



Date: April 6, 2015
To: President and Members of the EMID Board of Directors
Via: James C. Hardy, District Manager
From: Edmund Suen, Finance Director
Mimi Lam, Accounting Manager
Subject: Review of Projected Water Rates for FY 2015-2016; Policy Direction for Rate Notification under Proposition 218

RECOMMENDATION

It is recommended that the EMID Board of Directors review materials provided in this supplemental staff report to the initial staff report provided to the Board on March 23, 2015 regarding the proposed water rates for FY 2015-2016. After considering the information in this supplemental staff report and the initial March 23, 2015 staff report, it is further recommended that the District Board provide staff with policy direction establishing the proposed rates for FY 2015-2016 that will be noticed to all rate payers under the requirements of Proposition 218.

EXECUTIVE SUMMARY

On March 23, 2015, District staff and its rate consultant, Bartle Wells Associates (BWA) presented materials to the Board for direction on proposed water rates for FY 2015-2016. Based on analysis performed by BWA, staff asked the Board to provide direction on the **water rate study's five option scenarios for FY 2015-2016. The option scenarios are as follows:**

1. Uniform Without Smoothing
2. Uniform With Smoothing
3. Two Tier Without Smoothing
4. Two Tier With Smoothing (recommended)
5. Two Tier With Hybrid (Full cost recovery in the 1st Year and rate smoothing thereafter; this item was a late addition to the option scenarios)

The Board deliberated over the information provided and requested additional information as follows:

- A Three Tier Model (Scenario 6) using the current year's rate structure (Tier One being 75% of the base cost, Tier Two being the base cost, and Tier Three being 150% of the base cost).
- Consideration of setting commercial rates using a "base allocation" model for each business. Each business would then be charged the base consumption rate for that allocation and a second tier for a penalty for exceeding the base allocation.

Based on BWA's analysis which includes consideration of the additional supplemental information provided to the Board this evening, **Bartle Wells Associates continues to recommend a conservation-based rate model with two tiers (option scenario 4: Two Tier with Smoothing). Moreover, staff is recommending that the District Board budget Water Sustainability Fund expenses at \$200,000 per year which is consistent with last year's expenditures necessary to continue support for the conservation effort, and that any surplus reserves be used to offset any rate increases for ratepayers.** This policy is maintained in the aforementioned recommended rates for FY 2015-2016 and in light of the efforts to ensure that we maintain a Sustainable Foster City.

Based on the District Board direction, staff will prepare a notice that will be mailed to all ratepayers on or before April 15, 2015 in compliance with the provisions of Proposition 218. A public hearing on and adoption of the proposed rates will occur at the June 1, 2015 Board meeting in conjunction with the FY 2015-2016 annual budget public hearing. The new rates will become effective July 1, 2015.

BACKGROUND

On March 23, 2015, District staff and its rate consultant, Bartle Wells Associates (BWA) provided a proposed water rates staff report (see Attachment) and a presentation to the Board for its review, including a recommendation to adopt rate Option Scenario Four (Two Tier With Smoothing). In addition, at the request of staff, BWA also provided Scenario Option Five (Two Tier With Hybrid with full cost recovery in the 1st Year and rate smoothing thereafter). Scenario Option Five would provide for an additional \$370,000 in revenues compared to Scenario Option Four. Due to the reduced revenues, Scenario Option Four would reduce reserves by an estimated \$102,000 as indicated in the table below.

		Option Scenario 4 Two Tier With Smoothing	Option Scenario 5 Two Tier Hybrid With Smoothing	Difference
Water Operating Fund				
FY 2015-16				
	Projected Revenues	13,099,000	13,469,000	370,000
	Projected Expenses	(12,796,000)	(12,796,000)	-
	Transfer to CIP Reserve	(205,000)	(205,000)	-
	Projected Transfer to Water Sustainability Fund	(200,000)	(200,000)	-
	Revenues Less Total Expenses	(102,000)	268,000	370,000
	Projected Fund Balance, 7/1/2015	3,361,000	3,361,000	-
	Projected Fund Balance, 6/30/2016	3,259,000	3,629,000	370,000
	Reserve Test (25% of Operating Expense)	(3,200,000)	(3,200,000)	-
	Excess Reserves available projects	59,000	429,000	370,000

The Board asked staff and BWA various questions and requested additional information to be brought back tonight as follows:

- A Three Tier Model (Scenario 6) using the current year's rate structure (Tier One being 75% of the base cost, Tier Two being the base cost, and Tier Three being 150% of the base cost).

- Consideration of setting commercial rates using a “base allocation” model for each business. Each business would then be charged the base consumption rate for that allocation and a second tier for a penalty for exceeding the base allocation.

ANALYSIS

1. Three Tier Model (Scenario 6)

BWA has developed a Three Tier Model (Scenario 6) based on the current rate structure. It is as follows:

Three Tier Model (Scenario 6)

		Three Tier Model (Scenario 6) FY 2015-2016
Single Family Residential		
≤ 10 units	75% of Base Consumption Rate	\$3.30
> 10 and < 20 units	100% of Base Consumption Rate	4.40
> 20 units	150% of Base Consumption Rate	6.60
Multi-Family Residential (per living unit)		
≤ 5 units	75% of Base Consumption Rate	\$3.30
> 5 and ≤ 10 units	100% of Base Consumption Rate	4.40
> 10 units	150% of Base Consumption Rate	6.60
Irrigation Customers		
≤ 100% of Annual Water Budget	100% of Base Consumption Rate	\$4.40
> 100% of Annual Water Budget	150% of Base Consumption Rate	6.60
Commercial and Fire Line Customers		
Base Consumption Rate	100% of Base Consumption Rate	\$4.40
Monthly Meter Charge		
3/4"		17.25
1"		28.75
1-1/2"		69.00
2"		92.00
3"		201.25
4"		362.25
6"		805.00
8"		1,380.00
Private Fire Service Protection Meter Charge		
3/4"		\$24.15
1"		24.15
1-1/2"		24.15
2"		32.20
3"		70.45
4"		126.80
6"		281.75
8"		483.00
(Minimum charge is equivalent to 1-1/2" meter charge)		

Although a three tiered rate structure has been used by the District since FY 2010-2011, BWA recommends the District adopt a new rate structure that better aligns the District with a standardized rate setting methodology. As was presented at the March 23, 2015 District Board Study Session, the BWA identified five option scenarios are as follows:

1. Uniform Without Smoothing
2. Uniform With Smoothing
3. Two Tier Without Smoothing
4. Two Tier With Smoothing (recommended)
5. Two Tier With Hybrid (Full cost recovery in the 1st Year and rate smoothing thereafter; this item was a late addition to the option scenarios)

2. Consideration of a Two Tier Commercial Rate Structure

Both the current and proposed FY 2015-2016 water rate structure includes a uniform single rate for commercial customers. At the March 23, 2015 Board Study Session, the Board requested staff and BWA to consider setting commercial rates using a “base allocation” model for each business. Each business would then be charged the base consumption rate for that allocation and a second tier for a penalty for exceeding the base allocation so as to incent water conservation. Due to the limited amount of time available to perform a comprehensive evaluation on this subject (due to the need to bring back this item to the Board by tonight’s meeting), staff undertook a limited assessment of the issue.

Staff and BWA recommend that the District Board maintain the existing flat-rate consumption structure for five primary reasons:

- a) Existing Financial Incentives to Conserve - Commercial customers pay wastewater fees based upon the amount of water used. Restaurants, in particular, pay the highest wastewater rate per ccf because of what they discharge. While residential customers pay a fixed rate, all commercial customers pay more on their wastewater charges based on their consumption; therefore, there is a built-in incentive to reduce water usage to reduce the overall utility bill. In addition, several commercial customers also have irrigation accounts with the City, so their outdoor usage is already subjected to conservation-based water rate structures that provide financial incentives towards conservation.
- b) Counterproductive to Economic Development / Penalizes Growth – The public policy choices in this area must weigh the supportive business climate and economic development pursuits in the area with the need for water conservation. Imposing a conservation-based rate structure on commercial customers could have the unintended consequence of penalizing a business for economic growth (i.e., more water used may be indicative of higher occupancy rates, larger sales volumes, or larger facilities, which generate other revenue sources for the District). The data model shows that those businesses which are generally considered successful in their category would suffer the most with respect to a tiered rate structure. As an example, staff looked at water consumption data for restaurants and usage for successful (higher sales tax revenue) restaurants were clearly higher than the lower grossing counterparts.

- c) Penalties Have Diluted Impact in Achieving Conservation – While residential tiered rate structures provide a direct financial incentive for individuals to conserve water, a tiered rate structure imposed on commercial customers will have a diluted effect in providing financial incentives to most businesses. Water costs for commercial customers are usually immaterial when it comes to their overall financial activity. There might not be a perceived or a direct correlation on water conservation when compared to their overall income statement. For example, a 50% increase in water consumption costs for a particular restaurant in the District area would only increase bi-monthly costs to their business of less than \$250, hardly enough of an incentive to conserve.
- d) Limited Magnitude of Potential Water Savings – The Commercial customer classes combined represent just 13% of the total water consumed by District customers. While the District wishes to strive for conservation, its efforts are best placed in the existing irrigation and residential customer classes. In additional, the cost of doing a comprehensive analysis is estimated to be \$10,000, which would erode the penalty revenues associated with tiered rate model.
- e) Water Meters/Accounts – There is not always one water meter for each business as they are often shared (e.g. a restaurant, bakery, 2 hair salons, and a spa share one meter under the address of 973 East Hillsdale Blvd; a restaurant, a security guard services company, and a dry cleaning establishment share one meter under the address of 1082 Foster City Blvd, and a restaurant, caterer, and a pet services company share one meter under the address of 1457 Beach Park Blvd). This condition/arrangement makes it difficult to determine accountability for water consumption. In addition, vacancies also create difficulties in calculating base use.

Based on the above preliminary analysis, staff recommends that the District Board maintain the existing flat consumption rate model for commercial customers.

POLICY DIRECTION

Staff seeks Board direction on the policy questions identified on the March 23, 2015 staff report. Staff is also providing them here in this staff report for ease of reference. The policy questions are as follows:

1. Water Rate Model

- a. Since Scenario Option 4 employs a smoothing of rates, it is expected to generate \$370,000 less in revenues than Scenario Option 5. This will result in a draw-down of reserves by \$102,000 in FY 2015-2016, leaving only a minimal surplus of \$59,000 on June 30, 2016. On the other hand, Scenario Option 5 would enhance reserves by \$268,000, leaving a healthier surplus of \$429,000 above the minimum 25% of operating expenses threshold of \$3,200,000. Some of the reserves could be allocated to the Water Sustainability Fund should requests for rebates exceed \$200,000 as customers respond to the water restrictions associated with the drought. As a result, staff is recommending either Scenario Option Four or Five for City Council's consideration. Does the Board wish to proceed with option scenario 4: Two Tier with Smoothing or option scenario 5: TwoTier With Hybrid (full cost recovery in the 1st Year and rate smoothing thereafter)?

2. Sustainability Fund

- a. Does the Board wish to continue the use of a Water Sustainability Fund to fund conservation-based programs with a cap of \$200,000 for expenditures in any given year?

3. Rebate Programs

- a. Does the Board wish to maintain its water related rebate programs to customers at their current levels?

4. Drought Implementation Issues

- a. Does the Board wish to provide any input to District Staff as it considers potential drought implementation strategies to be brought back to the District Board at a future meeting in the event that the SFPUC declares a water emergency and invoke mandatory rationing for FY 2015-2016?
- b. Does the Board wish to include a "SFPUC Wholesale Passthrough Rate Increase for Water Availability" provision in the Proposition 218 notice to ratepayers advising them that the District Board may decide to implement a water rationing passthrough fee in the event that the SFPUC invokes a fee on the District to address water availability and/or mandatory rationing for FY 2015-2016 and in the event that penalties and other costs associated with the implementation of mandatory rationing measures require ratepayers to bear those costs?

PROPOSITION 218 NOTIFICATION

Per the requirements under Proposition 218, all ratepayers will receive a notice on or before April 15, 2015, based upon the District Board's policy direction this evening. Due to the complexity of the rate model changes being recommended, a user-friendly notice will continue to be prepared that still meets the Proposition 218 noticing requirements. A public hearing will be held and the rates adopted on June 1, 2015. The rates will go into effect on July 1, 2015.

It should be noted that between the notification date and the public hearing date, the District Board will receive the FY 2015-2016 Preliminary Annual Budget and 5-Year Financial Plan. Any adjustments that occur based upon District Board direction at the Budget Study Session will be incorporated into an updated rate model at the time of the public hearing. However, it is the opinion of staff that conservative assumptions have been employed in the creation of the attached rate models. Accordingly, staff believes that the rates proposed herein are the maximum rates that would be recommended for FY 2015-2016. At the public hearing, the District Board would have the option of reducing rates lower than what was noticed to rate payers under Proposition 218 if budgetary estimates change, but it could not increase the rates above what was noticed.

Attachments:

- Bartle Wells Associates March 31, 2015 Supplemental Memorandum on Water and Wastewater Rate Study
- March 23, 2015 Staff Report and attachments



DATE: March 31, 2015

TO: City of Foster City/Estero Municipal Improvement District

FROM: Bartle Wells Associates; Doug Dove and Aleks Levin

SUBJECT: Water and Wastewater Rate Study Results (Supplement to March 23, 2015 Report)

SUMMARY OF FINDINGS AND RECOMMENDATIONS

Introduction and Background

The Estero Municipal Improvement District (District) engaged Bartle Wells Associates (BWA) to develop 10-year financial projections for the District's Water and Wastewater Enterprises and to recommend water and wastewater rate increases for the next five-year period. The District last conducted formal rate studies for these utilities in 2004 and has continued to perform an internal analysis of operating and maintenance costs annually since then. The District last increased water and wastewater service charges in FY2014. The District is currently in good financial shape with water and wastewater service rates being in the lower range compared to other agencies on the Peninsula. The District has a relatively young infrastructure for both enterprises and is currently debt free. The District faces unique infrastructure funding challenges in each enterprise.

Water

Currently, the San Francisco Public Utilities Commission (SFPUC), the sole source of water supply for the District, has released updated projections for their wholesale rate for water from \$2.93 in FY2015 to \$3.83 in FY2016 per hundred cubic feet (ccf) a 30.7% increase. The primary driver for the rate increases are the costs associated with the \$4.6 billion Water System Improvement Project (WSIP) to upgrade the Hetch Hetchy Water System. The District will also continue to make annual payments of approximately \$750,000 to the Bay Area Water Supply and Conservation Agency (BAWSCA) for the WSIP capital improvements that were funded through the issuance of bonds. The water enterprise's single largest cost is water purchases from SFPUC.

There is also a potential that the SFPUC will implement the Drought Reduction Implementation Plan (DRIP) due to very low precipitation during the Fall and Winter, and the low Hetch Hetchy reservoir levels that could require mandatory rationing of all BAWSCA agencies.

Wastewater

The District has a Joint Exercises Powers Agreement with the City of San Mateo where the District receives treatment of its wastewater via the San Mateo Treatment Plant. The District is responsible for its share of operating and maintenance costs that San Mateo incurs treating the District's wastewater, as well as 25% of capital improvement costs at the plant. The City of San Mateo is expanding the wastewater treatment plant at an estimated cost of \$466 million over the next twenty years of which the District is responsible for approximately \$116 million. This is in addition to local capital projects for the District's own sewage collection system.

Bartle Wells conducted a water and wastewater rate survey of neighboring communities along the San Francisco Peninsula. The results of the water survey is summarized in Appendix I and the results of the wastewater survey is summarized in Appendix L.

The survey found that the District's water rates are among the lowest in the region. The average monthly water bill for the region (based on 9.5 ccf of monthly usage) is \$73.43 per month – the District's proposed average monthly residential water bill, under Option 4, for FY2016 is to be \$56.49 per month, or 23% less than the average of neighboring communities.

The District's wastewater rates are also low amongst its comparator agencies. The average monthly bill among the comparator agencies is \$83.55 – the District's proposed monthly residential wastewater bill, under Option 3, for FY2016 is to be \$51.47 per month, or 38% less than the average of the neighboring communities.

Water Enterprise Fund

The District currently provides water service to a population of approximately 32,500. Most of the District's customers are residential. Table 1 shows the approximately 8,120 meters that allow for water service and fire protection service.

Table 1
 City of Foster City / Estero Municipal Improvement District
 Water Meters By Size

Data as of: 02/07/14

Meter Size	Accounts	Meter Ratio ^{1,2}	Est. Meter Equivalents ³
Water Service			
3/4"	6,815	1.00	6,815
1"	407	1.67	678
1-1/2"	159	4.00	636
2"	374	5.33	1,995
3"	80	11.67	933
4"	49	21.00	1,029
6"	24	46.67	1,120
8"	15	80.00	1,200
Subtotal	7,923		14,406
Private Fire Protection Service			
3/4"	1	0.35	0
1"	7	0.58	4
1-1/2"	3	1.40	4
2"	0	1.87	0
3"	2	4.08	8
4"	27	7.35	198
6"	95	16.33	1,552
8"	62	28.00	1,736
Subtotal	197		3,503
Total	8,120		17,909

Source: Foster City/Estero Municipal Improvement District water use records

[1] The meter ratios shall be based on meter size in compliance with ratios established by the American Water Works Association (AWWA) Sizing Water Service Lines and Meters M22, Second Edition, 2004 (M22 Manual)

[2] Private fire protection service ratio based on the fire service line; Resolution No. 2715

[3] Equals the number of accounts multiplied by the meter ratio for each meter size.

Table 2 illustrates the current reserves that the District can draw down in case of emergency or to smooth any “rate shocks” to its customers.

Table 2
 City of Foster City / Estero Municipal Improvement District
 Water Enterprise Operating Reserves

Fund Reserve Component	July 1, 2014
	Beginning Cash Balance
Reserved for Maintenance & Operation	<u>\$2,685,544</u>
Total	2,685,544

Note: Rate model only includes fund reserve components available to fund ongoing operating expenditures.

Source: City of Foster City/Estero Municipal Improvement District Water and Sewer Equity Analysis FYE June 30, 2014

The wholesale water purchase rates that SFPUC is projecting over the next ten years are shown graphically in Chart A. The SFPUC also collects the BAWSCA Bond Surcharge from the District. So the chart incorporates the BAWSCA Bond Surcharge estimated at .35 cents per ccf. The SFPUC rates and BAWSCA surcharge combined are projected to increase from \$3.28/ccf (\$2.93 SFPUC + \$.35 BAWSCA) in FY2015 to \$5.28/ccf by FY2020.

CHART A

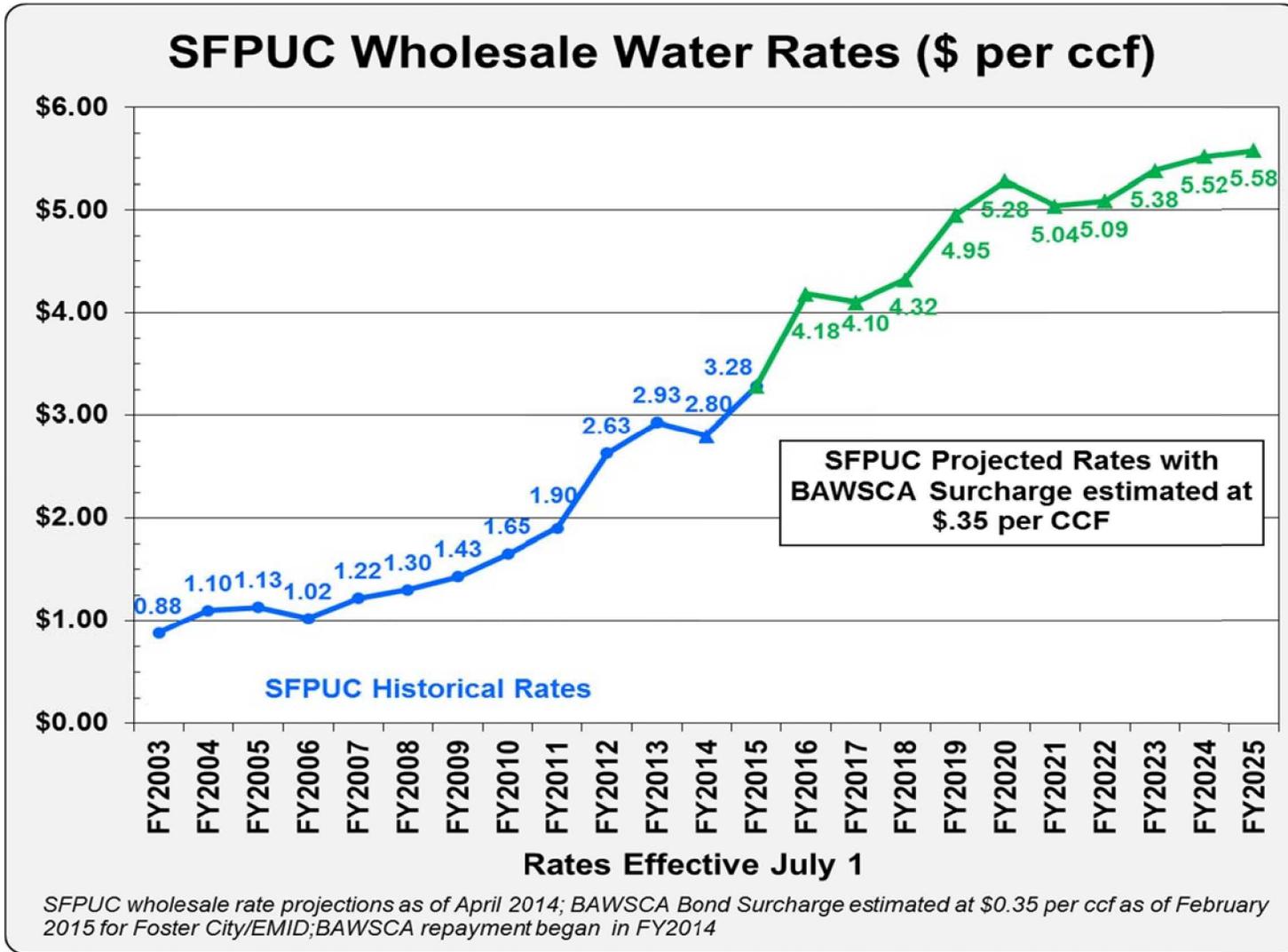


Table 3 summarizes the District’s projected operating expenditures which are anticipated to increase over the next five years by 51%. The largest driver of the operating cost increases are the SFPUC wholesale water purchase rates.

