velocity Way was used to calculate the projected demand for the project. Based on a large office space with a cooling tower, a water use factor of 13 GPY/square foot was applied to the proposed 800,000 square feet of office space. This factor includes landscape irrigation and yields a demand of 33 AFY for the proposed development. Consumption data for the existing buildings at 1155-1191 Chess Drive which will be demolished was used to determine the existing water demand of approximately 18 AFY. Therefore, the net demand resulting from the proposed project is calculated by subtracting the existing consumption from the total demand, resulting in approximately 15 AFY of additional water demand. This project will be completed between years 2025 and 2030.

1297 Chess Drive (formerly Harry's Hofbrau): Water use estimates are based on the square footage of the proposed 2,555 square foot Habit Burger, a 2,600 square foot Mod Pizza, and a 4,643 square foot Panera Bread restaurant and the 1,894 square foot FedEx for an additional water demand of approximately 2.4 AFY. A unit water use factor of 0.2 GPD/square foot was applied to the "fast casual" restaurants and a retail unit

water use factor of 0.111 GPD/square foot was used for the FedEx space. Restaurant and retail unit water use factors were provided by Castaic Lake Water Agency based on their CII Demand Factor Study in December 2016. This project was completed in 2017.

1601 Beach Park Blvd: The proposed project consists of a 31-unit residential development. The proposal includes demolition of an existing church building to construct 31 condominium-style townhomes and site improvements on an approximately 1.35-acre site located at 1601 Beach Park Boulevard. The subject site is located at the northwest corner of Beach Park Boulevard and Gull Avenue. As proposed, the 31 townhomes include a mix of three (3) unit types, all of which have four (4) bedrooms. A 147 GPD per unit water use factor was applied to the 31 four-bedroom and 3.5-bath units. The existing church building being demolished has had no water use in recent years and therefore no water demand is associated with the site. This analysis conservatively assumes any previous demand on site is negligible and is not accounted for as far as reducing the net demand. The project is considered likely to be entitled and constructed and is estimated to be completed between years 2020 and 2025. The total water demand required for this project is approximately 5.5 AFY.

New Hotel in Metro Center: The approved project involves the development of an approximately 83,000 square-foot, six-story hotel with 154 guest rooms, a restaurant, meeting space, rooftop bar, fitness center, lobby lounge, and guest laundry room. Water use estimates are derived from number of guests, staff, occupancy, site area, etc. Values are consistent with industry standards and represent 90 GPD/room and 17 GPD/(100 square feet). There is no building to be demolished, but there is existing irrigation on site. Two years of consumption data from August 2017 to July 2019, solely for the purpose of irrigation, was used to determine the existing site water demand of approximately 6 AFY. Therefore, the net demand resulting from the proposed project is calculated by subtracting the existing consumption from the total projected development project demand, resulting in approximately 10 AFY of additional water demand. This project will be completed between years 2020 and 2025.

Table G-6 shows the total projected annual additional demand generated from the various development projects that are under review by the City of Foster City. EMID has a first-come, first-served policy for serving new development projects, with each new major project requiring a demand analysis. The calculations have been revised based on current information and are included in Table G-6 to show the cumulative demand.

TABLE G-6 ANNUAL NET ADDITIONAL FUTURE DEMANDS FROM VARIOUS PROJECTS (AFY)

Development Project	2020	2025	2030	2035	2040
Lincoln Centre Life Sciences Research Campus	69	120	120	120	120
Gilead Integrated Corporate Campus	70	87	105	105	105
Pilgrim Triton Master Plan Project	27	92	128	128	128
15-Acres Project (Foster Square)	56	56	56	56	56
Tidelands (400 Mariner's Island Blvd)	14	14	14	14	14
TownePlace Suites	11	11	11	11	11
Chess/Hatch Drive Offices Project	0	6	15	15	15
1297 Chess Drive	2	2	2	2	2
1601 Beach Park Blvd	-	5	5	5	5
New Hotel in Metro Center	-	10	10	10	10
Subtotal Projects	250	404	467	467	467
2015 UWMP Demand Projection with Passive and Active Conservation Savings Annual Increase	0	6	(71)	(68)	(46)
Total	250	410	396	399	420

Table G-7 shows the total system demand projected for EMID including the demand from the proposed projects. The total system demand is calculated by adding the net demand generated from the proposed projects from Table G-7 to the system demand projections.