Table 3
 City of Foster City / Estero Municipal Improvement District
 Water Enterprise O&M Projection

Expenses	Five Year Projection (Prop 218)						Annual % Increase [1]
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	3.0%
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	2.5%
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	2.5%
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	2.5%
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	varies
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	2.5%
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	
TOTAL O&M Expenditures	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	
		19.1%	0.2%	5.4%	12.0%	6.5%	

[1] Based on historical results

As shown in CHART B, the District’s current revenues (\$11.6M) outpace expenditures (\$10.7M) in FY2015. Beginning in FY2016, if no rate adjustments are implemented then expenditures will outpace revenues.

CHART B

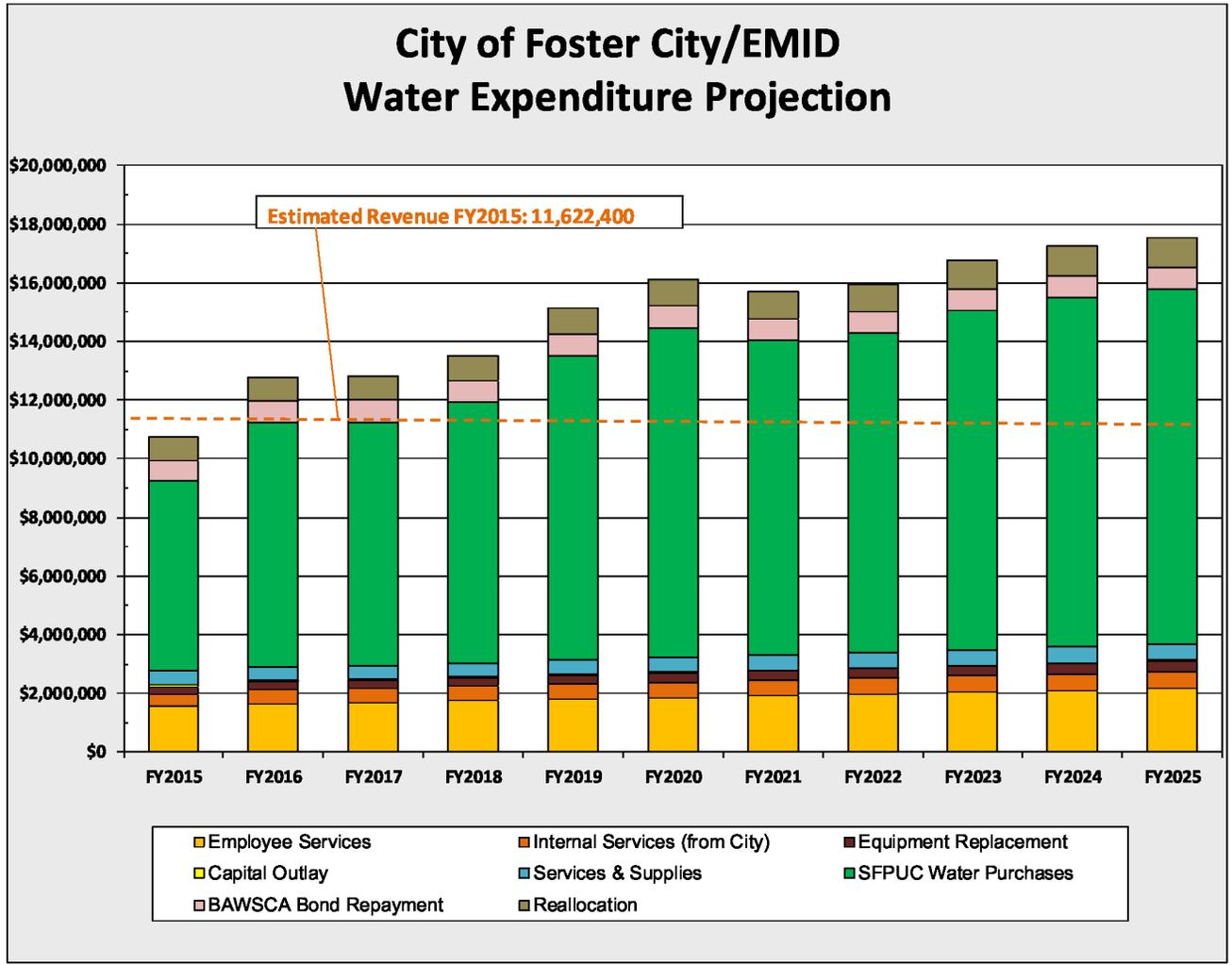


Table 4 summarizes the current water rates. The District has variable expenditures which are expenditures that are impacted by the amount of water its customers consume. These costs must be recouped via its volumetric water charge, \$3.32 per ccf in FY2015. Likewise the District's meter charges recover fixed expenditures, expenditures that are fixed regardless of amount of water that is consumed, \$16.00 for a ¾" meter in FY2015. The District currently has a tiered-rate model for its residential customers where higher levels of water consumption are subject to higher water rates. The District's Tier 2 rate of \$3.32 is the average residential cost and Tier 1 is set at 75% of the Tier 2 rate and Tier 3 is 150% of the Tier 2 rate, to encourage conservation. For its irrigation customers, the District has worked with John Whitcomb of Waterfluence to assign each irrigation customer a water budget. Any water consumed above the irrigation customers allotted amount is subject to a higher Tier 2 rate.

Table 4
 City of Foster City / Estero Municipal Improvement District
 Current Rates

Current
<u>2015</u>

Fixed Meter Charge

Monthly Meter Charge

<u>Meter Size</u>	
3/4"	\$16.00
1"	28.00
1-1/2"	80.00
2"	128.00
3"	224.00
4"	352.00
6"	672.00
8"	1,056.00

Bi-Monthly Water Consumption Rates

Single Family Residential

Tier 1	0-10 per ccf	\$2.49
Tier 2	11-20 per ccf	3.32
Tier 3	Over 20 per ccf	4.98

Multi-Family Residential

Tier 1	0-5 ccf per living unit	\$2.49
Tier 2	6-10 ccf per living unit	3.32
Tier 3	Over 10 ccf per living unit	4.98

Irrigation Customes

Tier 1	<=100% of annual budget	\$3.32
Tier 2	>100% of annual budget	4.98

Commercial and Fire Line

All usage	\$3.32
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Monthly Private Fire Protection Charge

% of Water Meter Charge

<u>Meter Size</u>	
3/4"	\$28.00
1"	28.00
1-1/2"	28.00
2"	44.80
3"	78.40
4"	123.20
6"	235.20
8"	369.60

Rate Option Scenarios

For all rate option scenarios, the largest factor effecting the District's rates is the SFPUC wholesale water rates. The volumetric component is calculated to recoup the costs of SFPUC water purchases, the BAWSCA Bond Surcharge and the District's conservation programs.

The District's meter charges likewise need to recover costs associated with fixed expenditures. The proposed rate increases for meter charges are the same across all proposed rate option scenarios. A proposed 7.75% increase in FY2016, 5.5% increase in FY2017, FY2018, and FY2019 and a 3.5% increase in FY2020 and no proposed increases the following five years. The fixed meter charge for a ¾" meter will go up from \$16.00 a month in FY2015 to \$20.95 a month, a 31% increase.

The District currently has three tiers. BWA recommends the following rate structure alternatives to better align the District with the standardized rate setting methodology.

Rate Option Scenario 1: Uniform Rate without Smoothing (Appendix A1)

This scenario would charge a single uniform rate, across all customer categories. This option would directly follow SFPUC rates and have rate and revenue volatility. The District's volumetric rate would be increased by 32.4% from \$3.32 per ccf to \$4.40 in FY2016. By FY2025 the District's rate based on projected SFPUC rates is recommended to be \$5.80 per ccf an increase of approximately 75%. This scenario would generate operating net revenues for all fiscal years.

Rate Option Scenario 2: Uniform with Smoothing (Appendix A2)

Under this scenario, the district would charge its customers a single uniform rate but the rate increases would be smoothed out over the years to avoid revenue volatility and rate shock customers. This option allows a more gradual increase in rates. The recommended volumetric rate for FY2025 is \$5.75 per ccf, an increase of approximately 73.2% of the FY2015 rate of \$3.32 per ccf.

Rate Option 3: Two Tier without Smoothing (Appendix A3)

This scenario would reduce the amount of tiers that the District currently has for residential customers from three to two and keep a two tier structure for Irrigation customers. The District's current Tier 1 and 2 breakpoints for single family residential and multi-family residential would be consolidated into their own respective Tier 1s. Tier 3, the old highest tier for residential customers would become Tier 2 and the additional revenue from that tier would fund the District's conservation programs. This rate scenario encourages conservation but at the same time is heavily reflective of the SFPUC rate. The Tier 1 volumetric rate by FY2025 is recommended to be \$5.66, an increase of approximately 70.5%. Commercial customers would still be charged a single tier because commercial customers are too heterogeneous to be fairly placed in a tiered rate structure; they are commonly placed in a single tier. For FY2016 Tier 1 (0 to 20 ccf used) the recommended rate for Single Family Residential Customers would be \$4.30 and Tier 2 recommended rate (greater than 20 ccf used) would be \$4.64.

Rate Option 4: Two Tier with Smoothing (Appendix A4)

This rate option scenario has the same structure as Option 3 but it proposes a smoothing of the rate increases, a similar approach that is used in Rate Option 2. As in Option 4, Commercial customers would still be charged a single tier because commercial customers are too heterogeneous to be fairly placed in a tiered rate structure; they are commonly placed in a single tier. For FY2016 Tier 1 (0 to 20 ccf used) the recommended rate for Single Family Residential Customers would be \$4.13 and Tier 2 recommended rate (greater than 20ccf used) would be \$4.47. The Tier 1 rate would increase by 34% from \$4.13 in FY2016 to \$5.55 by FY2025.

Rate Option 5: Two Tier Hybrid Model (Appendix A5)

This rate option scenario combines Rate Options 3 and 4. This scenario would not sell water at a subsidized rate in FY2016 but proposes a smoothing of the rate increases during the subsequent years. As in Rate Options 3 and 4, Commercial customers would still be charged a single tier because commercial customers are too heterogeneous to be fairly placed in a tiered rate structure; they are commonly

placed in a single tier. For FY2016 Tier 1 (0 to 20 ccf used) the recommended rate for Single Family Residential Customers would be \$4.30 and Tier 2 recommended rate (greater than 20ccf used) would be \$4.64. The Tier 1 rate would increase from \$4.30 in FY2016 to \$5.55 by FY2025.

Rate Option 6: Three Tier Model (Appendix A6)

This rate option keeps the existing rate structure. This model would result in a lower bill for customers. This option proposes that the base tier (Tier 2) would be increased by 32.5% to \$4.40 per ccf. Likewise Tier 1 and Tier 3 would be increased a proportional amount, \$3.30 per ccf and \$6.60 per ccf, respectively.

Chart C summarizes the projected water bill of a typical single family residential customer under all proposed rate option scenarios. The typical single family residential customer uses 19 ccf per bi-monthly period in FY2025 is as follows:

- Rate Option Scenario 1: Uniform Rate without Smoothing is projected to result in the highest monthly water bill of \$76.00 in FY2025 from \$43.39 in FY2015, an increase of approximately 75%.
- Rate Option 2: Uniform Rate with Smoothing typical bill is projected to be \$74.73
- Rate Option 3: Two Tier without Smoothing typical bill is projected to be \$75.58
- Rate Option Scenario 4: Two Tier with Smoothing will result in a bill of approximately \$73.68, an increase of approximately 70%.
- Rate Option Scenario 5: Two Tier Hybrid Model will result in the same typical residential bill for FY2017-FY2025 as in Rate Option Scenario 4.
- Rate Option Scenario 6: Three Tier Model will result in the lowest typical residential bill.

CHART C

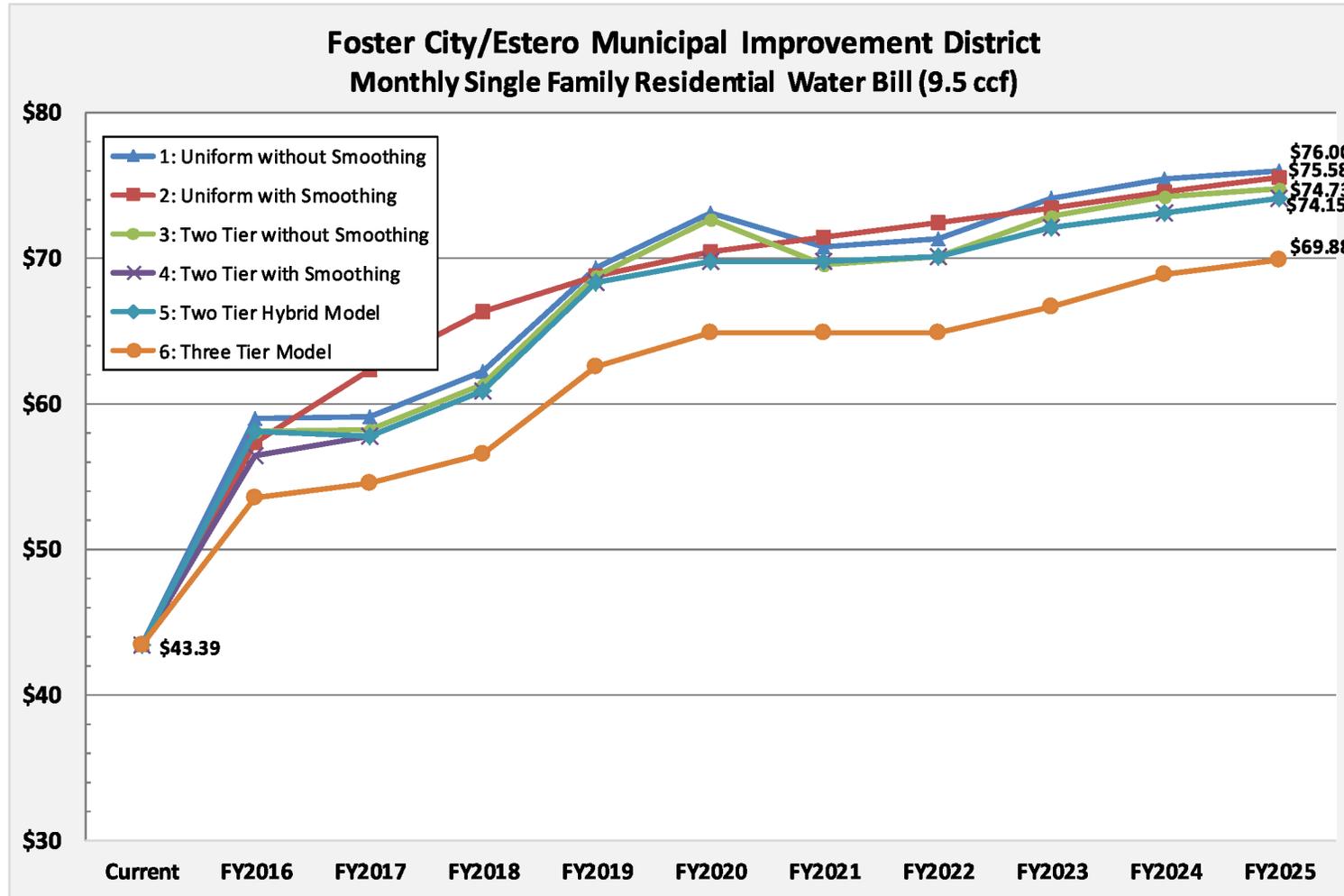


Table 5 shows the bill for a typical residential single family water customer for all scenarios for a ten year time period.

Table 5
Foster City / Estero Municipal Improvement District
Projected Water Rate Impacts

Rate Change Options	Current	Fiscal Year Ending June 30,						Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Scenario 1: Uniform Rate without Smoothing												
Single Family Residential Monthly Rate	\$43.39	\$59.00	\$59.13	\$62.20	\$69.31	\$73.14	\$70.80	\$71.30	\$74.09	\$75.44	\$76.00	
\$ Increase		15.61	0.13	3.07	7.11	3.84	(2.34)	0.49	2.80	1.34	0.57	
% Increase		36.0%	0.2%	5.2%	11.4%	5.5%	-3.2%	0.7%	3.9%	1.8%	0.8%	
Scenario 2: Uniform Rate with Smoothing												
Single Family Residential Monthly Rate	\$43.39	\$57.34	\$62.28	\$66.32	\$68.80	\$70.45	\$71.40	\$72.44	\$73.49	\$74.53	\$75.58	
\$ Increase		13.95	4.94	4.04	2.48	1.65	0.95	1.05	1.05	1.04	1.05	
% Increase		32.2%	8.6%	6.5%	3.7%	2.4%	1.3%	1.5%	1.4%	1.4%	1.4%	
Scenario 3: Two Tier without Smoothing												
Single Family Residential Monthly Rate	\$43.39	\$58.11	\$58.24	\$61.32	\$68.80	\$72.63	\$69.56	\$70.05	\$72.84	\$74.17	\$74.73	
\$ Increase		14.72	0.14	3.08	7.47	3.84	(3.07)	0.48	2.79	1.34	0.56	
% Increase		33.9%	0.2%	5.3%	12.2%	5.6%	-4.2%	0.7%	4.0%	1.8%	0.8%	
Scenario 4: Two Tier with Smoothing												
Single Family Residential Monthly Rate	\$43.39	\$56.49	\$57.82	\$60.91	\$68.32	\$69.78	\$69.78	\$70.07	\$72.06	\$73.11	\$74.15	
\$ Increase		13.10	1.33	3.09	7.41	1.46	0.00	0.28	2.00	1.05	1.05	
% Increase		30.2%	2.4%	5.3%	12.2%	2.1%	0.0%	0.4%	2.8%	1.5%	1.4%	
Scenario 5: Two Tier Hybrid Model [1]												
Single Family Residential Monthly Rate	\$43.39	\$58.11	\$57.82	\$60.91	\$68.32	\$69.78	\$69.78	\$70.07	\$72.06	\$73.11	\$74.15	
\$ Increase		14.72	(0.29)	3.09	7.41	1.46	0.00	0.28	2.00	1.05	1.05	
% Increase		33.9%	-0.5%	5.3%	12.2%	2.1%	0.0%	0.4%	2.8%	1.5%	1.4%	
Scenario 6: Three Tier Model												
Single Family Residential Monthly Rate	\$43.39	\$53.54	\$54.49	\$56.58	\$62.49	\$64.88	\$64.88	\$64.88	\$66.64	\$68.92	\$69.88	
\$ Increase		10.15	0.95	2.09	5.91	2.39	0.00	0.00	1.76	2.28	0.96	
% Increase		23.4%	1.8%	3.8%	10.4%	3.8%	0.0%	0.0%	2.7%	3.4%	1.4%	

Based on Single Family Residential Use of 9.5 ccf

[1] Scenario 3 rates for FY2016; Scenario 4 rates for FY2017 onward

Table 6 shows the rate impact on various single family residential users under the proposed rate scenarios. The “Low User” will have their bill increased by the most amounts in all rate option scenarios; this is due to the elimination of the old Tier 1, which charged consumers for water at a reduced rate. The “Current Median User” will also have a large increase in their water utility bill for the same reason. The “High User” benefits from the uniform rate structures due to the adjustments of the new tier structures and projected to have a lower bill under rate options 1,2, and 4. Table 6 also shows the number of single family residential bills that were in each tier for FY2014.

Table 6
Foster City / Estero Municipal Improvement District
Projected Water Rate Impacts

	Current		FY2014		Projected Rate Options - Fiscal Year Ending June 30 2016				
	Rates	Number of Bills	Percent	Uniform no Smoothing	Uniform Smoothing	Two Tier no Smoothing	Two Tier with Smoothing	Two Tier Hybrid Model	
Monthly meter charge	\$16.00			\$17.25	\$17.25	\$17.25	\$17.25	\$17.25	
% Change from FY2015				7.8%	7.8%	7.8%	7.8%	7.8%	
Single Family Residential Bi-Monthly Tiers									
Tier 1: 0 to 10 ccf	\$2.49	5,120	19%	\$4.40	\$4.22	\$4.30	\$4.13	\$4.30	
Tier 2: 11 to 20 ccf	\$3.32	9,868	36%	\$4.40	\$4.22	\$4.30	\$4.13	\$4.30	
Tier 3: over 20 ccf	\$4.98	12,493	45%	\$4.40	\$4.22	\$4.64	\$4.47	\$4.64	
Total Number of Bills		27,481	100%						
Water Use Level	Monthly Use (ccf)								
Low User	5	\$28.45		\$39.23	\$38.35	\$38.75	\$37.90	\$38.75	
\$ Increase				10.78	9.90	10.30	9.45	10.30	
% Increase				37.9%	34.8%	36.2%	33.2%	36.2%	
Current Median User [1]	9.5	\$43.39		\$59.00	\$57.34	\$58.11	\$56.49	\$58.11	
\$ Increase				15.61	13.95	14.72	13.10	14.72	
% Increase				36.0%	32.2%	33.9%	30.2%	33.9%	
Med-High User	20	\$94.85		\$105.15	\$101.65	\$106.69	\$103.28	\$106.69	
\$ Increase				10.30	6.80	11.84	8.43	11.84	
% Increase				10.9%	7.2%	12.5%	8.9%	12.5%	
High User	50	\$244.25		\$237.00	\$228.25	\$245.98	\$237.45	\$245.98	
\$ Increase				(7.25)	(16.00)	1.73	(6.80)	1.73	
% Increase				-3.0%	-6.6%	0.7%	-2.8%	0.7%	

Based on use of Single Family Residential Customers over a Bi-Monthly Billing Period

Tables 7 shows the rates for Rate Option 4: Two Tier with Smoothing across a ten year period.

Table 7 City of Foster City / Estero Municipal Improvement District Proposed Water Rates - Two Tier with Smoothing				TWO TIER WITH SMOOTHING									
	2012	2013	Current Rates	Proposed Rates Two Tier FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00
Conservation-Based Water Rate Model (based on bi-monthly allotments)													
<i>Single Family Residential</i>													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 3: over 20 ccf	4.70	4.70	\$4.98	4.47	4.78	5.11	5.29	5.36	5.49	5.49	5.70	5.76	5.90
<i>Multi-Family Residential (per living unit)</i>													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 3: over 10 ccf	4.70	4.70	\$4.98	4.48	4.81	5.13	5.32	5.39	5.51	5.51	5.72	5.79	5.92
<i>Irrigation Customers</i>													
≤ 100% of Annual Water Budget	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
> 100% of Annual Water Budget	4.70	4.70	\$4.98	5.43	5.85	6.20	6.33	6.37	6.58	6.58	6.78	6.85	7.01
<i>Commercial and Fire Line Customers</i>													
Base Consumption Rate	3.13	3.13	\$3.32	4.22	4.52	4.85	5.05	5.13	5.24	5.24	5.45	5.51	5.64
Monthly Private Fire Service Protection Meter Charge													
3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80
(Minimum charge is equivalent to 1-1/2" meter charge)													

Recommendation: BWA recommends Rate Option Scenario 4: Two Tier with Smoothing. This rate option allows for the enterprise to remain financially strong while impacting the ratepayers by the least amount and encourages conservation.

Wastewater Enterprise Fund

There are approximately 12,919 wastewater accounts serviced by the District. The majority of accounts, approximately 92% are residential with the remainder being made up of commercial and institutional accounts as shown in Table 8.

Table 8
Foster City / Estero Municipal Improvement District
Wastewater Service Accounts

Data as of:	02/07/15
-------------	----------

Customer Class	Number of Accounts
<u>Residential</u>	
Single Family	4,534
Townhouse/Duplex	2,222
Apartment/Condominium (Pools w/ Restrooms)	<u>5,941</u>
Residential Total	12,697
<u>Commercial</u>	
Restaurants	46
Commercial/Hotels/Offices/Industrial/Laundromats	<u>141</u>
Commercial Total	187
<u>Institutional</u>	
Institutional/Schools	<u>35</u>
Institutional Total	35
Total	12,919

Source: Cognos Sewer Customer Count Report

The District has approximately \$1.6 million in its maintenance and operations reserve fund that the District can draw upon in case of an emergency or to mitigate “rate shocks” as shown in Table 9.

Table 9
Foster City / Estero Municipal Improvement District
Wastewater Operating Fund Reserves

Fund Reserve Component	July 1, 2014 Balance
Reserved for Maintenance & Operation	\$1,638,605
Total	\$1,638,605

Note: Rate model only includes fund reserve components available to fund ongoing operating and capital expenditures.

Source: City of Foster City/Estero Municipal Improvement District Water and Sewer Equity Analysis FYE June 30, 2014

Table 10 summarizes the current wastewater service rates.

Table 10
Foster City / Estero Municipal Improvement District
Current Wastewater Rates

Fiscal Year Ending June 30	Current 2015
Residential (flat monthly rate)	
Single Family	\$47.00
Townhouse/Duplex	39.55
Apartment/Condominium (Pools w/ Restrooms)	39.55
Commercial (rate per ccf of water use)	
Restaurants	8.54
Commercial/Hotels/Offices/Industrial/Laundromats	3.00
Institutional (rate per ccf of water use)	
Institutional/Schools	1.69

Table 11 summarizes the operating expenditures of the enterprise. Costs are expected to remain relatively stable over the next five years. The largest portion of the District's operating and maintenance costs are related to the treatment of wastewater by San Mateo. The District is also responsible for 25% of ongoing Wastewater Treatment Plant capital costs estimated at \$1,000,000 annually.

Table 11
City of Foster City / Estero Municipal Improvement District
Wastewater Enterprise O&M Projection

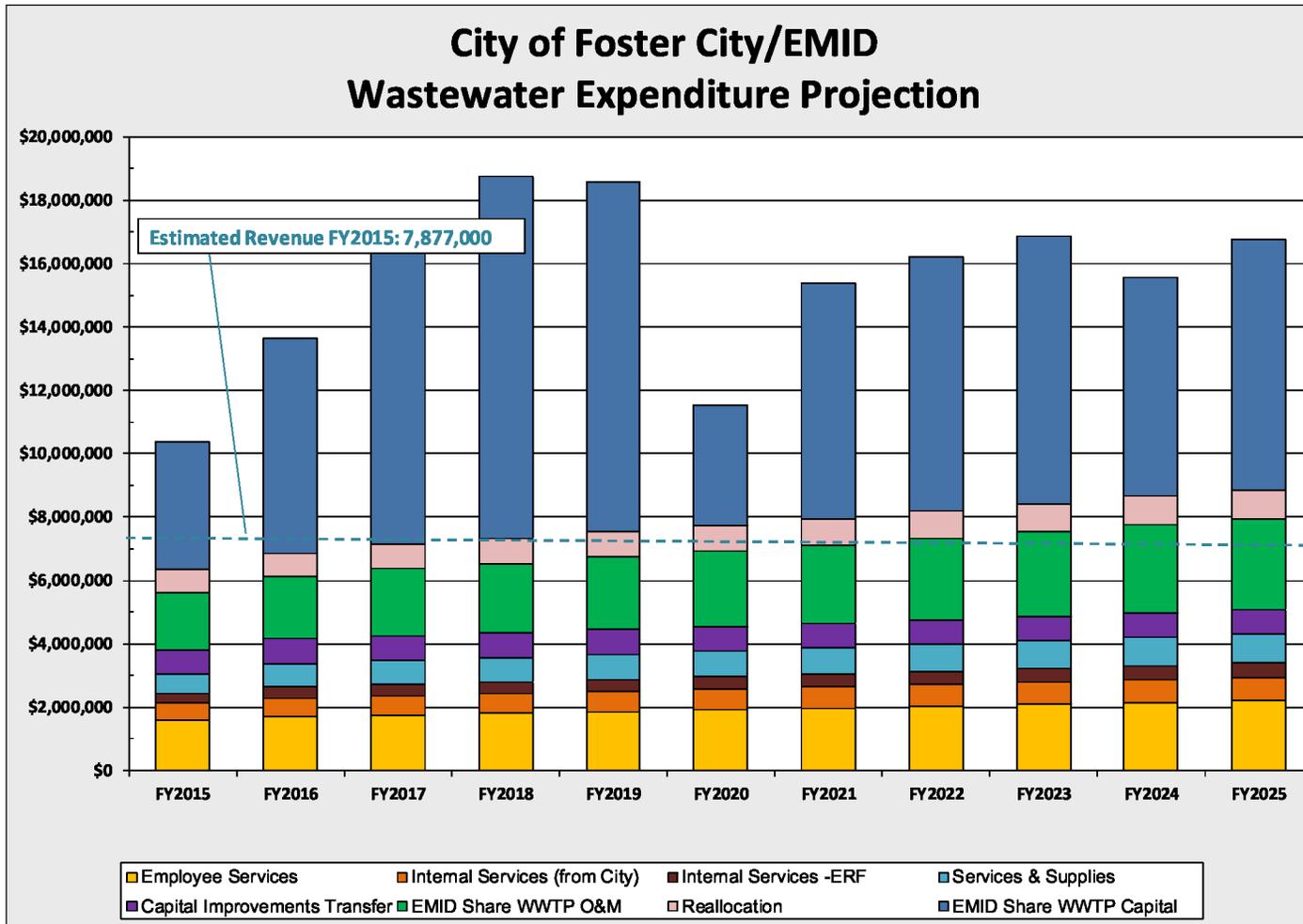
Expenses	Five Year Projection (Prop 218)						Annual %
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	Increase [1]
Employee Services	1,601,200	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	3.0%
Internal Services (from City)	537,084	590,369	605,000	620,000	636,000	652,000	2.5%
Internal Services -ERF	276,319	360,436	369,000	378,000	387,000	397,000	2.5%
Services & Supplies	619,850	729,200	747,000	766,000	785,000	805,000	2.5%
EMID Share WWTP O&M	1,800,000	1,961,000	2,131,000	2,201,000	2,309,000	2,374,000	varies
EMID Share WWTP Capital Improvements	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	
Reallocation	719,966	738,000	756,000	775,000	794,000	814,000	2.5%
TOTAL O&M Expenditures	6,554,419	7,075,005	7,355,000	7,539,000	7,764,000	7,951,000	
		7.9%	4.0%	2.5%	3.0%	2.4%	

[1] Based on historical results

Chart D shows all estimated expenditures that the District is expecting to incur over the next ten years. This includes the operating expenditures found in Table 11, along with its share of the San Mateo Wastewater Plant Master Plan Improvements

Project and transfers to the District’s local wastewater capital fund that is used to fund the District’s ongoing capital improvements and repairs.

CHART D



7.1 - 26

Rate Option Scenarios

The first rate option scenario (Appendix J1) of pay-as-you-go results in a steep increase in wastewater rates of 175% in FY2016, followed by no rate increases in FY2017 and FY2018 then a rate reduction of 5% in FY2019 and a 10% rate reduction in FY2020. This results in an approximate 135% increase in the residential wastewater bill from \$47.00 in FY2016 to \$110.51 in FY2025. This option results in the District taking on no debt. The District is projected to not have enough revenue and reserves to cover all expenditures through FY2015 and remain financially solvent. Rate Option 1 includes a transfer from the District's wastewater capital fund in FY2015 to pay for its share of the San Mateo Wastewater Plant Master Plan Improvements Project Costs for that year of approximately \$4,056,000 in FY2015. The District would pay this interfund "loan" back in FY2016. The primary driver of rate increases in this option is San Mateo WWTP Capital Costs.

The second rate option scenario (Appendix J2) includes financing the San Mateo Wastewater Plant Master Plan Improvements Project through both SRF loans and bond issues. The breakdown of projects to be financed through SRF and bond is based off of the latest projections of how the City of San Mateo is planning to fund these projects. This rate option proposes annual rate increases of 9.00% from for FY2016 through FY2020 followed by 5.1% rate increase for FY2021 and 5.0% annual rate increases through FY2025. This rate option scenario will result in a residential wastewater bill increase of 97% from \$47.00 in FY2015 to \$92.38 in FY2025. State Revolving Fund Loans require that the District set aside a reserve fund that is equal to one year's debt service for the loan. The bonds issued have the same requirement but the cash reserve fund is built into the bond proceeds themselves. With SRF financing, the District will have to make transfers to the SRF reserve fund. Both SRF and bond require that the District maintain a debt service ratio of 1.2. This means that annual operating net revenue is 120% of annual debt service payments. This is to ensure that if the District experiences any revenue volatility or financial emergency, it will have a buffer against which to continue to make debt service payments. This scenario includes an interfund loan in FY2015 from the local wastewater capital fund. The interfund loan will be repaid through the first bond issue in FY2016. In order to be able to pay back the interfund loan

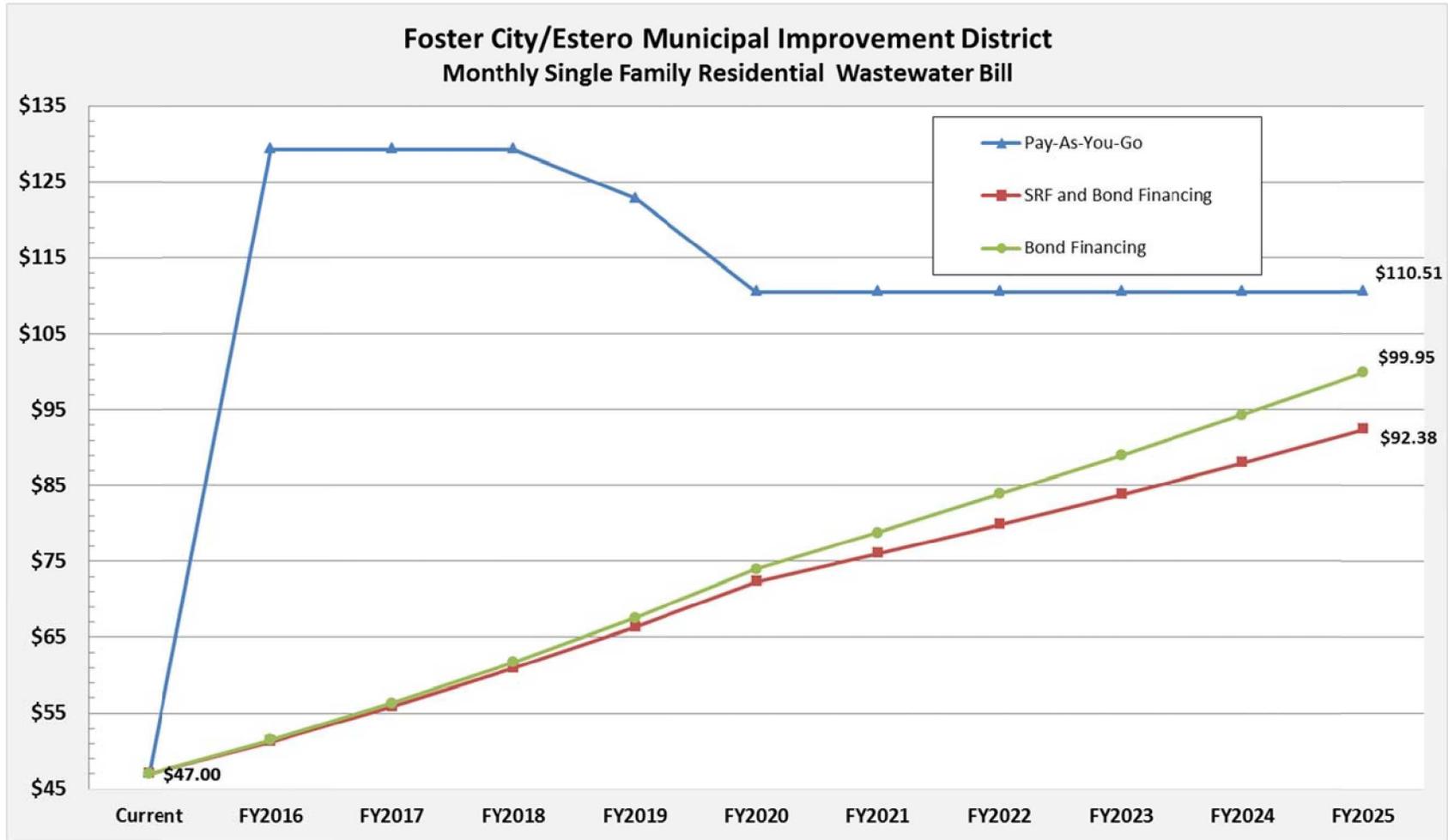
through debt proceeds, the District must pass a reimbursement resolution. Without the reimbursement resolution the district can only reimburse capital costs occurring 60 days before the bond issue. The primary driver of rate increases for this option is to maintain adequate debt service coverage.

The third rate option (Appendix J3) scenario would fund all expenditures associated with the San Mateo Wastewater Plant Master Plan Improvements Project through bond proceeds only (no SRF). This would result in 9.5% rate increases in FY2016 through FY2020 followed by 6.5% rate increases in FY2021 and FY2022 and 6.00% rate increases from FY2023 to FY2025. This rate option scenario results in a single family residential wastewater bill of for FY2025 \$99.95 up from \$47.00 in FY2015, a 113% increase. This option also includes an interfund loan to be paid back through bond proceeds. The primary driver of this rate increase scenario is to maintain adequate debt service coverage.

Chart E shows the monthly residential wastewater bill for all three rate option scenarios that will keep the enterprise financially strong.

- Option 1 Pay-As-You pay as you go will result in the highest residential wastewater bill of \$110.51 by FY2025. While this option results in the highest rate for the customers, it will keep the District debt free.
- Options 2 and 3 include using debt proceeds to help finance the Wastewater Treatment Plant Project.
 - Option 2 results in the lowest single family residential wastewater bill of \$92.38 by FY2025
 - Option 3 results in a bill of \$99.95 by FY2025.

CHART E



Tables 12 and 13 show the calculations for the debt issue size and annual debt service payments for Option 2 and 3 respectively. The estimated borrowing amount of bonds for Option 2 is estimated to be \$52 million with an additional \$38 million to be borrowed through State Revolving Fund (SRF) loans. The borrowing amount under Option 3 is estimated at approximately \$93.6 million.

Table 12
City of Foster City / Estero Municipal Improvement District
Estimated Debt Service Costs for Financing Wastewater Projects
Bond Calculations For Scenario 2: SRF and Bond Financing

	30-Year 2016 Bond	30-Year 2017 Bond	30-Year 2018 Bond	30-Year 2019 Bond	30-Year 2020 Bond	30-Year 2021 Bond	30-Year 2022 Bond	30-Year 2023 Bond
Debt Issue Size	11,830,000	10,748,000	9,509,000	8,632,000	1,143,000	3,340,000	3,348,000	3,435,000
Proceeds For Construction	\$10,845,000	\$9,854,000	\$8,718,000	\$7,897,000	\$1,046,000	\$3,056,000	\$3,063,000	\$3,136,000
Total All Costs	236,600	214,960	190,180	172,640	22,860	66,800	66,960	68,700
Cash Reserve Fund	748,000	679,000	601,000	562,000	74,000	217,000	218,000	230,000
Principal Maturities	30	30	30	30	30	30	30	30
Assumed Avg Interest Rate	4.75%	4.75%	4.75%	5.00%	5.00%	5.00%	5.00%	5.25%
Average Annual Payment	748,000	679,000	601,000	562,000	74,000	217,000	218,000	230,000
Less Interest Earnings on Reserve ¹	11,200	10,200	9,000	8,400	1,100	3,300	3,300	3,500
Net annual Payment	736,800	668,800	592,000	553,600	72,900	213,700	214,700	226,500
Total of All Payments ²	21,356,000	19,385,000	17,159,000	16,046,000	2,113,000	6,194,000	6,223,000	6,565,000
Present Value of Payments ³	11,656,000	10,581,000	9,366,000	8,510,000	1,121,000	3,285,000	3,300,000	3,385,000

[1] Earnings at 1.5%

[2] Net of reserve fund and interest earned on reserve fund.

[3] Discounted at assumed bond rate.

Table 13
 City of Foster City / Estero Municipal Improvement District
 Estimated Debt Service Costs for Financing Wastewater Projects
 Bond Calculations For Scenario 3: Bond Financing

	30-Year 2016 Bond	30-Year 2017 Bond	30-Year 2018 Bond	30-Year 2019 Bond	30-Year 2020 Bond	30-Year 2021 Bond	30-Year 2022 Bond	30-Year 2023 Bond	30-Year 2024 Bond	30-Year 2025 Bond
Debt Issue Size	11,830,000	10,748,000	12,478,000	12,066,000	4,179,000	8,129,000	8,767,000	9,256,000	7,546,000	8,644,000
Proceeds For Construction	\$10,845,000	\$9,854,000	\$11,439,000	\$11,040,000	\$3,823,000	\$7,437,000	\$8,022,000	\$8,452,000	\$6,890,000	\$7,893,000
Total All Costs	236,600	214,960	249,560	241,320	83,580	162,580	175,340	185,120	150,920	172,880
Cash Reserve Fund	748,000	679,000	789,000	785,000	272,000	529,000	570,000	619,000	505,000	578,000
Principal Maturities	30	30	30	30	30	30	30	30	30	30
Assumed Avg Interest Rate	4.75%	4.75%	4.75%	5.00%	5.00%	5.00%	5.00%	5.25%	5.25%	5.25%
Average Annual Payment	748,000	679,000	789,000	785,000	272,000	529,000	570,000	619,000	505,000	578,000
Less Interest Earnings on Reserve ¹	11,200	10,200	11,800	11,800	4,100	7,900	8,600	9,300	7,600	8,700
Net annual Payment	736,800	668,800	777,200	773,200	267,900	521,100	561,400	609,700	497,400	569,300
Total of All Payments ²	21,356,000	19,385,000	22,527,000	22,411,000	7,765,000	15,104,000	16,272,000	17,672,000	14,417,000	16,501,000
Present Value of Payments ³	11,656,000	10,581,000	12,296,000	11,886,000	4,118,000	8,011,000	8,630,000	9,111,000	7,433,000	8,508,000

[1] Earnings at 1.5%

[2] Net of reserve fund and interest earned on reserve fund.

[3] Discounted at assumed bond rate.

Table 14 shows for Scenario 2: SRF and Bond Financing what portion of the projects for the San Mateo Wastewater Plant Master Plan Improvements Project will be funded through SRF proceeds and which will be funded through bond proceeds.

Table 14
 City of Foster City / Estero Municipal Improvement District
 Sources and Uses of Wastewater Plant Master Plan Project

	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimated Project Costs	3,527,000	5,903,000	8,569,000	9,947,000	9,600,000	3,325,000	6,467,000	6,976,000	7,350,000	5,991,000	6,864,000
15% Contingency	<u>529,000</u>	<u>886,000</u>	<u>1,285,000</u>	<u>1,492,000</u>	<u>1,440,000</u>	<u>498,000</u>	<u>970,000</u>	<u>1,046,000</u>	<u>1,102,000</u>	<u>899,000</u>	<u>1,029,000</u>
Total Estimated Project Costs	4,056,000	6,789,000	9,854,000	11,439,000	11,040,000	3,823,000	7,437,000	8,022,000	8,452,000	6,890,000	7,893,000
SRF	0	0	0	2,721,000	3,143,000	2,777,000	4,381,000	4,959,000	5,861,000	6,685,000	7,553,000
Bond	0	10,845,000	9,854,000	8,718,000	7,897,000	1,046,000	3,056,000	3,063,000	2,591,000	205,000	340,000
Interfund Loan	4,056,000	(4,056,000)	0	0	0	0	0	0	0	0	0

Recommendation: BWA recommends that the District pursue Rate Option Scenario 3: Bond Financing.