TABLE G-7 TOTAL SYSTEM DEMAND WITH ADDED PROJECTS

System Demand, No Drought	2015 ¹	2020	2025	2030	2035	2040
Demand Projection for EMID, with Passive and Active Conservation, MGD	3.98	3.97	3.96	4.03	4.09	4.13
Demand Projection for EMID, with Passive and Active Conservation, AFY	4,459	4,449	4,444	4,514	4,582	4,628
Net Demand from Additional Projects, AFY	0	250	410	396	399	420
Total System Demand, AFY	4,459	4,700	4,854	4,910	4,981	5,048
SFPUC Supply Assurance, AFY	6,610	6,610	6,610	6,610	6,610	6,610
Estimated Remaining SFPUC Supply, AFY	2,151	1,910	1,757	1,700	1,630	1,562
Est. Remaining Supply Reliability, %	33%	29%	27%	26%	25%	24%

¹ 2015 data is based on actual numbers.

F. COMPARISON OF SUPPLY ALLOCATION VS. WATER DEMAND PROJECTIONS

1. Comparison of Supply Versus Demand

Table G-8 shows a comparison of the supply allocations from Table G-5 and projected total system demands from Table G-7, through the 20-year planning horizon as required by SB 610. As discussed in Table G-3, during a period of five consecutive dry years, the SFPUC's plan calls for a 26 percent supply reduction of the normal year supply in the first year, followed by a 34 percent reduction of the normal year supply for each of the next four years. To meet the reductions, EMID will have to cut back its consumption in kind by implementing the Water Shortage Contingency Plan based on the severity of the drought. The EMID's Water Shortage Contingency Plan describes the triggering levels and actions to be considered for each stage of demand reduction. The plan has five stages, with each stage set to respond to increasingly more severe conditions. In 2018, EMID elected to refine its Water Shortage Contingency Plan to achieve water savings of up to 15 percent rather than the previous 10 percent goal that was targeted in a Stage 2 Drought.

As shown in Table G-8, there will continue to be sufficient supplies to meet all projected demand, including the additional demand generated from the proposed projects in all conditions until year 2040. This conclusion is dependent on EMID's implementation of the mandatory demand reduction as outlined in the EMID Water Shortage Contingency Plan.

In the event of prolonged drought conditions, EMID would implement the Water Shortage Contingency Plan, which would result in reduced water demand of up to 50 percent within the service area. The Water Shortage Contingency Plan thus would ensure an adequate water supply within the EMID service area if the SFPUC reduces water deliveries to EMID by 10 percent to 20 percent (as would occur during a prolonged drought). For instance, a 20 percent reduction in water demand would reduce the overall demand during year 5 of a 5-year drought to approximately 3,702 AFY starting in 2040 with the new projects built out, as shown in Table G-8. The anticipated supply that year, considering a 22 percent reduction in water deliveries from the SFPUC, would be 4,039 AFY as shown in Table G-4. Thus, even under a 5-year drought scenario starting in 2040, EMID would be estimated to provide adequate water to all existing and anticipated development and maintain a water surplus of approximately 355 AFY.

TABLE G-8 ANNUAL SUPPLY ALLOCATION VS. MULTIPLE DRY YEARS DEMAND (AFY) WITH DEMAND CUTBACKS IN DRY YEARS
CONSISTENT WITH THE 2018 REVISED WATER SHORTAGE CONTINGENCY PLAN

Year		Normal Year	Single Dry Year	Year 2	Year 3	Year 4	Year 5
			Demand Reduction %				
			15%	15%	20%	20%	20%
2015'	Allocation	6,613	4,887	4,394	4,394	4,394	4,394
	ACTUAL Demand	(4,459)	(3,790)	(3,790)	(3,567)	(3,567)	(3,567)
	Excess	2,154	1,097	604	827	827	827
2020	Maximum Allocation	6,613	4,887	4,394	4,394	4,394	4,394
	Demand (NOT including proposed projects)	(4,450)	(3,782)	(3,782)	(3,560)	(3,560)	(3,560)
	Demand (including proposed projects)	(4,700)	(3,995)	(3,995)	(3,760)	(3,760)	(3,760)
	Excess (NOT including proposed projects)	2,163	1,105	612	834	834	834
	Excess (including proposed projects)	1,913	892	399	634	634	634
2025	Maximum Allocation	6,613	4,887	4,394	4,394	4,394	4,394
	Demand (NOT including proposed projects)	(4,444)	(3,777)	(3,777)	(3,555)	(3,555)	(3,555)
	Demand (including proposed projects)	(4,854)	(4,126)	(4,126)	(3,883)	(3,883)	(3,883)
	Excess (NOT including proposed projects)	2,170	1,110	617	839	839	839
	Excess (including proposed projects)	1,760	761	268	511	511	511
2030	Maximum Allocation	6,613	4,887	4,394	4,394	4,394	4,394
	Demand (NOT including proposed projects)	(4,514)	(3,837)	(3,837)	(3,611)	(3,611)	(3,611)
	Demand (including proposed projects)	(4,910)	(4,174)	(4,174)	(3,928)	(3,928)	(3,928)
	Excess (NOT including proposed projects)	2,099	1,050	557	783	783	783
	Excess (including proposed projects)	1,703	713	220	466	466	466

Year		Normal Year	Single Dry Year	Year 2	Year 3	Year 4	Year 5
			Demand Reduction %				
			15%	15%	20%	20%	20%
2035	Maximum Allocation	6,613	4,887	4,394	4,394	4,394	4,394
	Demand (NOT including proposed projects)	(4,582)	(3,895)	(3,895)	(3,665)	(3,665)	(3,665)
	Demand (including proposed projects)	(4,981)	(4,234)	(4,234)	(3,985)	(3,985)	(3,985)
	Excess (NOT including proposed projects)	2,032	993	499	728	728	728
	Excess (including proposed projects)	1,633	653	160	409	409	409
2040	Maximum Allocation	6,613	4,887	4,394	4,394	4,394	4,394
	Demand (NOT including proposed projects)	(4,628)	(3,934)	(3,934)	(3,702)	(3,702)	(3,702)
	Demand (including proposed projects)	(5,048)	(4,291)	(4,291)	(4,039)	(4,039)	(4,039)
	Excess (NOT including proposed projects)	1,985	953	460	692	692	692
	Excess (including proposed projects)	1,565	596	103	355	355	355

¹ 2015 data is based on actual numbers.

2. Supply and Demand Conclusion

In conclusion, the water demand associated with the new hotel proposed to be located in the Metro Center General Development Plan area, and all foreseeable development as of October 2019 (including the development at 1601 Beach Park Blvd that is likely to be entitled and constructed by year 2025), could be accommodated during multiple dry years (such as those that could result from global climate change). This could happen through implementation of the mandatory demand reductions as outlined in the recently updated 2018 Water Shortage Contingency Plan.

The new hotel proposed to be located at the southwest corner of Metro Center Boulevard and Shell Boulevard, in the Metro Center General Development Plan area, as a whole would generate an additional net water demand of 10 AFY. The 31-unit condominium at 1601 Beach Park Blvd would generate an additional net water demand of 5 AFY. The water demand would be within the anticipated supply range for EMID and would not lead to insufficient water supplies in existing entitlements and resources or require new or expanded entitlements. Therefore, the proposed projects would result in a less-than-significant impact upon the existing and anticipated potable water supply.