Wastewater Cost of Service Analysis

In addition, Bartle Wells performed a Wastewater Cost of Service Analysis to determine equitable cost allocation to the various user classes. BWA recommends placing commercial customers into three wastewater strength categories, (low, medium and high) based on the State Water Resources Control Board (SWRCB) Wastewater Revenue Program Guidelines. Low strength wastewater (Class A) customers include banks, laundromats, retail stores, schools, churches and others as shown in Table 15.

Medium strength wastewater (Class B) customers have wastewater strength factors that are assumed to be similar to residential wastewater strength factors. They include typical commercial activities such as libraries, spas, nail salons, gas stations and bars.

High strength wastewater (Class C) customers primarily include food-related businesses such as restaurants, bakeries, dairies, wineries, catering, butcher shops and fish markets.

Table 15
City of Foster City/Estero Municipal Improvement District
Strength Classifications into Low, Medium/Domestic, and High Strength Dischargers

Low Strength

- Banks & Financial Institutions
- Barber Shops/Hair Salons (hair cutting only)
- Post Offices/Government
- Retail Stores
- Libraries
- Schools
- Churches, Halls & Lodges

**Medium/Commercial/
Domestic Strength**

- Residential - All
- Appliance Repair
- Beauty Shops (hair cutting w/additional treatments)
- Dry Cleaners
- Nail Salons
- Pet Groomers
- Commercial Laundromats
- Bars & Taverns
- Tasting Rooms
- Hospitals - General, Convalescent & Veterinarian
- Hotels, Motels, B&Bs, and Vacation Rentals
- Offices - Business and Professional

**Medium/Commercial/
Domestic Strength cont.**

- Offices - Medical/Dental
- Pools with Restrooms (Clubhouse)
- Theaters
- Warehouses
- Car Washes
- High Tech Medical Manufacturing
- Light Manufacturing/Industrial
- Gym or Health Club
- Machine Shops
- Service Stations, Garages, Auto Repair Shops
- Mini Marts - W/O Dish Washer or Garbage Disposal
- Mini Mart with Gas Pumps - W/O Dish Washer or Garbage Disposal
- Spa with Various Beauty Treatments

High Strength

- Restaurants
- Coffee Shops
- Ice Cream Parlors
- Catering
- Eatery
- Bakeries
- Butcher Shops
- Fish Market/Shop
- Markets - with Dish Washer or Garbage Disposal
- Markets - with Bakeries or Butcher Shops
- Mini Marts - with Dish Washer or Garbage Disposal
- Wineries
- Market
- Dairies (milk producers, yogurt, ice cream maker)
- Specialty Foods Manufacturing (e.g., cheese or olive oil maker)

Note: Wastewater users who have Fats, Oils, and Grease (FOG) waste will be put into the High Strength user category

Table 16 summarizes the assumed wastewater strength factors for the low, medium and high strength groups that are based on typical strengths provided in the SWRCB’s Revenue Program Guidelines. The strength factor for medium strength customers is equivalent to residential or “domestic” strength, of 1.00. The strength factor for low strength is calculated at 0.66 and for high strength is calculated at 2.85 based on the SWRCB guidelines.

Table 16
City of Foster City/Estero Municipal Improvement District
Assumed Wastewater Strength Factors

Strength Class	LOW	MEDIUM	HIGH
Examples:	Institutional Bank	Residential Tasting Room	Restaurant Bakery
Flow (gpd)	200	200	200
BOD (mg/l)	130	240	1000
TSS (mg/l)	100	240	800
Strength Factor	0.66	1.00	2.85

Strength Factor Formula $SF = (Flow(gpd)/200) * (0.33 + (0.33 * BOD(mg/l)/240) + (0.34 * TSS(mg/l)/240))$

WW flows and strengths based on State Water Resources Control Board's Revenue Program Guidelines

Table 17 summarizes the mass-balance analysis for the City’s wastewater system and calculates the wastewater rates for each customer class. Single family residences are assumed to have an average daily (dry weather) flow of 200 gallons per day (gpd). Based on residential occupancy data provided by the City of Foster City, single family residences are estimated to have an average of 2.67 residents per household and multi-family residences are estimated to have an average of 2.25 residents per household (84% of a single family household). Multi-family dwellings are billed based on an estimated flow of 168 gpd or 0.84 times the single family rate. As a check, the mass balance in Table 17 compares the total calculated and measured daily wastewater flows for Foster City (average dry weather flow). The results agree well with the estimated daily flow at 2.39 million gallons per day (mgd) and the measured flow at 2.37 mgd.

Table 17
City of Foster City/Estero Municipal Improvement District
Summary of Sewer Users by Customer Class

Customer Class	Accounts	EDUs	Annual Measured ADWF Flow (gal/day)	ADWF Flow (gal/day)	FY2015 Estimate EDU x Flow ADWF Flow (gal/day)	BOD (mg/l)	TSS (mg/l)	FY2015 Calculated Current Rate	FY2016 Calculated New Rate
Residential									
Single Family Residential	4,534	4,534		200	906,800	240	240	47.00	51.47
Townhouse/Duplex	2,222	2,222		168	373,296	240	240	39.48	43.23
Apartment/Condos	5,941	5,941		168	998,088	240	240	39.48	43.23
					2,278,184				
Commercial									
				Flow Factor					
Low Strength	35		36,295	65%	23,592	130	100	1.97	2.16
Medium/Domestic Strength	141		121,901	53%	64,486	240	240	3.00	3.29
High Strength	46		40,833	70%	28,583	1000	800	8.54	9.35
			199,029		116,660				
Totals					2,394,844				
Check Against Lowest Actual Monthly Avg. Day Flow (May 2014 from LS 59 Flow Log):					2,367,806				

7.1 - 36

Table 18 calculates the rates for each customer class based on their updated flows and loadings for all proposed rate option scenarios. Low strength commercial rates would increase more than the 9.5% due to the updated higher strength assumptions used in this study based on the latest SWRCB Guidelines.

Table 18
City of Foster City / Estero Municipal Improvement District
Projected Wastewater Rate Impacts

Projected Rates	Current	Projected - Fiscal Year Ending June 30				
	2015	2016	2017	2018	2019	2020
Rate Increase Option 1: Pay-As-You-Go		175%	0%	0%	-5%	-10%
Residential (flat monthly rate)						
Single Family	\$47.00	\$129.25	\$129.25	\$129.25	\$122.79	\$110.51
<i>Increase (Decrease)</i>		82.25	0.00	0.00	(6.46)	(12.28)
Townhouse/Duplex	39.55	108.57	108.57	108.57	103.14	92.83
<i>Increase (Decrease)</i>		69.02	0.00	0.00	(5.43)	(10.31)
Apartment/Condominium (Pools w/ Restrooms)	39.55	108.57	108.57	108.57	103.14	92.83
<i>Increase (Decrease)</i>		69.02	0.00	0.00	(5.43)	(10.31)
Commercial (rate per ccf of water use)						
High Strength	8.54	23.49	23.49	23.49	22.32	20.09
<i>Increase (Decrease) per ccf</i>		14.95	0.00	0.00	(1.17)	(2.23)
Medium/Domestic Strength	3.00	8.25	8.25	8.25	7.84	7.06
<i>Increase (Decrease) per ccf</i>		5.25	0.00	0.00	(0.41)	(0.78)
Low Strength	1.69	5.42	5.42	5.42	5.15	4.64
<i>Increase (Decrease) per ccf</i>		3.73	0.00	0.00	(0.27)	(0.51)
Rate Increase Option 2 - SRF and Bond Financing		9.00%	9.00%	9.00%	9.00%	9.00%
Residential (flat monthly rate)						
Single Family	\$47.00	\$51.23	\$55.84	\$60.87	\$66.35	\$72.32
<i>Increase (Decrease)</i>		4.23	4.61	5.03	5.48	5.97
Townhouse/Duplex	39.55	43.03	46.90	51.12	55.72	60.73
<i>Increase (Decrease)</i>		3.48	3.87	4.22	4.60	5.01
Apartment/Condominium (Pools w/ Restrooms)	39.55	43.03	46.90	51.12	55.72	60.73
<i>Increase (Decrease)</i>		3.48	3.87	4.22	4.60	5.01
Commercial (rate per ccf of water use)						
High Strength	8.54	9.31	10.15	11.06	12.06	13.15
<i>Increase (Decrease) per ccf</i>		0.77	0.84	0.91	1.00	1.09
Medium/Domestic Strength	3.00	3.27	3.56	3.88	4.23	4.61
<i>Increase (Decrease) per ccf</i>		0.27	0.29	0.32	0.35	0.38
Low Strength	1.69	2.15	2.34	2.55	2.78	3.03
<i>Increase (Decrease) per ccf</i>		0.46	0.19	0.21	0.23	0.25

Projected Rates	Current	Projected - Fiscal Year Ending June 30				
	2015	2016	2017	2018	2019	2020
Scenario 3 - Bond Financing		9.5%	9.5%	9.5%	9.5%	9.5%
Residential (flat monthly rate)						
Single Family	\$47.00	\$51.47	\$56.36	\$61.71	\$67.57	\$73.99
<i>Increase (Decrease)</i>		<i>4.47</i>	<i>4.89</i>	<i>5.35</i>	<i>5.86</i>	<i>6.42</i>
Townhouse/Duplex	39.55	43.23	47.34	51.84	56.76	62.15
<i>Increase (Decrease)</i>		<i>3.68</i>	<i>4.11</i>	<i>4.50</i>	<i>4.92</i>	<i>5.39</i>
Apartment/Condominium (Pools w/ Restrooms)	39.55	43.23	47.34	51.84	56.76	62.15
<i>Increase (Decrease)</i>		<i>3.68</i>	<i>4.11</i>	<i>4.50</i>	<i>4.92</i>	<i>5.39</i>
Commercial (rate per ccf of water use)						
High Strength	8.54	9.35	10.24	11.21	12.27	13.44
<i>Increase (Decrease) per ccf</i>		<i>0.81</i>	<i>0.89</i>	<i>0.97</i>	<i>1.06</i>	<i>1.17</i>
Medium/Domestic Strength	3.00	3.29	3.60	3.94	4.31	4.72
<i>Increase (Decrease) per ccf</i>		<i>0.29</i>	<i>0.31</i>	<i>0.34</i>	<i>0.37</i>	<i>0.41</i>
Low Strength	1.69	2.16	2.37	2.60	2.85	3.12
<i>Increase (Decrease) per ccf</i>		<i>0.47</i>	<i>0.21</i>	<i>0.23</i>	<i>0.25</i>	<i>0.27</i>

APPENDIX A: Cash Flow Projections for Water Rate Option Scenarios 1, 2, 3, 4, 5, and 6

APPENDIX A1

City of Foster City / Estero Municipal Improvement District

Water Enterprise Cash Flow Projection - Uniform Rate Structure without Smoothing

UNIFORM WITHOUT SMOOTHING											
Fiscal Year Ending June 30	Five Year Projection						Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth [1]		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Fixed Charge	\$16.00	\$17.25	\$18.20	\$19.20	\$20.25	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95
Fixed Rate Adjustment		7.75%	5.50%	5.50%	5.50%	3.50%	0.0%	0.0%	0.0%	0.0%	0.0%
SFR Variable Charge	\$3.32	\$4.40	\$4.31	\$4.53	\$5.16	\$5.49	\$5.25	\$5.30	\$5.59	\$5.74	\$5.80
Variable Rate Adjustment		32.4%	-2.0%	5.0%	14.1%	6.4%	-4.5%	1.0%	5.6%	2.5%	1.0%
Monthly Service Charge Single Family (9.5 ccf)	\$43.39	\$59.00	\$59.13	\$62.20	\$69.31	\$73.14	\$70.80	\$71.30	\$74.09	\$75.44	\$76.00
Rate Adjustment		36.0%	0.2%	5.2%	11.4%	5.5%	-3.2%	0.7%	3.9%	1.8%	0.8%
Beginning Fund Balance	\$2,685,544	\$3,361,000	\$3,579,000	\$3,756,000	\$4,109,000	\$4,572,000	\$5,146,000	\$5,625,000	\$6,006,000	\$6,285,000	\$6,459,000
Revenues											
Water Sales & Service Charges											
<i>Meter Charge Revenue Estimate (Table 9)</i>	3,624,000	3,755,000	4,011,000	4,285,000	4,575,000	4,791,000	4,803,000	4,815,000	4,827,000	4,839,000	4,851,000
<i>Volumetric Revenue Estimate (Table 9)</i>	7,250,000	9,300,000	9,229,000	9,817,000	11,335,000	12,208,000	11,692,000	11,834,000	12,525,000	12,876,000	13,045,000
Connection Fees [1]	590,400	278,000	77,000	77,000	0	0	0	0	0	0	0
Interest Earnings - Operating Reserve [2]	70,000	34,000	36,000	38,000	41,000	46,000	51,000	56,000	60,000	63,000	65,000
Interest Earnings - Capital Improvement Fund [3]	50,000	52,000	53,000	55,000	54,000	52,000	52,000	52,000	52,000	52,000	52,000
Water Sustainability Fund Revenue	38,000	0	0	0	0	0	0	0	0	0	0
Operating Revenues	11,622,400	13,419,000	13,406,000	14,272,000	16,005,000	17,097,000	16,588,000	16,757,000	17,464,000	17,830,000	18,013,000
Expenses											
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	541,000	555,000	569,000	583,000	598,000
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	309,000	317,000	325,000	333,000	341,000
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	505,000	518,000	531,000	544,000	558,000
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	10,742,000	10,884,000	11,575,000	11,926,000	12,095,000
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	923,000	946,000	970,000	994,000	1,019,000
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Operating Expenses	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	15,714,000	15,971,000	16,780,000	17,251,000	17,545,000
Operating Net Revenues	880,224	623,000	582,000	758,000	868,000	979,000	884,000	786,000	684,000	579,000	468,000
Water Sustainability Fund Transfer	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital Improvement Transfer [4]	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Total Expenses	10,947,176	13,201,000	13,229,000	13,919,000	15,542,000	16,523,000	16,119,000	16,376,000	17,185,000	17,656,000	17,950,000
Revenues Less O&M Expenses	880,224	623,000	582,000	758,000	868,000	979,000	884,000	786,000	684,000	579,000	468,000
Revenues Less Total Expenses	675,224	218,000	177,000	353,000	463,000	574,000	479,000	381,000	279,000	174,000	63,000
Ending Fund Balance	3,360,768	3,579,000	3,756,000	4,109,000	4,572,000	5,146,000	5,625,000	6,006,000	6,285,000	6,459,000	6,522,000
Revenue Test: Annual Revenues > O&M Expenses											
Annual Revenues Less O&M Expenses	880,224	623,000	582,000	758,000	868,000	979,000	884,000	786,000	684,000	579,000	468,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	3,360,768	3,579,000	3,756,000	4,109,000	4,572,000	5,146,000	5,625,000	6,006,000	6,285,000	6,459,000	6,522,000
25% operating expenses	2,690,000	3,200,000	3,210,000	3,360,000	3,780,000	4,030,000	3,930,000	3,990,000	4,200,000	4,310,000	4,390,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Based on CDD and City of Foster City/EMID estimates

[2] Calculated as 1% of the Beginning Fund Balance of the Water Revenue Fund

[3] Calculated as 1% of the Beginning Fund Balance of the Water Capital Improvement Project Fund

[4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX A2

City of Foster City / Estero Municipal Improvement District
Water Enterprise Cash Flow Projection - Uniform Rate Structure with Smoothing

UNIFORM WITH SMOOTHING											
Fiscal Year Ending June 30	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth [1]		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Fixed Charge	\$16.00	\$17.25	\$18.20	\$19.20	\$20.25	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95
Fixed Rate Adjustment		7.8%	5.5%	5.5%	5.5%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%
SFR Variable Charge	\$3.32	\$4.22	\$4.64	\$4.96	\$5.11	\$5.21	\$5.31	\$5.42	\$5.53	\$5.64	\$5.75
Variable Rate Adjustment		27.1%	10.0%	6.9%	3.0%	2.0%	1.9%	2.1%	2.0%	2.0%	2.0%
Monthly Service Charge Single Family (9.5 ccf)	\$43.39	\$57.34	\$62.28	\$66.32	\$68.80	\$70.45	\$71.40	\$72.44	\$73.49	\$74.53	\$75.58
Rate Adjustment		32.2%	8.6%	6.5%	3.7%	2.4%	1.3%	1.5%	1.4%	1.4%	1.4%
Beginning Fund Balance	\$2,685,544	\$3,361,000	\$3,209,000	\$4,092,000	\$5,389,000	\$5,746,000	\$5,700,000	\$6,324,000	\$6,981,000	\$7,127,000	\$7,095,000
Revenues											
Water Sales & Service Charges											
Meter Charge Revenue Estimate (Table 9)	3,624,000	3,755,000	4,011,000	4,285,000	4,575,000	4,791,000	4,803,000	4,815,000	4,827,000	4,839,000	4,851,000
Volumetric Revenue Estimate (Table 9)	7,250,000	8,930,000	9,939,000	10,758,000	11,216,000	11,577,000	11,831,000	12,103,000	12,382,000	12,662,000	12,943,000
Connection Fees [1]	590,400	278,000	77,000	77,000	0	0	0	0	0	0	0
Interest Earnings - Operating Reserve [2]	70,000	34,000	32,000	41,000	54,000	57,000	57,000	63,000	70,000	71,000	71,000
Interest Earnings - Capital Improvement Fund [3]	50,000	52,000	53,000	55,000	54,000	52,000	52,000	52,000	52,000	52,000	52,000
Water Sustainability Fund Revenue	38,000	0	0	0	0	0	0	0	0	0	0
Operating Revenues	11,622,400	13,049,000	14,112,000	15,216,000	15,899,000	16,477,000	16,743,000	17,033,000	17,331,000	17,624,000	17,917,000
Expenses											
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	541,000	555,000	569,000	583,000	598,000
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	309,000	317,000	325,000	333,000	341,000
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	505,000	518,000	531,000	544,000	558,000
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	10,742,000	10,884,000	11,575,000	11,926,000	12,095,000
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	923,000	946,000	970,000	994,000	1,019,000
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Operating Expenses	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	15,714,000	15,971,000	16,780,000	17,251,000	17,545,000
Operating Net Revenues	880,224	253,000	1,288,000	1,702,000	762,000	359,000	1,029,000	1,062,000	551,000	373,000	372,000
Water Sustainability Fund Transfer	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital Improvement Transfer [4]	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Total Expenses	10,947,176	13,201,000	13,229,000	13,919,000	15,542,000	16,523,000	16,119,000	16,376,000	17,185,000	17,656,000	17,950,000
Revenues Less O&M Expenses	880,224	253,000	1,288,000	1,702,000	762,000	359,000	1,029,000	1,062,000	551,000	373,000	372,000
Revenues Less Total Expenses	675,224	(152,000)	883,000	1,297,000	357,000	(46,000)	624,000	657,000	146,000	(32,000)	(33,000)
Ending Fund Balance	3,360,768	3,209,000	4,092,000	5,389,000	5,746,000	5,700,000	6,324,000	6,981,000	7,127,000	7,095,000	7,062,000
Revenue Test: Annual Revenues > O&M Expenses											
Annual Revenues Less O&M Expenses	880,224	253,000	1,288,000	1,702,000	762,000	359,000	1,029,000	1,062,000	551,000	373,000	372,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	3,360,768	3,209,000	4,092,000	5,389,000	5,746,000	5,700,000	6,324,000	6,981,000	7,127,000	7,095,000	7,062,000
25% operating expenses	2,690,000	3,200,000	3,210,000	3,380,000	3,780,000	4,030,000	3,930,000	3,990,000	4,200,000	4,310,000	4,390,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Based on CDD and City of Foster City/EMID estimates

[2] Calculated as 1% of the Beginning Fund Balance of the Water Revenue Fund

[3] Calculated as 1% of the Beginning Fund Balance of the Water Capital Improvement Project Fund

[4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX A3

City of Foster City / Estero Municipal Improvement District

Water Enterprise Cash Flow Projection - Residential Two Tier Rate Structure without Smoothing