G. DEMAND MANAGEMENT MEASURES

1. Description of Adopted Water Conservation Measures

Over the years, EMID has implemented demand management measures to reduce the overall demand for water. Water conservation helpful tips are available online and in brochures to educate customers. Every year during the National Public Works Week, local schools and teachers are invited to participate in water facility tours and activities to promote water conservation. Table G-9 presents the water conservation measures EMID is currently implementing or planning to implement.

TABLE G-9 EMID CURRENT AND PROPOSED CONSERVATION MEASURES

Measure Name	Description
Water Loss Control Program	<p>Maintain a thorough annual accounting of water production, sales by customer class and quantity of water produced but not sold (non-revenue water). In conjunction with system accounting, include audits that identify and quantify known legitimate uses of non-revenue water to determine remaining potential for reducing water losses. Goal is to lower the Infrastructure Leakage Index (ILI) and non-revenue water every year by a pre-determined amount based on cost-effectiveness. These programs typically pay for themselves based on savings in operational costs (and saved rate revenue can be directed more to system repairs/replacement and other costs). Specific goals and methods to be developed by Utility. May include accelerated main and service line replacement. Enhanced real loss reduction may include more ambitious main replacement and active leak detection. Capture water from water main flushing and hydrant flow testing for reuse.</p> <p>Measure start: Ongoing.</p>
Metering with Advanced Metering Infrastructure (AMI)	<p>Retrofit system with AMI meters and associated network capable of providing continuous consumption data to Utility offices. Improved identification of system and customer leaks is a major conservation benefit. Some of the costs of these systems are offset by operational efficiencies and reduced staffing, as regular meter reading and those for opening and closing accounts are accomplished without need for physical or drive-by meter reading. Also enables enhanced billing options and ability to monitor unauthorized usage (such as use/tampering with closed accounts or irrigation if time of day or days per week are regulated). Customer service is improved as staff can quickly access continuous usage records to address customer inquiries. Optional features include online customer access to their usage, which has been shown to improve accountability and reduce water use. A ten-year change-out would be a reasonable objective. Require that new customers install such AMI meters as described above and possibly purchase means of viewing daily consumption inside their home/business either through the Internet (if available) or separate device. The AMI system would, on demand, indicate to the customer and Utility where and how their water is used, facilitating water use reduction and prompting leak identification. This would require Utility to install an AMI system. Require that larger or irrigation customers install such AMI meters as described above and possibly purchase means of viewing daily consumption by landscape/property managers, or business either through the Internet (if available) or separate device.</p> <p>Measure start: 2013-Ongoing.</p>