TWO TIER WITHOUT SMOOTHING												
Fiscal Year Ending June 30	Budget	Five Year Projection					Extended Year Projection					
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Assumptions:												
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth [1]		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Fixed Charge	\$16.00	\$17.25	\$18.20	\$19.20	\$20.25	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95
Fixed Rate Adjustment		7.81%	5.51%	5.49%	5.47%	3.46%	0%	0%	0%	0%	0%	0%
SFR Variable Charge	\$3.32	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66	5.66
Variable Rate Adjustment		29.5%	-2.0%	5.2%	15.2%	6.5%	-5.9%	1.0%	5.7%	2.6%	1.1%	1.1%
Monthly Service Charge Single Family (9.5 ccf)	\$43.39	\$58.11	\$58.24	\$61.32	\$68.80	\$72.63	\$69.56	\$70.05	\$72.84	\$74.17	\$74.73	\$74.73
Rate Adjustment		33.9%	0.2%	5.3%	12.2%	5.6%	-4.2%	0.7%	4.0%	1.8%	0.8%	0.8%
Beginning Fund Balance	\$2,685,544	\$3,361,000	\$3,629,000	\$3,857,000	\$4,263,000	\$4,815,000	\$5,480,000	\$5,941,000	\$6,304,000	\$6,566,000	\$6,724,000	\$6,724,000
Revenues												
Water Sales & Service Charges												
Meter Charge Revenue Estimate (Table 9)	3,624,000	3,755,000	4,011,000	4,285,000	4,575,000	4,791,000	4,803,000	4,815,000	4,827,000	4,839,000	4,851,000	4,851,000
Volumetric Revenue Estimate (Table 9)	7,250,000	9,350,000	9,280,000	9,869,000	11,422,000	12,297,000	11,670,000	11,813,000	12,505,000	12,857,000	13,027,000	13,027,000
Connection Fees [1]	590,400	278,000	77,000	77,000	0	0	0	0	0	0	0	0
Interest Earnings - Operating Reserve [2]	70,000	34,000	36,000	39,000	43,000	48,000	55,000	59,000	63,000	66,000	67,000	67,000
Interest Earnings - Capital Improvement Fund [3]	50,000	52,000	53,000	55,000	54,000	52,000	52,000	52,000	52,000	52,000	52,000	52,000
Water Sustainability Fund Revenue	38,000	0	0	0	0	0	0	0	0	0	0	0
Operating Revenues	11,622,400	13,469,000	13,457,000	14,325,000	16,094,000	17,188,000	16,580,000	16,739,000	17,447,000	17,814,000	17,997,000	17,997,000
Expenses												
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000	2,149,000
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	541,000	555,000	569,000	583,000	598,000	598,000
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	309,000	317,000	325,000	333,000	341,000	341,000
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	505,000	518,000	531,000	544,000	558,000	558,000
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	10,742,000	10,884,000	11,575,000	11,926,000	12,095,000	12,095,000
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	923,000	946,000	970,000	994,000	1,019,000	1,019,000
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Operating Expenses	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	15,714,000	15,971,000	16,780,000	17,251,000	17,545,000	17,545,000
Operating Net Revenues	880,224	673,000	633,000	811,000	957,000	1,070,000	866,000	768,000	667,000	563,000	452,000	452,000
Water Sustainability Fund Transfer	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital Improvement Transfer [4]	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Total Expenses	10,947,176	13,201,000	13,229,000	13,919,000	15,542,000	16,523,000	16,119,000	16,376,000	17,185,000	17,656,000	17,950,000	17,950,000
Revenues Less O&M Expenses	880,224	673,000	633,000	811,000	957,000	1,070,000	866,000	768,000	667,000	563,000	452,000	452,000
Revenues Less Total Expenses	675,224	268,000	228,000	406,000	552,000	665,000	461,000	363,000	262,000	158,000	47,000	47,000
Ending Fund Balance	3,360,768	3,629,000	3,857,000	4,263,000	4,815,000	5,480,000	5,941,000	6,304,000	6,566,000	6,724,000	6,771,000	6,771,000
Revenue Test: Annual Revenues > O&M Expenses												
Annual Revenues Less O&M Expenses	880,224	673,000	633,000	811,000	957,000	1,070,000	866,000	768,000	667,000	563,000	452,000	452,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses												
Year-end fund balance	3,360,768	3,629,000	3,857,000	4,263,000	4,815,000	5,480,000	5,941,000	6,304,000	6,566,000	6,724,000	6,771,000	6,771,000
25% operating expenses	2,690,000	3,200,000	3,210,000	3,380,000	3,780,000	4,030,000	3,930,000	3,990,000	4,200,000	4,310,000	4,390,000	4,390,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Based on CDD and City of Foster City/EMID estimates

[2] Calculated as 1% of the Beginning Fund Balance of the Water Revenue Fund

[3] Calculated as 1% of the Beginning Fund Balance of the Water Capital Improvement Project Fund

[4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX A4

City of Foster City / Estero Municipal Improvement District
Water Enterprise Cash Flow Projection - Residential Two Tier Rate Structure with Smoothing

TWO TIER WITH SMOOTHING											
Fiscal Year Ending June 30	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth [1]		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Fixed Charge	\$16.00	\$17.25	\$18.20	\$19.20	\$20.25	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95
Fixed Rate Adjustment		7.81%	5.51%	5.49%	5.47%	3.46%	0%	0%	0%	0%	0%
SFR Variable Charge	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Variable Rate Adjustment		24.4%	7.3%	7.2%	5.9%	1.6%	0.6%	0.0%	4.1%	1.3%	2.4%
Monthly Service Charge Single Family (9.5 ccf)	\$43.39	\$56.49	\$60.29	\$64.33	\$68.04	\$69.50	\$69.78	\$69.78	\$71.78	\$72.44	\$73.68
Rate Adjustment		30.2%	6.7%	6.7%	5.8%	2.1%	0.4%	0.0%	2.9%	0.9%	1.7%
Beginning Fund Balance	\$2,685,544	\$3,361,000	\$3,259,000	\$3,953,000	\$5,064,000	\$5,447,000	\$5,375,000	\$5,890,000	\$6,191,000	\$6,199,000	\$5,933,000
Revenues											
Water Sales & Service Charges											
Meter Charge Revenue Estimate (Table 9)	3,624,000	3,755,000	4,011,000	4,285,000	4,575,000	4,791,000	4,803,000	4,815,000	4,827,000	4,839,000	4,851,000
Volumetric Revenue Estimate (Table 9)	7,250,000	8,980,000	9,749,000	10,573,000	11,245,000	11,554,000	11,725,000	11,751,000	12,252,000	12,437,000	12,767,000
Connection Fees [1]	590,400	278,000	77,000	77,000	0	0	0	0	0	0	0
Interest Earnings - Operating Reserve [2]	70,000	34,000	33,000	40,000	51,000	54,000	54,000	59,000	62,000	62,000	59,000
Interest Earnings - Capital Improvement Fund [3]	50,000	52,000	53,000	55,000	54,000	52,000	52,000	52,000	52,000	52,000	52,000
Other	38,000	0	0	0	0	0	0	0	0	0	0
Operating Revenues	11,622,400	13,099,000	13,923,000	15,030,000	15,925,000	16,451,000	16,634,000	16,677,000	17,193,000	17,390,000	17,729,000
Expenses											
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	541,000	555,000	569,000	583,000	598,000
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	309,000	317,000	325,000	333,000	341,000
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	505,000	518,000	531,000	544,000	558,000
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	10,742,000	10,884,000	11,575,000	11,926,000	12,095,000
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	923,000	946,000	970,000	994,000	1,019,000
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Operating Expenses	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	15,714,000	15,971,000	16,780,000	17,251,000	17,545,000
Operating Net Revenues	880,224	303,000	1,099,000	1,516,000	788,000	333,000	920,000	706,000	413,000	139,000	184,000
Water Sustainability Fund Transfer	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital Improvement Transfer [4]	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Total Expenses	10,947,176	13,201,000	13,229,000	13,919,000	15,542,000	16,523,000	16,119,000	16,376,000	17,185,000	17,656,000	17,950,000
Revenues Less O&M Expenses	880,224	303,000	1,099,000	1,516,000	788,000	333,000	920,000	706,000	413,000	139,000	184,000
Revenues Less Total Expenses	675,224	(102,000)	694,000	1,111,000	383,000	(72,000)	515,000	301,000	8,000	(266,000)	(221,000)
Ending Fund Balance	3,360,768	3,259,000	3,953,000	5,064,000	5,447,000	5,375,000	5,890,000	6,191,000	6,199,000	5,933,000	5,712,000
Revenue Test: Annual Revenues > O&M Expenses											
Annual Revenues Less O&M Expenses	880,224	303,000	1,099,000	1,516,000	788,000	333,000	920,000	706,000	413,000	139,000	184,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	3,360,768	3,259,000	3,953,000	5,064,000	5,447,000	5,375,000	5,890,000	6,191,000	6,199,000	5,933,000	5,712,000
25% operating expenses	2,690,000	3,200,000	3,210,000	3,380,000	3,780,000	4,030,000	3,930,000	3,990,000	4,200,000	4,310,000	4,390,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Based on CDD and City of Foster City/EMID estimates

[2] Calculated as 1% of the Beginning Fund Balance of the Water Revenue Fund

[3] Calculated as 1% of the Beginning Fund Balance of the Water Capital Improvement Project Fund

[4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX A5

City of Foster City / Estero Municipal Improvement District
 Water Enterprise Cash Flow Projection - Residential Two Tier Rate Structure Hybrid Model

TWO TIER HYBRID MODEL											
Fiscal Year Ending June 30	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth [1]		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Fixed Charge	\$16.00	\$17.25	\$18.20	\$19.20	\$20.25	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95
Fixed Rate Adjustment		7.81%	5.51%	5.49%	5.47%	3.46%	0%	0%	0%	0%	0%
SFR Variable Charge	\$3.32	4.30	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Variable Rate Adjustment		29.5%	3.0%	7.2%	5.9%	1.6%	0.6%	0.0%	4.1%	1.3%	2.4%
Monthly Service Charge Single Family (9.5 ccf)	\$43.39	\$58.11	\$60.29	\$64.33	\$68.04	\$69.50	\$69.78	\$69.78	\$71.78	\$72.44	\$73.68
Rate Adjustment		33.9%	3.8%	6.7%	5.8%	2.1%	0.4%	0.0%	2.9%	0.9%	1.7%
Beginning Fund Balance	\$2,685,544	\$3,361,000	\$3,629,000	\$4,326,000	\$5,440,000	\$5,826,000	\$5,758,000	\$6,277,000	\$6,582,000	\$6,594,000	\$6,332,000
Revenues											
Water Sales & Service Charges											
Meter Charge Revenue Estimate (Table 9)	3,624,000	3,755,000	4,011,000	4,285,000	4,575,000	4,791,000	4,803,000	4,815,000	4,827,000	4,839,000	4,851,000
Volumetric Revenue Estimate (Table 9)	7,250,000	9,350,000	9,749,000	10,573,000	11,245,000	11,554,000	11,725,000	11,751,000	12,252,000	12,437,000	12,767,000
Connection Fees [1]	590,400	278,000	77,000	77,000	0	0	0	0	0	0	0
Interest Earnings - Operating Reserve [2]	70,000	34,000	36,000	43,000	54,000	58,000	58,000	63,000	66,000	66,000	63,000
Interest Earnings - Capital Improvement Fund [3]	50,000	52,000	53,000	55,000	54,000	52,000	52,000	52,000	52,000	52,000	52,000
Other	38,000	0	0	0	0	0	0	0	0	0	0
Operating Revenues	11,622,400	13,469,000	13,926,000	15,033,000	15,928,000	16,455,000	16,638,000	16,681,000	17,197,000	17,394,000	17,733,000
Expenses											
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	541,000	555,000	569,000	583,000	598,000
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	309,000	317,000	325,000	333,000	341,000
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	505,000	518,000	531,000	544,000	558,000
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	10,742,000	10,884,000	11,575,000	11,926,000	12,095,000
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	923,000	946,000	970,000	994,000	1,019,000
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Operating Expenses	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	15,714,000	15,971,000	16,780,000	17,251,000	17,545,000
Operating Net Revenues	880,224	673,000	1,102,000	1,519,000	791,000	337,000	924,000	710,000	417,000	143,000	188,000
Water Sustainability Fund Transfer	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital Improvement Transfer [4]	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Total Expenses	10,947,176	13,201,000	13,229,000	13,919,000	15,542,000	16,523,000	16,119,000	16,376,000	17,185,000	17,656,000	17,950,000
Revenues Less O&M Expenses	880,224	673,000	1,102,000	1,519,000	791,000	337,000	924,000	710,000	417,000	143,000	188,000
Revenues Less Total Expenses	675,224	268,000	697,000	1,114,000	386,000	(68,000)	519,000	305,000	12,000	(262,000)	(217,000)
Ending Fund Balance	3,360,768	3,629,000	4,326,000	5,440,000	5,826,000	5,758,000	6,277,000	6,582,000	6,594,000	6,332,000	6,115,000
Revenue Test: Annual Revenues > O&M Expenses											
Annual Revenues Less O&M Expenses	880,224	673,000	1,102,000	1,519,000	791,000	337,000	924,000	710,000	417,000	143,000	188,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	3,360,768	3,629,000	4,326,000	5,440,000	5,826,000	5,758,000	6,277,000	6,582,000	6,594,000	6,332,000	6,115,000
25% operating expenses	2,690,000	3,200,000	3,210,000	3,380,000	3,780,000	4,030,000	3,930,000	3,990,000	4,200,000	4,310,000	4,390,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Based on CDD and City of Foster City/EMID estimates

[2] Calculated as 1% of the Beginning Fund Balance of the Water Revenue Fund

[3] Calculated as 1% of the Beginning Fund Balance of the Water Capital Improvement Project Fund

[4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX A6

City of Foster City / Estero Municipal Improvement District
 Water Enterprise Cash Flow Projection - Three Tier Model

THREE TIER MODEL											
Fiscal Year Ending June 30	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth [1]		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Fixed Charge	\$16.00	\$17.25	\$18.20	\$19.20	\$20.25	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95
Fixed Rate Adjustment		7.81%	5.51%	5.49%	5.47%	3.46%	0%	0%	0%	0%	0%
Tier 2 Base Charge	\$3.32	\$4.40	\$4.40	\$4.53	\$5.12	\$5.32	\$5.32	\$5.32	\$5.54	\$5.81	\$5.93
Variable Rate Adjustment		32.5%	0.0%	3.0%	13.0%	4.0%	0.0%	0.0%	4.0%	5.0%	2.0%
Monthly Service Charge Single Family (9.5 ccf)	\$43.39	\$53.54	\$54.49	\$56.58	\$62.49	\$64.88	\$64.88	\$64.88	\$66.64	\$68.92	\$69.88
Rate Adjustment		23.4%	1.8%	3.8%	10.4%	3.8%	0.0%	0.0%	2.7%	3.4%	1.4%
Beginning Fund Balance	\$2,685,544	\$3,361,000	\$3,906,000	\$4,602,000	\$5,310,000	\$6,073,000	\$6,691,000	\$7,764,000	\$8,630,000	\$9,234,000	\$10,062,000
Revenues											
Water Sales & Service Charges											
Meter Charge Revenue Estimate (Table 9)	3,624,000	3,755,000	4,011,000	4,285,000	4,575,000	4,791,000	4,803,000	4,815,000	4,827,000	4,839,000	4,851,000
Volumetric Revenue Estimate (Table 9)	7,250,000	9,627,000	9,745,000	10,164,000	11,623,000	12,237,000	12,270,000	12,297,000	12,824,000	13,501,000	13,808,000
Connection Fees [1]	590,400	278,000	77,000	77,000	0	0	0	0	0	0	0
Interest Earnings - Operating Reserve [2]	70,000	34,000	39,000	46,000	53,000	61,000	67,000	78,000	86,000	92,000	101,000
Interest Earnings - Capital Improvement Fund [3]	50,000	52,000	53,000	55,000	54,000	52,000	52,000	52,000	52,000	52,000	52,000
Other	38,000	0	0	0	0	0	0	0	0	0	0
Operating Revenues	11,622,400	13,746,000	13,925,000	14,627,000	16,305,000	17,141,000	17,192,000	17,242,000	17,789,000	18,484,000	18,812,000
Expenses											
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	541,000	555,000	569,000	583,000	598,000
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	309,000	317,000	325,000	333,000	341,000
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	505,000	518,000	531,000	544,000	558,000
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	10,742,000	10,884,000	11,575,000	11,926,000	12,095,000
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	923,000	946,000	970,000	994,000	1,019,000
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Operating Expenses	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	15,714,000	15,971,000	16,780,000	17,251,000	17,545,000
Operating Net Revenues	880,224	950,000	1,101,000	1,113,000	1,168,000	1,023,000	1,478,000	1,271,000	1,009,000	1,233,000	1,267,000
Water Sustainability Fund Transfer	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital Improvement Transfer [4]	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Total Expenses	10,947,176	13,201,000	13,229,000	13,919,000	15,542,000	16,523,000	16,119,000	16,376,000	17,185,000	17,656,000	17,950,000
Revenues Less O&M Expenses	880,224	950,000	1,101,000	1,113,000	1,168,000	1,023,000	1,478,000	1,271,000	1,009,000	1,233,000	1,267,000
Revenues Less Total Expenses	675,224	545,000	696,000	708,000	763,000	618,000	1,073,000	866,000	604,000	828,000	862,000
Ending Fund Balance	3,360,768	3,906,000	4,602,000	5,310,000	6,073,000	6,691,000	7,764,000	8,630,000	9,234,000	10,062,000	10,924,000
Revenue Test: Annual Revenues > O&M Expenses											
Annual Revenues Less O&M Expenses	880,224	950,000	1,101,000	1,113,000	1,168,000	1,023,000	1,478,000	1,271,000	1,009,000	1,233,000	1,267,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	3,360,768	3,906,000	4,602,000	5,310,000	6,073,000	6,691,000	7,764,000	8,630,000	9,234,000	10,062,000	10,924,000
25% operating expenses	2,690,000	3,200,000	3,210,000	3,380,000	3,780,000	4,030,000	3,930,000	3,990,000	4,200,000	4,310,000	4,390,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Based on CDD and City of Foster City/EMID estimates

[2] Calculated as 1% of the Beginning Fund Balance of the Water Revenue Fund

[3] Calculated as 1% of the Beginning Fund Balance of the Water Capital Improvement Project Fund

[4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX B: Rates over ten years for Rate Option Scenarios 1, 2, 3, 4, 5 and 6

APPENDIX B1

City of Foster City / Estero Municipal Improvement District
Proposed Water Rates - Uniform without Smoothing

UNIFORM WITHOUT SMOOTHING

	2012	2013	Current Rates	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00

Conservation-Based Water Rate Model (based on bi-monthly allotments)

Single Family Residential													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Tier 3: over 20 ccf	4.70	4.70	\$4.98	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Multi-Family Residential (per living unit)													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Tier 3: over 10 ccf	4.70	4.70	\$4.98	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Irrigation Customers													
≤ 100% of Annual Water Budget	3.13	3.13	\$3.32	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
> 100% of Annual Water Budget	4.70	4.70	\$4.98	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Commercial and Fire Line Customers													
Base Consumption Rate	3.13	3.13	\$3.32	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80

Monthly Private Fire Service Protection Meter Charge

3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80

(Minimum charge is equivalent to 1-1/2" meter charge)

7.1 - 45

UNIFORM WITH SMOOTHING

	2012	2013	Current Rates	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00

Conservation-Based Water Rate Model (based on bi-monthly allotments)													
Single Family Residential													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Tier 3: over 20 ccf	4.70	4.70	\$4.98	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Multi-Family Residential (per living unit)													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Tier 3: over 10 ccf	4.70	4.70	\$4.98	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Irrigation Customers													
< 100% of Annual Water Budget	3.13	3.13	\$3.32	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
> 100% of Annual Water Budget	4.70	4.70	\$4.98	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Commercial and Fire Line Customers													
Base Consumption Rate	3.13	3.13	\$3.32	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75

Monthly Private Fire Service Protection Meter Charge													
3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80

(Minimum charge is equivalent to 1-1/2" meter charge)

7.1 - 46

TWO TIER WITHOUT SMOOTHING

	2012	2013	Current Rates	Proposed Rates Two Tier FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00
Conservation-Based Water Rate Model (based on bi-monthly allotments)													
Single Family Residential													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
Tier 3: over 20 ccf	4.70	4.70	\$4.98	4.64	4.55	4.77	5.37	5.70	5.46	5.51	5.81	5.96	6.02
Multi-Family Residential (per living unit)													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
Tier 3: over 10 ccf	4.70	4.70	\$4.98	4.67	4.58	4.79	5.40	5.73	5.49	5.54	5.84	5.98	6.04
Irrigation Customers													
< 100% of Annual Water Budget	3.13	3.13	\$3.32	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
> 100% of Annual Water Budget	4.70	4.70	\$4.98	5.65	5.57	5.79	6.43	6.78	6.54	6.61	6.92	7.08	7.16
Commercial and Fire Line Customers													
Base Consumption Rate	3.13	3.13	\$3.32	4.40	4.31	4.53	5.13	5.46	5.21	5.26	5.56	5.70	5.76
Monthly Private Fire Service Protection Meter Charge													
3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80
(Minimum charge is equivalent to 1-1/2" meter charge)													

7.1 - 47

TWO TIER WITH SMOOTHING

	2012	2013	Current Rates	Proposed Rates Two Tier FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00
Conservation-Based Water Rate Model (based on bi-monthly allotments)													
<i>Single Family Residential</i>													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 3: over 20 ccf	4.70	4.70	\$4.98	4.47	4.78	5.11	5.29	5.36	5.49	5.49	5.70	5.76	5.90
<i>Multi-Family Residential (per living unit)</i>													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 3: over 10 ccf	4.70	4.70	\$4.98	4.48	4.81	5.13	5.32	5.39	5.51	5.51	5.72	5.79	5.92
<i>Irrigation Customers</i>													
≤ 100% of Annual Water Budget	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
> 100% of Annual Water Budget	4.70	4.70	\$4.98	5.43	5.85	6.20	6.33	6.37	6.58	6.58	6.78	6.85	7.01
<i>Commercial and Fire Line Customers</i>													
Base Consumption Rate	3.13	3.13	\$3.32	4.22	4.52	4.85	5.05	5.13	5.24	5.24	5.45	5.51	5.64
Monthly Private Fire Service Protection Meter Charge													
3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80
(Minimum charge is equivalent to 1-1/2" meter charge)													

7.1 - 48

TWO TIER HYBRID MODEL

	2012	2013	Current Rates	Proposed Rates Two Tier FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00
Conservation-Based Water Rate Model (based on bi-monthly allotments)													
<i>Single Family Residential</i>													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	4.30	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	4.30	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 3: over 20 ccf	4.70	4.70	\$4.98	4.64	4.78	5.11	5.29	5.36	5.49	5.49	5.70	5.76	5.90
<i>Multi-Family Residential (per living unit)</i>													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	4.30	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	4.30	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 3: over 10 ccf	4.70	4.70	\$4.98	4.67	4.81	5.13	5.32	5.39	5.51	5.51	5.72	5.79	5.92
<i>Irrigation Customers</i>													
≤ 100% of Annual Water Budget	3.13	3.13	\$3.32	4.30	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
> 100% of Annual Water Budget	4.70	4.70	\$4.98	5.65	5.85	6.20	6.33	6.37	6.58	6.58	6.78	6.85	7.01
<i>Commercial and Fire Line Customers</i>													
Base Consumption Rate	3.13	3.13	\$3.32	4.40	4.52	4.85	5.05	5.13	5.24	5.24	5.45	5.51	5.64
Monthly Private Fire Service Protection Meter Charge													
3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80
(Minimum charge is equivalent to 1-1/2" meter charge)													

7.1 - 49

THREE TIER MODEL

	2012	2013	Current Rates	Proposed Rates Two Tier FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00

Conservation-Based Water Rate Model (based on bi-monthly allotments)

Single Family Residential													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	3.30	3.30	3.40	3.84	3.99	3.99	3.99	4.15	4.36	4.45
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	4.40	4.40	4.53	5.12	5.32	5.32	5.32	5.54	5.81	5.93
Tier 3: over 20 ccf	4.70	4.70	\$4.98	6.60	6.60	6.80	7.68	7.99	7.99	7.99	8.31	8.72	8.90
Multi-Family Residential (per living unit)													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	3.30	3.30	3.40	3.84	3.99	3.99	3.99	4.15	4.36	4.45
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	4.40	4.40	4.53	5.12	5.32	5.32	5.32	5.54	5.81	5.93
Tier 3: over 10 ccf	4.70	4.70	\$4.98	6.60	6.60	6.80	7.68	7.99	7.99	7.99	8.31	8.72	8.90
Irrigation Customers													
≤ 100% of Annual Water Budget	3.13	3.13	\$3.32	4.40	4.40	4.53	5.12	5.32	5.32	5.32	5.54	5.81	5.93
> 100% of Annual Water Budget	4.70	4.70	\$4.98	6.60	6.60	6.80	7.68	7.99	7.99	7.99	8.31	8.72	8.90
Commercial and Fire Line Customers													
Base Consumption Rate	3.13	3.13	\$3.32	4.40	4.40	4.53	5.12	5.32	5.32	5.32	5.54	5.81	5.93

Monthly Private Fire Service Protection Meter Charge

3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80

(Minimum charge is equivalent to 1-1/2" meter charge)

7.1 - 50

Appendix C
 Foster City / Estero Municipal Improvement District
 Water Enterprise Fixed & Variable Breakdown (Uniform with Smoothing)
 For Informational Purposes

Data for Fiscal Year Ending June 30: 2016

	Total	Allocation %		Allocation \$	
		Fixed	Variable	Fixed	Variable
Revenues					
Water Sales & Service Charges					
Fixed Meter Charges (est.) (Table 5)	\$3,755,000	100%	0%	\$3,755,000	\$0
Water Quantity Charges (est.) (Table 5)	8,930,000	0%	100%	0	8,930,000
Connection Fees	278,000		100%	0	278,000
Interest Earnings - Operating Reserve	34,000	100%	0%	34,000	0
Interest Earnings - Capital Improvement Fund	52,000	100%	0%	52,000	0
Other	0	100%	0%	0	0
Total Revenues	13,049,000	29.4%	68.4%	3,841,000	8,930,000

Expenses					
Employee Services	1,647,000	100%	0%	1,647,000	0
Internal Services - Others	478,000	100%	0%	478,000	0
Internal Services - ERF	273,000	100%	0%	273,000	0
Services & Supplies	447,000	100%	0%	447,000	0
SFPUC Water Purchases	8,350,000	0%	100%	0	8,350,000
BAWSCA Bond Repayment	750,000	0%	100%		750,000
Reallocation	816,000	100%	0%	816,000	0
Capital Outlay	35,000	100%	0%	35,000	0
Water Sustainability Transfer	200,000	0%	100%	200,000	0
Capital Improvement Transfer	205,000	0%	100%	205,000	0
Total	13,201,000	31.1%	68.9%	4,101,000	9,100,000
Excess Revenues Over (Under) Expenses	(152,000)			(260,000)	(170,000)

Fixed means revenue or expense is not directly affected by variations in water consumption.
Variable means revenue or expense is directly affected by variations in water consumption.