TABLE G-9 EMID CURRENT AND PROPOSED CONSERVATION MEASURES

Measure Name	Description
Agency Public Information & Program Administration (added to BAWSCA)	<p>Continue with a regional water conservation outreach campaign. May modify to be a general “Use Only What You Need” message like Denver Water’s program or a “Beat the Peak” message media campaign like Cary, North Carolina or Tucson, Arizona: http://cms3.tucsonaz.gov/water/beatthepeak. Also considered a program with focused action like: “Take Control of your Controller” Campaign for a focused social media based campaign as a media campaign. Consider determining appropriate usage and media campaign message with marketing study/focus groups. Utility would sponsor bilingual training for managers and workers in landscape maintenance methods that will save irrigation water. Model after Green Gardener Program. Santa Barbara County Water Agency example: http://www.greengardener.org. With some of these programs, names of businesses that have obtained training are included in Utility publications and/or Web sites (as an incentive to participate). Measure start: Ongoing.</p>
In-School Education	<p>School assembly program, classroom presentations, and other options for school education. Measure based on the Resource Action Program Water Wise School Program. Measure start: Ongoing.</p>
Single and Multi-Family Water Surveys	<p>Indoor water surveys for existing single-family residential customers. Target those with high water use and provide a customized report to owner. May include give-away of efficient shower heads, aerators, and toilet devices. Usually combined with outdoor surveys (See Irrigation Measures). Indoor water surveys for existing multi-family residential customers (2 units or more). Target those with high water use and provide a customized report to owner. Usually combined with outdoor surveys (see Irrigation Measures) and sometimes with single-family surveys. Customer leaks can go uncorrected at properties where owners are least able to pay costs of repair. These programs may require that customer leaks be repaired, but either subsidize part of the repair and/or pay the cost with revolving funds that are paid back with water bills over time. May also include an option to replace inefficient plumbing fixtures at low-income residences. Provide incentive to install pressure regulating valve on existing properties with pressure exceeding 80 psi. Measure start: Ongoing.</p>
WaterSense Fixtures Giveaway	<p>Utility would buy showerheads and faucet aerators in bulk and give them away at Utility office or community events. Need to coordinate this program with the School Education measure on retrofit kit giveaways to the same customer categories. Measure start: Current-2020.</p>
Ultra-High-Efficiency Toilet (UHET) Residential Rebates	<p>Provide a rebate or voucher for the installation of an UHET. (Toilets flushing 1.28 GPF or less and include dual flush technology). Rebate amounts would reflect the incremental purchase cost. Measure start: Current through December 2019.</p>

TABLE G-9 EMID CURRENT AND PROPOSED CONSERVATION MEASURES

Measure Name	Description
"Lawn Be Gone" Landscape Conversion/Turf Removal	Provide a per-square-foot incentive to remove turf and replace with low water use plants or permeable hardscape. Rebate based on dollars per square foot removed and capped at an upper limit for single-family residence. Measure start: Ongoing.
Water Conserving Landscape & Codes (not including WBICs and turf removal) SF MF CII	Develop and enforce Water Efficient Landscape Design Standards. Standards specify that development projects subject to design review be landscaped according to climate appropriate principals, with appropriate turf ratios, plant selection, efficient irrigation systems, and smart irrigation controllers. There are many examples that have demonstrated significant water savings. The ordinance could require certification of landscape professionals. Measure start: Ongoing.
HET CII Rebates	Provide a rebate or voucher for the installation of a high efficiency toilet (HET). Toilets flushing 1.28 GPF or less and include dual flush technology. Rebate amounts would reflect the incremental purchase cost. Measure start: Current-2020.
Outdoor Water Audit - Large Landscape	Outdoor water audits offered for existing large landscape customers. Normally those with high water use are targeted and provided a customized report on how to save water. All large multi-family residential, , and public irrigators of large landscapes would be eligible for free landscape water audits upon request. Tied to the Waterfluence Budget Program. Measure start: Ongoing.
Landscape Water Budgets/Monitoring-Large Landscape Dedicated Meters & Mixed-Use Conversion	Website that provides feedback on irrigation water use (budget vs. actual). Current Waterfluence Program. May include the cost for dedicated meter conversion. Measure start: 2015.
"Lawn Be Gone" MF Large Landscape Conversion/Turf Removal	Provide a per-square-foot incentive to remove turf and replace with low water use plants or hardscape. Rebate is based on price per square foot removed and capped at an upper limit for multi-family or commercial residence. Measure start: Ongoing.
Rotating Sprinkler Nozzle Incentive Program SF MF Large Landscape	Provide rebates to replace standard spray sprinkler nozzles with rotating nozzles that have lower application rates. Nozzles cost about \$6 and rebates have been on the order of \$4 with a minimum purchase of about 20 nozzles. Measure start: 2015.

Source: Foster City. Public Works Water Conservation Rebate Programs webpage, accessed August 2019:
<https://www.fostercity.org/publicworks/page/water-conservation-rebate-programs>