10-YEAR RATE SMOOTHING MODEL

Fiscal Year Ending June 30	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fixed Meter Charge Increase	0.0%	7.75%	5.50%	5.50%	5.50%	3.50%	0.0%	0.0%	0.0%	0.0%	0.0%
Fixed Revenues +/- 5% of Fixed Costs?		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Base Consumption Rate Increase	0.0%	27.0%	10.0%	7.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Base Consumption Rate > SFPUC Rate+BAWSCA?		YES	YES	YES	YES	NO	YES	YES	YES	YES	YES
Reserves % Above (Below) Reserve Target		0.3%	27.5%	59.4%	52.0%	41.4%	60.9%	75.0%	69.7%	64.6%	60.9%
Reserve Target Met? (See Table 4)		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Meter Charge Revenue Estimate	\$ 3,624,000	\$ 3,755,000	\$ 4,011,000	\$ 4,285,000	\$ 4,575,000	\$ 4,791,000	\$ 4,803,000	\$ 4,815,000	\$ 4,827,000	\$ 4,839,000	\$ 4,851,000
Other Fixed Revenue Estimate	\$ 710,400	\$ 364,000	\$ 162,000	\$ 173,000	\$ 108,000	\$ 109,000	\$ 109,000	\$ 115,000	\$ 122,000	\$ 123,000	\$ 123,000
Volumetric Revenue Estimate	\$ 7,250,000	\$ 8,930,000	\$ 9,939,000	\$ 10,758,000	\$ 11,216,000	\$ 11,577,000	\$ 11,831,000	\$ 12,103,000	\$ 12,382,000	\$ 12,662,000	\$ 12,943,000
Total Projected Revenue	\$ 11,584,400	\$ 13,049,000	\$ 14,112,000	\$ 15,216,000	\$ 15,898,000	\$ 16,477,000	\$ 16,743,000	\$ 17,033,000	\$ 17,331,000	\$ 17,624,000	\$ 17,917,000
Total Projected Revenue (Rounded '000's)	\$ 11,584,000	\$ 13,049,000	\$ 14,112,000	\$ 15,216,000	\$ 15,898,000	\$ 16,477,000	\$ 16,743,000	\$ 17,033,000	\$ 17,331,000	\$ 17,624,000	\$ 17,917,000
Revenue Allocation											
Fixed	37.4%	31.6%	29.6%	29.3%	29.5%	29.7%	29.3%	28.9%	28.6%	28.2%	27.8%
Variable	62.6%	68.4%	70.4%	70.7%	70.5%	70.3%	70.7%	71.1%	71.4%	71.8%	72.2%
Cost Analysis											
Fixed	34.5%	31.1%	31.7%	30.9%	28.4%	27.3%	28.7%	29.0%	28.3%	28.2%	28.4%
Variable	65.5%	68.9%	68.3%	69.1%	71.6%	72.7%	71.3%	71.0%	71.7%	71.8%	71.6%
Base Meter Charge Calculation											
Monthly charge per meter equivalent (Rounded to nearest \$0.05)	\$ 16.00	\$ 17.25	\$ 18.20	\$ 19.20	\$ 20.25	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95
Annual charge per meter equivalent	\$ 192.00	\$ 207.00	\$ 218.40	\$ 230.40	\$ 243.00	\$ 251.40	\$ 251.40	\$ 251.40	\$ 251.40	\$ 251.40	\$ 251.40
Meter equivalents [1]	18,871	18,138	18,367	18,597	18,826	19,056	19,104	19,152	19,200	19,248	19,296
Fixed Revenue Estimate	\$ 3,624,000	\$ 3,755,000	\$ 4,011,000	\$ 4,285,000	\$ 4,575,000	\$ 4,791,000	\$ 4,803,000	\$ 4,815,000	\$ 4,827,000	\$ 4,839,000	\$ 4,851,000
Base Consumption Rate Calculation											
EMD Proposed Rate (Rounded to nearest \$0.01)	\$ 3.32	\$ 4.22	\$ 4.64	\$ 4.96	\$ 5.11	\$ 5.21	\$ 5.31	\$ 5.42	\$ 5.53	\$ 5.64	\$ 5.75
Projected annual water sales (ccf) [2]	2,183,704	2,116,000	2,142,000	2,169,000	2,195,000	2,222,000	2,228,000	2,233,000	2,239,000	2,245,000	2,251,000
Variable revenue estimate	\$7,250,000	\$8,930,000	\$9,939,000	\$10,758,000	\$11,216,000	\$11,577,000	\$11,831,000	\$12,103,000	\$12,382,000	\$12,662,000	\$12,943,000
% Spread between EMD and SFPUC Surcharge											
SFPUC PROJECTED RATES	\$2.93	\$3.83	\$3.75	\$3.97	\$4.60	\$4.93	\$4.69	\$4.74	\$5.03	\$5.17	\$5.23
Increase (Decrease) %		30.7%	(2.1%)	5.9%	15.9%	7.2%	(4.9%)	1.1%	6.1%	2.8%	1.2%
BAWSCA Surcharge	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35						
SFPUC Rate + BAWSCA Surcharge	\$3.28	\$4.18	\$4.10	\$4.32	\$4.95	\$5.28	\$5.04	\$5.09	\$5.38	\$5.52	\$5.58
EMID Fixed Meter Charge Increase (Decrease)		7.8%	5.5%	5.5%	5.5%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%
EMID Base Consumption Rate Increase (Decrease)		27.1%	10.0%	6.9%	3.0%	2.0%	1.9%	2.1%	2.0%	2.0%	2.0%
Raw rate without Smoothing	4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80	5.80

Note:
 [1] Household growth based on projections from the CDD.; FY2016 onwards uses updated meter ratios
 [2] Includes 2% water loss factor

7.1 - 52

Appendix E
 City of Foster City / Estero Municipal Improvement District
 Uniform Rate Structure - Raw Rate Calculation

Uniform Rate Structure			
	FY2016		
	Total Cost	Total Water Sales	Unit Cost (CCF)
Uniform Tier Structure - All Tiers			
SFPUC Water Purchases	8,350,000		
BAWSCA Bond Surcharge	750,000		
Water Sustainability Fund	<u>200,000</u>		
	9,300,000	2,116,000	4.40

Appendix F

City of Foster City / Estero Municipal Improvement District

Two Tier Conservation Based Rate Structure - Raw Rate Calculation

FY2016			Volumetric Water Costs	
Class	Usage per class	% of total usage	Base Charge Costs	Conservation Charge Costs
SFR	603,710	29%	\$ 2,653,356.59	\$ 57,061.43
MFR	704,142	33%	\$ 3,094,762.55	\$ 66,554.03
Commercial	284,176	13%	\$ 1,248,976.23	\$ 26,859.70
Fire Line	162	0%	\$ 712.40	\$ 15.32
Irrigation	523,811	25%	\$ 2,302,192.24	\$ 49,509.51
	<u>2,116,000.00</u>	<u>100%</u>	<u>\$ 9,300,000.00</u>	<u>\$ 200,000.00</u>

Class	Tier 1 Rate	Net Basic Cost	Over Water Allotment	Conservation Charge (Tier 2)	Tier 2 Rate
SFR	4.30	\$ 2,596,295.16	166,566.41	0.34	4.64
MFR	4.30	\$ 3,028,208.51	180,547.56	0.37	4.67
Commercial	4.40	\$ 1,248,976.23	~		
Fire Line	4.40	\$ 712.40	N/A		
Irrigation	4.30	\$ 2,252,682.73	36,618.50	1.35	5.65
		<u>\$ 9,126,875.02</u>			

7.1 - 54

Appendix G
 City of Foster City / Estero Municipal Improvement District
 Historical Water Sales

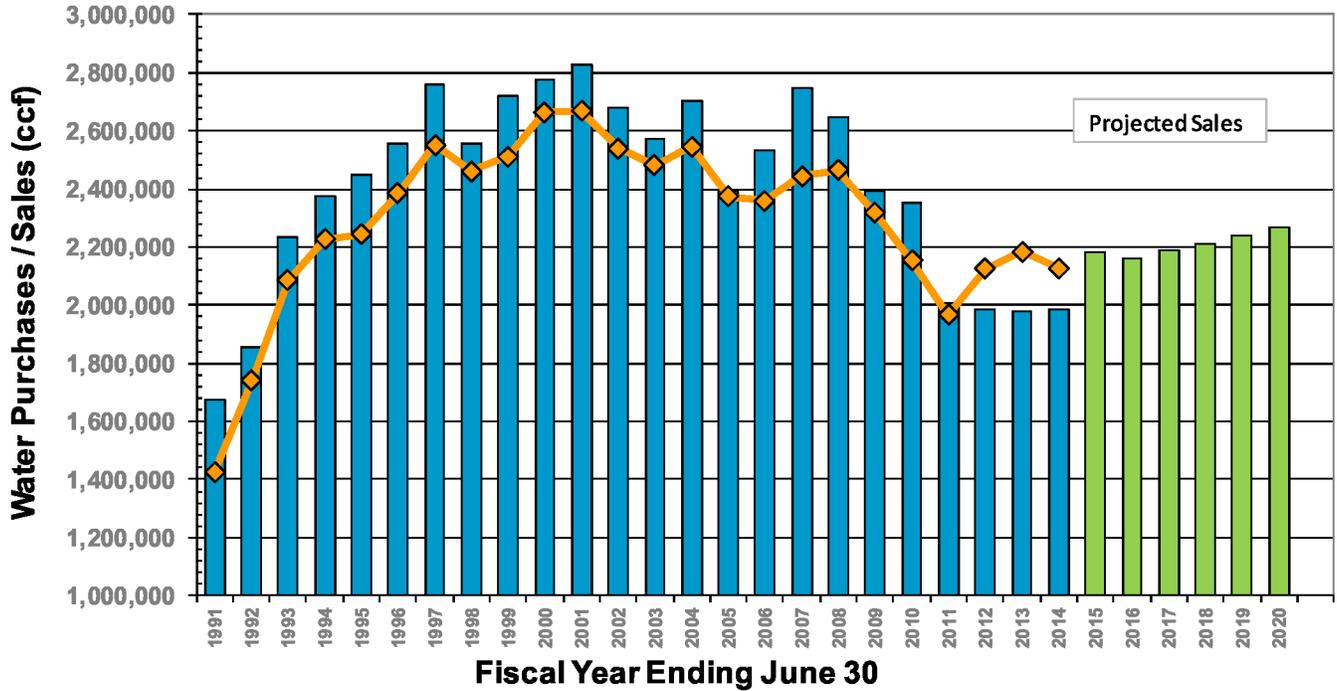
	EMID Annual Water Purchases [1]		
	FY 2012	FY2013	FY2014
July	242,276	226,969	250,440
Aug	213,098	212,499	212,385
Sep	206,793	246,726	219,590
Oct	223,402	179,907	192,215
Nov	155,130	180,045	158,900
Dec	137,791	73,781	137,795
Jan	121,271	90,201	125,750
Feb	121,602	108,685	125,549
Mar	122,041	132,833	86,166
Apr	123,211	143,297	105,675
May	107,071	180,448	170,100
Jun	208,605	201,635	198,808
	<u>1,982,291</u>	<u>1,977,026</u>	<u>1,983,373</u>
Water Sales	2,126,000	2,185,000	2,128,000
	7.2%	10.5%	7.3%

Source: Foster City/EMID 'EMID Monthly Water Purchases'; Billing Details
 FY2012-2014

[1] Units in ccf

[2] Consumption charged for Water, Irrigation and Fire Line Services

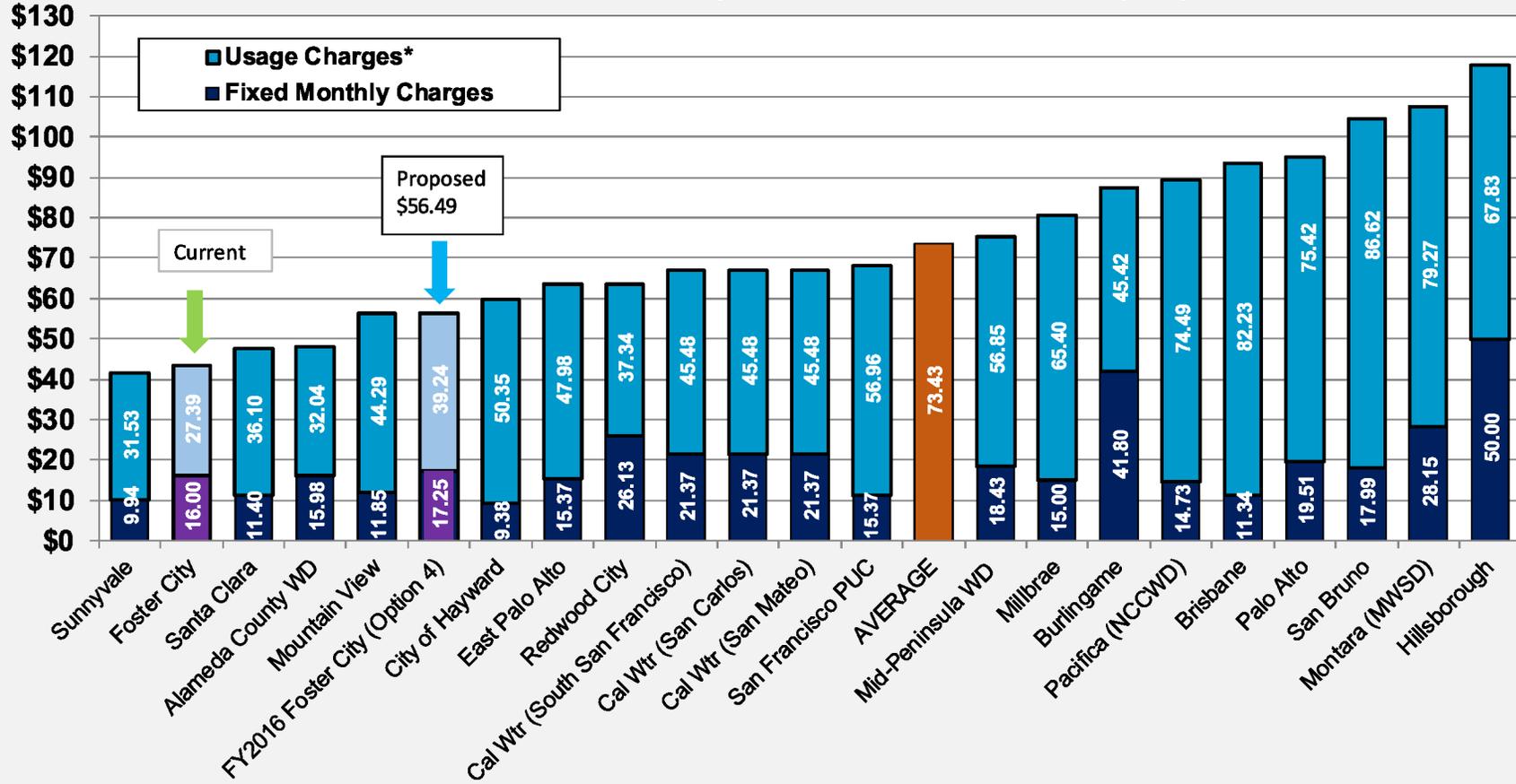
City of Foster City / EMID Historical SFPUC Wholesale Water Purchases vs. EMID Water Sales (ccf)



Note: Water purchases are billed by SFPUC monthly.
Water sales are billed by EMID on a bi-monthly, rotating basis.
Water meters that were malfunctioning have been replaced

█ Purchases ◆ Sales

Single Family Residential Monthly Water Rates, March 2015
Based on 9.5 ccf monthly water use, base meter size (3/4")



* Includes miscellaneous surcharges where applicable.

APPENDIX J: Cash Flow Projections for Wastewater Rate Options 1, 2, and 3

APPENDIX J1
 City of Foster City / Estero Municipal Improvement District
 Wastewater Enterprise Cash Flow Projection: Pay-As-You-Go

	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Monthly Service Charge for Single Family	\$47.00	\$129.25	\$129.25	\$129.25	\$122.79	\$110.51	\$110.51	\$110.51	\$110.51	\$110.51	\$110.51
Rate Adjustment		175%	0%	0%	-5%	-10%	0%	0%	0%	0%	0%
Beginning Fund Balance	\$1,638,605	\$2,181,200	\$2,827,200	\$4,101,700	\$3,866,200	\$2,990,200	\$7,503,200	\$8,265,200	\$8,263,200	\$7,638,200	\$8,364,200
Revenues											
Service Charges	6,820,000	18,842,000	19,079,000	19,317,000	18,589,000	16,957,000	16,999,000	17,041,000	17,084,000	17,127,000	17,170,000
Connection Fees [1]	796,000	418,000	87,500	87,500	0	0	0	0	0	0	0
Interest Earnings - Operating Reserves [2]	32,000	22,000	28,000	41,000	39,000	30,000	75,000	83,000	83,000	76,000	84,000
Interest Earnings - Capital Improvement Funds [3]	228,000	63,000	68,000	76,000	79,000	79,000	79,000	79,000	79,000	79,000	79,000
Other Revenue	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Operating Revenue	7,877,000	19,346,000	19,263,500	19,522,500	18,708,000	17,067,000	17,154,000	17,204,000	17,247,000	17,283,000	17,334,000
Interfund Loan	4,056,000	0	0	0	0	0	0	0	0	0	0
	4,056,000	0	0	0	0	0	0	0	0	0	0
Total Revenue	11,933,000	19,346,000	19,263,500	19,522,500	18,708,000	17,067,000	17,154,000	17,204,000	17,247,000	17,283,000	17,334,000
Expenses											
Employee Services	1,601,200	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000	2,213,000
EMID Share WWTP O&M	1,800,000	1,961,000	2,131,000	2,201,000	2,309,000	2,374,000	2,475,000	2,576,000	2,682,000	2,793,000	2,866,000
EMID Share WWTP Capital Improvements	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Internal Services (from City)	537,084	590,369	605,000	620,000	636,000	652,000	668,000	685,000	702,000	720,000	738,000
Internal Services -ERF	276,319	360,436	369,000	378,000	387,000	397,000	407,000	417,000	427,000	438,000	449,000
Services & Supplies	619,850	729,200	747,000	766,000	785,000	805,000	825,000	846,000	867,000	889,000	911,000
Reallocation	719,966	738,000	756,000	775,000	794,000	814,000	834,000	855,000	876,000	898,000	920,000
Operating Expenditures	6,554,419	7,075,005	7,355,000	7,539,000	7,764,000	7,951,000	8,175,000	8,404,000	8,640,000	8,887,000	9,087,000
Operating Net Revenue	1,322,581	12,270,995	11,908,500	11,983,500	10,944,000	9,116,000	8,979,000	8,800,000	8,607,000	8,396,000	8,247,000
Capital Improvements Transfer [4]	780,000	4,836,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000
EMID Share WWTP Expansion	4,056,000	6,789,000	9,854,000	11,439,000	11,040,000	3,823,000	7,437,000	8,022,000	8,452,000	6,890,000	7,893,000
	4,836,000	11,625,000	10,634,000	12,219,000	11,820,000	4,603,000	8,217,000	8,802,000	9,232,000	7,670,000	8,673,000
Total Expenditures	11,390,419	18,700,005	17,989,000	19,758,000	19,584,000	12,554,000	16,392,000	17,206,000	17,872,000	16,557,000	17,760,000
Revenues Less O&M Expenditures	1,322,581	12,270,995	11,908,500	11,983,500	10,944,000	9,116,000	8,979,000	8,800,000	8,607,000	8,396,000	8,247,000
Revenues Less Total Expenditures	542,581	645,995	1,274,500	(235,500)	(876,000)	4,513,000	762,000	(2,000)	(625,000)	726,000	(426,000)
Ending Fund Balance	2,181,186	2,827,195	4,101,700	3,866,200	2,990,200	7,503,200	8,265,200	8,263,200	7,638,200	8,364,200	7,938,200
Revenue Test: Annual Revenues > O&M Expenses											
Annual revs less O&M expenses	1,322,581	12,270,995	11,908,500	11,983,500	10,944,000	9,116,000	8,979,000	8,800,000	8,607,000	8,396,000	8,247,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	2,181,186	2,827,195	4,101,700	3,866,200	2,990,200	7,503,200	8,265,200	8,263,200	7,638,200	8,364,200	7,938,200
25% operating expenses	1,640,000	1,770,000	1,840,000	1,880,000	1,940,000	1,990,000	2,040,000	2,100,000	2,160,000	2,220,000	2,270,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Foster City/EMID Estimates
 [2] Calculated as 1% of the Beginning Fund Balance of the Wastewater Revenue Fund
 [3] Calculated as 1% of the Beginning Fund Balance of the Wastewater Capital Improvement Project Fund
 [4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX J2
 City of Foster City / Estero Municipal Improvement District
 Wastewater Enterprise Cash Flow Projection: SRF and Bond Financing

	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Rate Adjustment		9.00%	9.00%	9.00%	9.00%	9.00%	5.10%	5.00%	5.00%	5.00%	5.00%
Monthly Service Charge for Single Family	\$47.00	\$51.23	\$55.84	\$60.87	\$66.34	\$72.32	\$76.00	\$79.80	\$83.79	\$87.98	\$92.38
Beginning Fund Balance	\$1,638,605	\$2,181,200	\$3,336,200	\$3,840,900	\$4,252,800	\$4,522,200	\$4,304,000	\$4,442,900	\$4,557,100	\$5,207,600	\$4,759,600
Revenues											
Service Charges	6,820,000	7,521,000	8,293,000	9,143,000	10,078,000	11,108,000	11,702,000	12,316,000	12,963,000	13,644,000	14,360,000
Connection Fees [1]	796,000	418,000	87,500	87,500	0	0	0	0	0	0	0
Interest Earnings - Operating Reserves [2]	32,000	22,000	33,000	38,000	43,000	45,000	43,000	44,000	46,000	52,000	48,000
Interest Earnings - Capital Improvement Funds [3]	228,000	63,000	68,000	76,000	79,000	79,000	79,000	79,000	79,000	79,000	79,000
Other Revenue	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Operating Revenue	7,877,000	8,025,000	8,482,500	9,345,500	10,201,000	11,233,000	11,825,000	12,440,000	13,089,000	13,776,000	14,488,000
Interfund Loan	4,056,000	0	0	0	0	0	0	0	0	0	0
SRF Loans [4]	0	0	0	2,721,000	3,143,000	2,777,000	4,381,000	4,959,000	5,861,000	6,685,000	7,553,000
Bond Issues (see Table 17)	0	11,830,000	10,748,000	9,509,000	8,632,000	1,143,000	3,340,000	3,348,000	3,435,000	0	0
	4,056,000	11,830,000	10,748,000	12,230,000	11,775,000	3,920,000	7,721,000	8,307,000	9,296,000	6,685,000	7,553,000
Total Revenue	11,933,000	19,855,000	19,230,500	21,575,500	21,976,000	15,153,000	19,546,000	20,747,000	22,385,000	20,461,000	22,041,000
Expenses											
Employee Services	1,601,200	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,968,000	2,025,000	2,086,000	2,149,000	2,213,000
EMID Share WWTP O&M	1,800,000	1,961,000	2,131,000	2,201,000	2,309,000	2,374,000	2,475,000	2,576,000	2,682,000	2,793,000	2,866,000
EMID Share WWTP Capital Improvements	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Internal Services (from City)	537,084	590,369	605,000	620,000	636,000	652,000	668,000	685,000	702,000	720,000	738,000
Internal Services -ERF	276,319	360,436	369,000	378,000	387,000	397,000	407,000	417,000	427,000	438,000	449,000
Services & Supplies	619,850	729,200	747,000	766,000	785,000	805,000	825,000	846,000	867,000	889,000	911,000
Reallocation	719,986	738,000	756,000	775,000	794,000	814,000	834,000	855,000	876,000	898,000	920,000
Operating Expenditures	6,554,419	7,075,005	7,355,000	7,539,000	7,764,000	7,951,000	8,175,000	8,404,000	8,640,000	8,887,000	9,087,000
Operating Net Revenue	1,322,581	949,995	1,127,500	1,806,500	2,437,000	3,282,000	3,650,000	4,036,000	4,449,000	4,889,000	5,401,000
Transfer to SRF Reserve Fund	0	0	0	0	125,000	141,000	125,000	198,000	221,000	263,000	300,000
Capital Improvements Transfer [5]	780,000	4,836,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000
EMID Share WWTP Expansion	4,056,000	6,789,000	9,854,000	11,439,000	11,040,000	3,823,000	7,437,000	8,022,000	8,452,000	6,890,000	7,893,000
	4,836,000	11,625,000	10,634,000	12,219,000	11,945,000	4,744,000	8,342,000	9,000,000	9,453,000	7,933,000	8,973,000
Annual Debt Service											
Bond Issues	0	0	736,800	1,405,600	1,997,600	2,551,200	2,624,100	2,837,800	3,052,500	3,279,000	3,279,000
SRF Loans [4]	0	0	0	0	0	125,000	266,000	391,000	589,000	810,000	1,073,000
	0	0	736,800	1,405,600	1,997,600	2,676,200	2,890,100	3,228,800	3,641,500	4,089,000	4,352,000
Debt Coverage	0	0	1.53	1.29	1.22	1.23	1.26	1.25	1.22	1.20	1.24
Total Expenditures	11,390,419	18,700,005	18,725,800	21,163,600	21,706,600	15,371,200	19,407,100	20,632,800	21,734,500	20,909,000	22,412,000
Revenues Less O&M Expenditures	5,378,581	12,779,995	11,875,500	14,036,500	14,212,000	7,202,000	11,371,000	12,343,000	13,745,000	11,574,000	12,954,000
Revenues Less Total Expenditures	542,581	1,154,995	504,700	411,900	289,400	(218,200)	138,900	114,200	650,500	(448,000)	(371,000)
SRF Reserve Fund	0	0	0	0	125,000	266,000	391,000	589,000	810,000	1,073,000	1,373,000
General Fund	2,181,186	3,336,195	3,840,900	4,252,800	4,522,200	4,304,000	4,442,900	4,557,100	5,207,600	4,759,600	4,388,600
Ending Fund Balance	2,181,186	3,336,195	3,840,900	4,252,800	4,647,200	4,570,000	4,833,900	5,146,100	6,017,600	5,832,600	5,761,600
Revenue Test: Annual Revenues > O&M Expenses											
Annual revs less O&M expenses	1,322,581	949,995	1,127,500	1,806,500	2,437,000	3,282,000	3,650,000	4,036,000	4,449,000	4,889,000	5,401,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	2,181,186	3,336,195	3,840,900	4,252,800	4,647,200	4,570,000	4,833,900	5,146,100	6,017,600	5,832,600	5,761,600
25% operating expenses	1,640,000	1,770,000	1,840,000	1,880,000	1,940,000	1,990,000	2,040,000	2,100,000	2,160,000	2,220,000	2,270,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Foster City/EMID Estimates
 [2] Calculated as 1% of the Beginning Fund Balance of the Wastewater Revenue Fund
 [3] Calculated as 1% of the Beginning Fund Balance of the Wastewater Capital Improvement Project Fund
 [4] SRF Loans are based on a 30-year term with a 2% interest rate
 [5] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX J3
 City of Foster City / Estero Municipal Improvement District
 Wastewater Enterprise Cash Flow Projection: Bond Financing

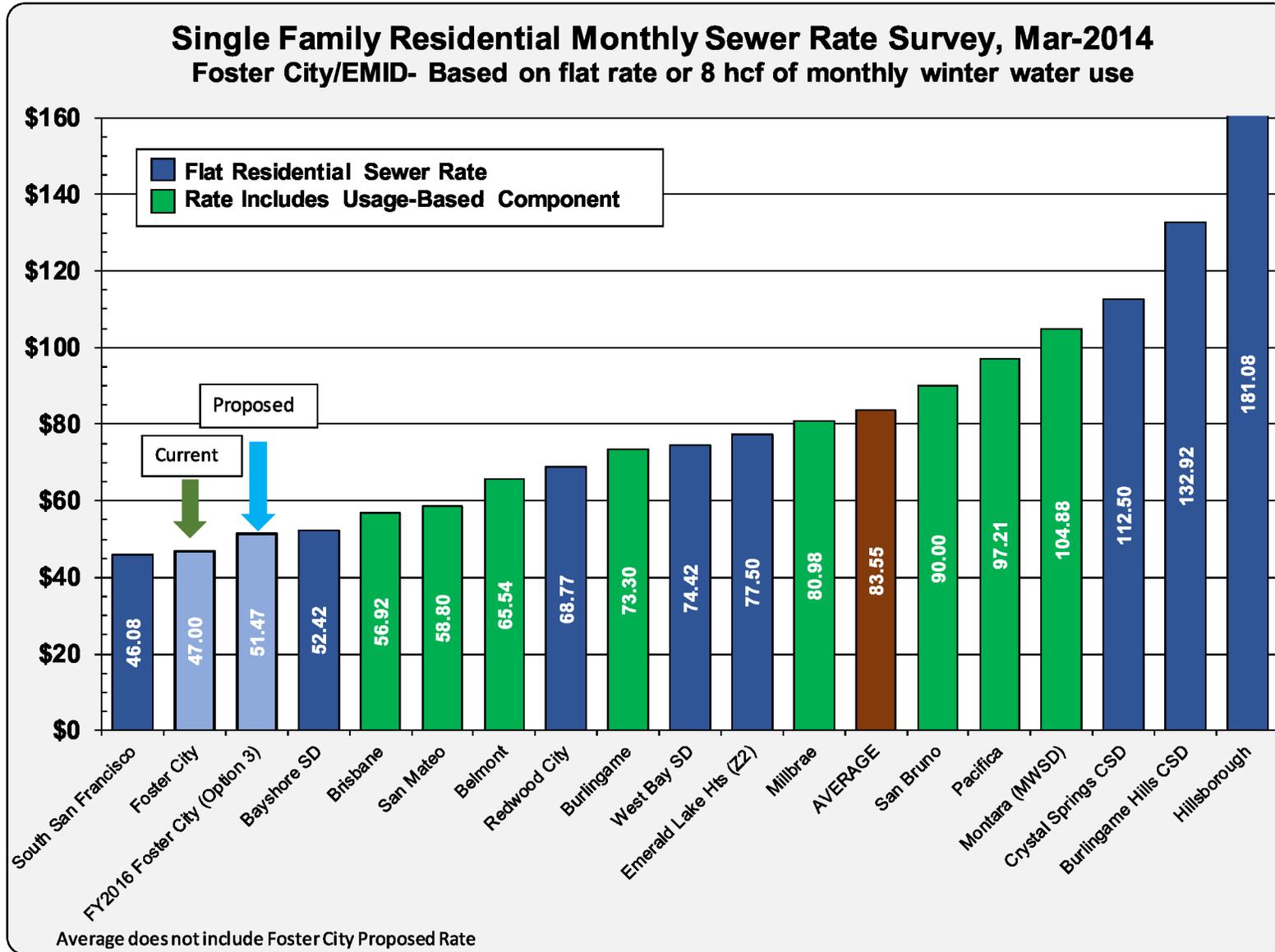
	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Rate Adjustment		9.50%	9.50%	9.50%	9.50%	9.50%	6.50%	6.50%	6.00%	6.00%	6.00%
Monthly Service Charge for Single Family	\$47.00	\$51.47	\$56.35	\$61.71	\$67.57	\$73.99	\$78.80	\$83.92	\$88.96	\$94.29	\$99.95
Beginning Fund Balance	\$1,638,605	\$2,181,200	\$3,370,200	\$3,950,900	\$4,737,800	\$5,426,000	\$5,591,000	\$6,369,100	\$7,277,100	\$8,264,700	\$9,117,600
Revenues											
Service Charges	6,820,000	7,555,000	8,368,000	9,268,000	10,262,000	11,362,000	12,129,000	12,948,000	13,757,000	14,617,000	15,531,000
Connection Fees [1]	796,000	418,000	87,500	87,500	0	0	0	0	0	0	0
Interest Earnings - Operating Reserves [2]	32,000	22,000	34,000	40,000	47,000	54,000	56,000	64,000	73,000	83,000	91,000
Interest Earnings - Capital Improvement Funds [3]	228,000	63,000	68,000	76,000	79,000	79,000	79,000	79,000	79,000	79,000	79,000
Other Revenue	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Operating Revenue	7,877,000	8,059,000	8,558,500	9,472,500	10,389,000	11,496,000	12,265,000	13,092,000	13,910,000	14,780,000	15,702,000
Interfund Loan	4,056,000	0	0	0	0	0	0	0	0	0	0
Bond Issue (see Table 18)	0	11,830,000	10,748,000	12,478,000	12,086,000	4,179,000	8,129,000	8,767,000	9,256,000	7,546,000	8,644,000
	4,056,000	11,830,000	10,748,000	12,478,000	12,086,000	4,179,000	8,129,000	8,767,000	9,256,000	7,546,000	8,644,000
Total Revenue	11,933,000	19,889,000	19,306,500	21,950,500	22,455,000	15,675,000	20,394,000	21,859,000	23,166,000	22,326,000	24,346,000
Expenses											
Employee Services	1,601,200	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000	2,213,000
EMID Share WWTP O&M	1,800,000	1,961,000	2,131,000	2,201,000	2,309,000	2,374,000	2,475,000	2,576,000	2,682,000	2,783,000	2,856,000
EMID Share WWTP Capital Improvements	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Internal Services (from City)	537,084	590,369	605,000	620,000	636,000	652,000	668,000	685,000	702,000	720,000	738,000
Internal Services -ERF	276,319	360,436	369,000	378,000	387,000	397,000	407,000	417,000	427,000	438,000	449,000
Services & Supplies	619,850	729,200	747,000	766,000	785,000	805,000	825,000	846,000	867,000	889,000	911,000
Reallocation	719,966	738,000	756,000	775,000	794,000	814,000	834,000	855,000	876,000	898,000	920,000
Operating Expenditures	6,554,419	7,075,005	7,355,000	7,539,000	7,764,000	7,951,000	8,175,000	8,404,000	8,640,000	8,887,000	9,087,000
Operating Net Revenue	1,322,581	983,995	1,203,500	1,933,500	2,625,000	3,545,000	4,090,000	4,688,000	5,270,000	5,893,000	6,615,000
Capital Improvements Transfer [4]	780,000	4,836,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000
EMID Share WWTP Expansion	4,056,000	6,789,000	9,854,000	11,439,000	11,040,000	3,823,000	7,437,000	8,022,000	8,452,000	6,890,000	7,893,000
	4,836,000	11,625,000	10,634,000	12,219,000	11,820,000	4,603,000	8,217,000	8,802,000	9,232,000	7,670,000	8,673,000
Annual Debt Service			736,800	1,405,600	2,182,800	2,956,000	3,223,900	3,745,000	4,306,400	4,916,100	5,413,500
Debt Coverage	0	0	1.63	1.38	1.20	1.20	1.27	1.25	1.22	1.20	1.22
Total Expenditures	11,390,419	18,700,005	18,725,800	21,163,600	21,766,800	15,510,000	19,615,900	20,951,000	22,178,400	21,473,100	23,173,500
Revenues Less O&M Expenditures	5,378,581	12,813,995	11,951,500	14,411,500	14,691,000	7,724,000	12,219,000	13,455,000	14,526,000	13,439,000	15,259,000
Revenues Less Total Expenditures	542,581	1,188,995	580,700	786,900	688,200	165,000	778,100	908,000	987,600	852,900	1,172,500
Ending Fund Balance	2,181,186	3,370,195	3,950,900	4,737,800	5,426,000	5,591,000	6,369,100	7,277,100	8,264,700	9,117,600	10,290,100
Revenue Test: Annual Revenues > O&M Expenses											
Annual revs less O&M expenses	5,378,581	12,813,995	11,951,500	14,411,500	14,691,000	7,724,000	12,219,000	13,455,000	14,526,000	13,439,000	15,259,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	2,181,186	3,370,195	3,950,900	4,737,800	5,426,000	5,591,000	6,369,100	7,277,100	8,264,700	9,117,600	10,290,100
25% operating expenses	1,640,000	1,770,000	1,840,000	1,880,000	1,940,000	1,990,000	2,040,000	2,100,000	2,160,000	2,220,000	2,270,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Growth projections based on CDD estimates
 [2] Calculated as 1% of the Beginning Fund Balance of the Wastewater Revenue Fund
 [3] Calculated as 1% of the Beginning Fund Balance of the Wastewater Capital Improvement Project Fund
 [4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

Appendix K

City Project Number	Master Plan Project ID	Project Type	Project Title / Description	Notes	Foster City/EMID Allocation (Future \$)	Projected CIP Costs (Future \$), Years 1-5					Projected CIP Costs (Future \$), Years 6-10					
						0 2014/15	1 2015/16	2 2016/17	3 2017/18	4 2018/19	5 2019/20	6 2020/21	7 2021/22	8 2022/23	9 2023/24	10 2024/25
WASTEWATER TREATMENT PLANT IMPROVEMENTS																
461005	CY-02	Admin	New Administration Building Project		8,329,347	0	0	0	0	563,054	666,348	2,498,804	2,498,804	2,082,337	0	0
NEW	0	Periodic	Asset Management/Condition Assessment	4% Cost Esc	137,446	25,000	0	0	0	0	30,416	0	0	0	0	37,006
0	0	Periodic	Integrated Master Plan Update - Every 5 years or so	4% Cost Esc	224,892	0	0	0	0	0	60,833	0	0	0	0	74,012
469974	IMM-03-A	Immediate	Disinfection: Immediate Projects: Chlorination/Dechlorination		658,500	72,500	586,000	0	0	0	0	0	0	0	0	0
469948	IMM-07-B	Immediate	SCADA: Immediate Projects: Phase 2		1,200,000	603,699	596,301	0	0	0	0	0	0	0	0	0
NEW	IMM-01-B	Immediate	Primary System: Immediate Projects-PC4		302,571	302,571	0	0	0	0	0	0	0	0	0	0
469973	IMM-02-B	Immediate	Secondary System: Immed. Projects: SCs 1-4 & RAS Pump Valves		1,690,000	560,000	500,000	560,000	50,000	0	0	0	0	0	0	0
469939	S-C-2 and IMM-C	Immediate	Solids Bldg: Immed Projects: Hopper/Building Encl. & Cake Pump		838,219	146,000	693,219	0	0	0	0	0	0	0	0	0
469975	IMM-05-D	Immediate	Solids: Immediate Projects: GT 1&2		1,046,000	293,750	702,250	50,000	0	0	0	0	0	0	0	0
469978	IMM-05-G	Immediate	Solids Bldg: Immediate Projects: Centrifuge Hoist Project		240,000	54,500	185,500	0	0	0	0	0	0	0	0	0
469979	IMM-06	Immediate	Electrical: Immediate Projects		110,000	35,000	25,000	25,000	25,000	0	0	0	0	0	0	0
469960	WW-01	Wet Weather	Primary Clarifier Replacement Project		11,962,177	837,352	956,974	3,588,653	3,588,653	2,990,544	0	0	0	0	0	0
469961	WW-02	Wet Weather	New Headworks Facility Project		12,589,261	881,248	1,007,141	3,776,778	3,776,778	3,147,315	0	0	0	0	0	0
469976	IMM-05-E	Immediate	Solids Bldg: Immediate Projects: Boiler Replacement		195,000	20,000	175,000	0	0	0	0	0	0	0	0	0
469962	RR-02	R&R	Short-term MCC Replacement Project		250,000	250,000	0	0	0	0	0	0	0	0	0	0
469967	0	0	Digester Gas to Compressed Natural Gas		0	0	0	0	0	0	0	0	0	0	0	0
469958	REG-01	Regulatory	Secondary Treatment Capacity Project	SRF	4,939,811	0	345,773	395,169	2,222,825	1,975,844	0	0	0	0	0	0
469963	RR-03	R&R	Tank Drain Pump Replacement Project	SRF	37,794	0	0	37,794	0	0	0	0	0	0	0	0
469959	REG-02	Regulatory	On-Site Stormwater Improvements Project	SRF	1,436,629	0	0	0	143,603	71,601	1,220,624	0	0	0	0	0
469965	WW-03	Wet Weather	New Flow Equalization Storage Project	SRF	10,037,341	(750,000)	0	0	0	685,364	868,967	3,258,702	3,258,702	2,715,585	0	0
NEW	RR-07	R&R	Aeration Blower Replacement Project	SRF	2,278,308	0	0	0	0	0	325,473	325,473	325,473	325,473	325,473	325,473
0	RR-08	R&R	New Standby Generator Project	SRF	1,838,643	0	0	0	0	0	0	183,864	91,932	91,932	1,470,914	0
0	RR-09	R&R	Sodium Hypochlorite Replacement Project	SRF	278,262	0	0	0	0	0	0	41,739	236,523	0	0	0
0	RR-10	R&R	Effluent Pump Station 2 Pump Replacement Project	SRF	510,383	0	0	0	0	0	0	170,126	170,126	170,126	170,126	0
0	RR-11	R&R	Electrical Equipment Replacement Project	SRF	426,196	0	0	0	0	0	0	63,929	362,267	0	0	0
0	RR-12	R&R	Digester Equipment Replacement Project	SRF	1,658,062	0	0	0	0	0	0	165,806	82,903	1,409,352	0	0
0	REG-03	Regulatory	Total Nitrogen Removal Project	SRF	17,359,484	0	0	0	0	0	0	0	1,215,164	1,368,759	5,207,845	0
0	RR-13	R&R	New Site Waste Pump Station Project	SRF	886,488	0	0	0	0	0	0	0	132,973	753,515	0	0
0	RR-14	R&R	Digester Heating Equipment Replacement Project	SRF	307,316	0	0	0	0	0	0	0	0	0	46,097	261,219
0	RR-15	R&R	Secondary Clarifier 5 Drive Unit Replacement Project	SRF	480,974	0	0	0	0	0	0	0	0	0	69,146	391,828
0	RR-16	R&R	DAFT Replacement Project	SRF	1,100,874	0	0	0	0	0	0	0	0	0	110,067	55,044
0	RR-17	R&R	Digester Feed Pump and Blower Replacement Project	SRF	698,404	0	0	0	0	0	0	0	0	0	69,840	34,920
0	0	0	Recycled Water Project	SRF	4,165,132	0	0	0	0	0	0	0	0	0	0	291,559
0	RR-19	R&R	Recycled Water Pump Replacement Project	SRF	167,834	0	0	0	0	0	0	0	0	0	0	0
0	RR-20	R&R	Thickening Equipment Replacement Project	SRF	283,885	0	0	0	0	0	0	0	0	0	0	0
0	RR-21	R&R	Dewatering Equipment Replacement Project	SRF	2,726,002	0	0	0	0	0	0	0	0	0	0	0
0	RR-22	R&R	WAS Pump Replacement Project	SRF	450,061	0	0	0	0	0	0	0	0	0	0	0
0	RR-23	R&R	Surge Tank Replacement Project	SRF	123,623	0	0	0	0	0	0	0	0	0	0	0
0	RR-24	R&R	Electrical Equipment Replacement Project	SRF	1,653,681	0	0	0	0	0	0	0	0	0	0	0
0	REG-04	Regulatory	Phosphorus Removal Project	SRF	2,995,607	0	0	0	0	0	0	0	0	0	0	0
469949	0	0	WWTP Annual Major Components	4% Cost Esc	3,722,260	125,000	130,000	135,200	140,606	146,232	152,082	158,165	164,462	171,071	177,914	185,031
469938	0	0	Integrated Master Plan		50,000	50,000	0	0	0	0	0	0	0	0	0	0
SUBTOTAL WWTP					100,566,868	3,526,620	5,903,158	8,568,594	9,947,467	9,600,156	3,324,763	6,466,748	6,975,789	7,349,833	5,991,226	6,863,936
PROGRAM MANAGEMENT (15% of Expenditures)					15,085,000	528,993	885,474	1,285,289	1,492,120	1,440,023	498,714	970,012	1,046,368	1,102,475	898,684	1,029,590
GRAND TOTAL					115,651,668	4,055,613	6,788,632	9,853,884	11,439,587	11,040,179	3,823,477	7,436,760	8,022,157	8,452,308	6,889,910	7,893,527

7.1 - 61





Date: March 23, 2015
To: President and Members of the EMID Board of Directors
Via: James C. Hardy, District Manager
From: Edmund Suen, Finance Director
Mimi Lam, Accounting Manager
Subject: Review of Projected Water Rates for FY 2015-2016; Policy Direction for Rate Notification under Proposition 218

RECOMMENDATION

It is recommended that the EMID Board of Directors hold a study session to review proposed water rates for FY 2015-2016. After considering the staff report, it is further recommended that the District Board provide staff with policy direction establishing the proposed rates for FY 2015-2016 that will be noticed to all rate payers under the requirements of Proposition 218.

EXECUTIVE SUMMARY

The District continues to implement a 10-year rate smoothing model, originally implemented in FY 2006-2007, to smooth out rate increases due to the significant rate increases from the San Francisco Public Utility Commission (SFPUC) through FY 2018-2019. The \$4.6 billion Water System Improvement Project (WSIP) to upgrade the Hetch Hetchy Water System was the primary factor of the significant increase in rates. The Board also implemented conservation-based water rates for residential and irrigation customers in FY 2010-2011. The District has seen declines in water consumption since conservation-based water rates and rebate programs were put in place in July 2010. Through February 28, 2015, overall water consumptions by residential and irrigation customers has dropped by 28.5%. Residential customer water consumption has dropped by 24.6%, and irrigation customers have reduced their "overwatering" from 39% to 15.7% with total water consumption decreased by 21.3%.

The District engaged Bartle Wells Associates (BWA) to prepare the FY 2015-2016 Water and Wastewater Rate Study as the last formal rate study was performed in 2004. Based on analysis performed by BWA, staff is asking for the Council to provide direction based on **BWA water rate study's four option scenarios for FY 2015-2016. The option scenarios are as follows:**

1. Uniform Without Smoothing
2. Uniform With Smoothing
3. Two Tier Without Smoothing
4. Two Tier With Smoothing (recommended)

The SFPUC has released the updated projections for their wholesale rate from the current \$2.93 to a rate of \$3.83 for FY 2015-2016 per hundred cubic feet (ccf). In addition, the District will continue to pay an amount equal to \$.35 per ccf, approximately \$750,000 through the SFPUC to the Bay Area Water Supply and Conservation Agency (BAWSCA) in reflection of the prepayment by BAWSCA agencies of the capital improvement costs associated with the WSIP through the issuance of bonds.

Based upon the SFPUC's anticipated rates, the BAWSCA Surcharge, and the projected deficit in the water operations fund heading into FY 2015-2016, and in an effort to mitigate rate increases on the District ratepayers, **Bartle Wells Associates is recommending an increase of 7.8% for residential fixed meter charges, and an increase of 24.4% for residential water rates.**

Based on their analysis, **Bartle Wells Associates is recommending a conservation-based rate model with two tiers.** Moreover, **staff is recommending that the District Board budget Water Sustainability Fund expenses at \$200,000 per year which is consistent with last year's expenditures necessary to continue support for the conservation effort, and that any surplus reserves be used to offset any rate increases for ratepayers.** This policy is maintained in the aforementioned recommended rates for FY 2015-2016 and in light of the efforts to ensure that we maintain a Sustainable Foster City.

Due to very low precipitation during the Fall and Winter, and the low Hetch Hetchy reservoir levels, there is a potential that the SFPUC will implement the Drought Reduction Implementation Plan (DRIP) that was approved by BAWSCA agencies in 2001 that could require mandatory water rationing for all BAWSCA agencies. That decision will be made by the end of April 2015 and, if implemented in May 2015, it would require the District to reduce water consumption through a reduced water allotment. Penalties would be imposed by the end of July 2016 based on water consumption through FY 2015-2016. Staff recommends that this matter be included in the Prop 218 Notice for information only, but that the Notice include the provision that the District Board could implement a "SFPUC Wholesale Passthrough Rate Increase for Water Availability", should the SFPUC implement a penalty or costs upon the District to ensure the availability of water to the District and other BAWSCA agencies.

Based on the District Board direction, staff will prepare a notice that will be mailed to all ratepayers on or before April 13, 2015 in compliance with the provisions of Proposition 218. A public hearing on and adoption of the proposed rates will occur at the June 1, 2015 Board meeting in conjunction with the FY 2015-2016 annual budget public hearing. The new rates will become effective July 1, 2015.

BACKGROUND

Historical Water Rate Setting Policies

The District purchases wholesale treated water from the SFPUC which is passed along to customers residing in the District boundaries. The rates that water customers pay are determined, in part, on a fixed charge based upon the size of the meter installed at the customer's location. The preponderance of revenue collected by the District is based upon the volume of water used by customers. Historically, the District has attempted to establish water rates that mirror the fixed vs. variable nature of the District's operating

costs. Fixed costs (personnel, overhead expenses, capital improvement projects, etc.) are paid for through fixed charges associated with the size of the pipe that supplies a customer's location (meter charges). Variable costs associated with the cost of wholesale water purchased from SFPUC, including the BAWSCA Surcharge, are paid for by the volume-based water consumption rate charged to customers.

Furthermore, the District has historically set rates on a "Pay As You Go" basis, meaning that rates are increased only based upon budgeted current operating expenditures and planned capital improvement projects, in order to meet minimum reserve requirements equal to 25% of annual operating expenditures, plus \$2 million for unanticipated capital improvement expenditures.

Rate Smoothing Model Implemented in FY 2006-2007

In FY 2006-2007, the District Board implemented a long-term rate smoothing model that is still in use today. That long-term model takes into consideration the long-range projections by the SFPUC in terms of wholesale water rates and in light of significant capital improvements that have a profound impact on the rate, such as the WSIP program. The rate smoothing model attempts to maintain targeted revenue increases at no greater than 10% per year. FY 2015-2016 continues the use of a 10-year model which has proven to be successful in dampening the impacts of significant rate increases imposed by the SFPUC on the ratepayers.

Funding District Long-Term Capital Improvements / Operating Reserves Maintained in the Operating Fund

In FY 2009-2010, the District implemented a long-term capital improvement funding strategy whereby a 10-year forecast was prepared for capital improvement projects (CIPs) and funding was transferred from operating revenues to the Capital Improvement Fund to fund those CIPs. Each year, an analysis is performed to ensure that there are adequate funds in the CIP Fund to fund CIPs on a "pay-as-you-go" basis. Since that fund is fully-funded based on that long-term forecast and annual analysis, all operating reserves as a result of operating surpluses are maintained in the Operating Fund and are used to offset future rates in the Rate Model.

Conservation-Based Water Modeling

On June 6, 2009, after months of collaboration with BAWSCA members, a successor Water Sales Contract and Water Supply Assurance (WSA) Agreement was approved by the District Board and the SFPUC. Under the terms of that agreement, the District is guaranteed a WSA in non-drought years of 5.9 million gallons per day (MGD) on an annual basis. If the District exceeds the WSA threshold, the SFPUC would have the authority to charge an "environmental surcharge" penalty to the District for water usage above the 5.9 MGD cap. Those penalties have the potential to be financially severe to the District and its customers.

In an effort to ensure that the District lived within its WSA, and in part on the recommendations of the City's Environmental Sustainability Task Force, the Board approved the implementation of a conservation-based water rate model in July 2010 for residential and irrigation customers as a means of striving towards conservation.

Residential customer classes were assigned to a “tiered-rate” model with three (3) rate tiers whereby increasing levels of water consumption were subjected to higher rates. A base level of consumption was established based on the need for a 20% reduction in overall water consumption. This base consumption standard, which serves as the middle tier (Tier 2) of the model, was set at a bi-monthly consumption rate of 20 units (hundred cubic feet, or “CCF”) for single-family residential units, and 10 CCF for multi-family residential units.

Irrigation customers were assigned to a Water Budget rate model, whereby each landscaped area was assigned a Water Budget that is based on landscaped areas, actual climate conditions, and evapotranspiration factors based on plant materials. Landscape Water Use Reports (“LWUR”) are issued each month to each irrigation customer by BAWSCA’s consultant, John Whitcomb of Waterfluence LLC, in order to track budgeted use against actual performance.

The Rate structures have been modified over time, but the rate structure in place today is summarized in the following table:

Bi-Monthly Consumption¹:	Modified Consumption Rates
Single Family Residential	
≤ 10 units of water	75% of Base Consumption Rate
> 10 units, ≤ 20 units of water	100% of Base Consumption Rate
Over 20 units of water	150% of Base Consumption Rate
Multi Family Residential	
≤ 5 units of water	75% of Base Consumption Rate
> 5 units, ≤ 10 units of water	100% of Base Consumption Rate
Over 10 units of water	150% of Base Consumption Rate
Irrigation Customers	
≤ 100% of Annual Water Budget	100% of Base Consumption Rate
> 100% of Annual Water Budget	150% of Base Consumption Rate

ANALYSIS

The conservation-based water rate model is developed on two tracks:

1. **Base Rate Model** – This model determines the revenue requirements based upon projected costs using a 10-year forecast, and extrapolates the revenue requirements in terms of a) fixed meter charges (equated to the fixed costs of the Enterprise) and b) a Base Consumption Rate that is primarily based on the SFPUC wholesale rate, the BAWSCA surcharge, and assumptions relative to water loss throughout the system.

2. **Conservation-Based Rate Model** – a rate structure whose primary goal is water conservation is modeled based upon significant data analysis and interpretation. The Base Consumption Rate determined as part of the Base Rate model is then utilized to determine the cost structure of the rate model to be borne by customers.

¹ Should the District implement a monthly billing cycle, the units of water at each tier would be reduced in half (e.g., the 1st tier reduces from 10 units to 5 units).

The following two subsections of the Analysis provide information on how the recommended rate structure is implemented.

1. Fixed Meter Charges

Fixed meter charges are established based upon an analysis of the fixed costs of the operations and the fixed revenues required to fund those fixed costs. Fixed costs in this case are defined as those costs that are required to maintain a reliable delivery of water to the customer, and include such costs as personnel, equipment, infrastructure, and administrative costs, as those costs remain fixed irrespective of the amount of water consumed. The fixed meter revenues required are then allocated based upon an “equivalent meter charge” analysis, that considers the availability of water to be served to each customer based upon the size of the pipe servicing that customer in compliance with ratios established by the American Water Works Association (AWWA) Sizing Water Service Lines and Meters M22. For example, a 2” pipe (and, thus, a 2” meter) is capable of delivering 5.33 times (or 533%) the amount of water delivered by a standard ¾” meter. Accordingly, the fixed meter revenues associated with the 2” meter are 5.33x the ¾” meter cost.

Based on the water rate model, it is recommended that fixed meter charges be increased on average of 7.8% in order to match fixed revenues with fixed costs. These changes are proposed to be implemented across all fixed meter rates.

2. Variable Rate Model

Latest Information from SFPUC

In February 2015, BAWSCA notified its members that SFPUC is projecting a wholesale increase for water from **\$2.93 to \$3.83 per ccf**. This increase is \$0.38 per ccf more than the rates that were anticipated in the prior year’s analysis. The increase was made based upon the timing in which the capital expenditures were anticipated to come “on-line” under the WSIP improvements. The primary driver for the rate increases are the costs associated with the \$4.6 billion Water System Improvement Project (WSIP) to upgrade the Hetch Hetchy Water System. .

Assumptions Used in Water Rate Model

The following assumptions were used in creating the rate model attached:

Revenues

- Metered water sales (consumption) for FY 2015-2016 is estimated at **2.116** million CCF per year. Water usage in new developments such as Pilgrim-Triton, Gilead Sciences, Chess Drive Offices, Illumina, and the Foster Square development is expected to be offset by the continued conservation programs already in place and the expectations of implementing water conservation techniques in the development of those projects.
- Interest income is expected to return 1.0% on investment assets over the 10-year forecast based on current returns. In addition, interest income generated from capital improvement funds is estimated and assumed that it will be transferred to the operating fund to offset annual operating costs, as funding for capital

improvement projects are funded through annual transfers from operations (see below).

- Rate changes for FY 2015-2016 would take place effective July 1, 2015.
- Meter charges, which represent the “fixed cost” nature of revenues, are proposed to be increased by on average of 7.8% in FY 2015-2016 to better match this fixed revenue stream with the underlying percentage of fixed costs and in light of surplus reserves available in the Operating Fund and Water Sustainability Fund. The 10-year forecast projects that these meter charges will need to be increased for Single Family Residence would be from \$17.25 per month to \$20.85 by FY 2019-2020 in order to balance the fixed and variable revenue streams.

Expenditures

- SFPUC rate analysis for the 10 years ending June 30, 2025 was used as a basis for projecting wholesale water rates.
- BAWSCA Surcharge is expected to remain flat at \$.35 per ccf at approximately \$750,000 per year based on the fixed bond repayment schedule and assuming that the District’s consumption remains relatively consistent as a pro-rata share of total BAWSCA consumption. This payment is considered to be a “fixed cost” as it is not expected to vary much based on water consumption.
- Preliminary budget figures for FY 2015-2016 are used as the basis for expenditures, with no assumption made as to expenditure savings in future years.
- The terms of the current memorandum of understanding with AFSCME, and the compensation and benefits plan for Management Employees, are incorporated into the assumptions for personnel costs. No assumptions have been made relative to the negotiations for successor agreements consistent with the District’s budgeting policy, however an ongoing increase of 3% has been assumed for compensation and benefits increases consistent with the City’s five-year projections, plus known increases anticipated in CalPERS pension costs.
- All other expenditures are assumed to increase by 2.5% per year, consistent with the expected assumptions for the FY 2015-2016 Annual Budget 5-year Financial Plan.
- An annual placeholder of \$205,000 starting in FY 2015-2016 is included based upon the current Long-Term CIP Funding Program also reviewed at this Budget Study Session.

Reserve Levels

- Minimum reserve requirements for each year are assumed to be not less than 25% of annual operating expenditures, \$2 million for unanticipated Capital Expenditures, consistent with the Board’s existing reserve policy.
- The Water Sustainability Fund has a reserve cap of \$400,000, with surplus reserves from penalties being transferred to the Operating Fund to offset water rates in the 10-year forecast. Due to the success of the conservation effort and the reduction in revenues from the penalty tier, staff is recommending to build in \$200,000 in the operating budget for water sustainability/rebate programs uses.

Revenue Requirements

BWA water rate model tables and charts illustrate the revenue increases from ratepayers necessary to implement the 10-year rate smoothing model. Appendix B4 of BWA rate study of that analysis presents the recommended 10-year financial forecast of the model.

Rate Survey

A survey of communities along the San Francisco Peninsula was conducted to compare the District's typical residential monthly bill with the neighboring communities. The results of the survey are summarized in the attached comparison charts. The survey indicates the District's projected water rates are among the lowest in the region. The average monthly water bill (based on 9.5 ccf per month) amongst the 21 comparator agencies is \$73.43 per month – the District's is proposed to be \$56.49 per month, or 23% **less** than the average of neighboring communities.

Most of the communities surveyed are in the midst of evaluating their water rates and are anticipating, at a minimum, inflationary adjustments and increases based on the increase from SFPUC. When these adjustments are complete, the District's rates are anticipated to remain near the lowest level among comparator agencies.

3. Conservation-Based Rate Model

Preliminary Data Analysis

Since the first year of the conservation-based water rate model, the amount of water consumed by residential and irrigation customers has fallen by 28.5% as presented in the following table:

	Water Consumption July 1 to February 28						% Chg
	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	since 2009-2010
Single-Family	485,579	454,310	434,295	423,038	449,252	294,100	(39.4%)
Multi-Family							
<i>Duplexes</i>	2,914	2,890	2,751	2,649	2,893	1,836	(37.0%)
<i>Townhomes</i>	140,643	135,339	129,200	130,772	110,126	75,190	(46.5%)
<i>Apartments / Condos</i>	420,157	420,057	407,902	400,669	377,989	347,914	(17.2%)
Subtotal - Multi-Family	563,714	558,286	539,853	534,090	491,008	424,940	(24.6%)
Subtotal all residential	1,049,293	1,012,596	974,148	957,128	940,260	719,040	(31.5%)
Irrigation	426,241	406,646	356,695	353,158	419,458	335,653	(21.3%)
Total	1,475,534	1,419,242	1,330,843	1,310,286	1,359,718	1,054,693	(28.5%)

Residential customers have reduced consumption by 31.5%. Reductions by Multi-Family residential units has fallen by 24.6%, however part of this reduction has come through the meter segregation program where the water consumed for irrigation that was attributed to domestic (indoor) use has now been transferred to Irrigation use. Nevertheless, we have anecdotally noted decreases in consumption by townhomes and

condominiums that are in homeowners associations due to the efforts of those HOAs and their respective boards to be keenly aware of water conservation efforts.

Irrigation consumption has decreased by 21.3% over the period. Based on statistics provided by Waterfluence, since 2009, the amount of “overwatering” (actual usage that exceeds the water budget as determined through the Landscape Water Use Reports for each customer) has decreased from 39.6% to 15.7% when taking into consideration evapotranspiration factors (e.g., rainfall, temperatures, humidity, landscape area and type).

The data presented above is important as it relates to the policy choices in terms of rates and rebate programs.

Residential Tiered-Rate Model

Impacts

The tiered-rate model is having a positive impact on water consumption. District staff efforts have been outstanding in working with customers to understand their consumption patterns and informing them of how they compared to their neighbors. Many customers realized that their use was out of line with the norm and explored ways with staff on how to conserve through the District’s rebate programs.

Relaying the nature of these interactions is instructive in three areas: 1) the rate structure is creating a financial incentive for heavy water users to change their consumption patterns; 2) once customers understand how their consumption patterns compare to those around them, most are incented to look at ways to change their patterns; and, 3) water usage in the summer months, where outdoor usage is at peak, is critical in the overall plan for conservation.

Proposed Rate Model

As it relates to the model, BWA recommends that a conservation-based rate model and Tier structure that is better aligned with the standardized rate setting methodology be used. BWA recommends a Rate model for FY 2015-2016 (compared to FY 2014-2015) as follows:

Conservation-Based Water Rate Model (based on bi-monthly allotments)	Proposed FY 2015-2016
<i>Single Family Residential</i>	
≤ 20 units	\$4.13
> 20 units	\$4.47
<i>Multi-Family Residential (per living unit)</i>	
≤ 10 units	\$4.13
> 10 units	\$4.48
<i>Irrigation Customers</i>	
≤ 100% of Annual Water Budget	\$4.13
> 100% of Annual Water Budget	\$5.43
<i>Commercial and Fire Line Customers</i>	
	\$4.22

Conservation-Based Water Rate Model (based on bi-monthly allotments)**Current FY 2014-2015****Single Family Residential**

≤ 10 units	75% of Base Consumption Rate	\$2.49
> 10 and < 20 units	100% of Base Consumption Rate	\$3.32
> 20 units	150% of Base Consumption Rate	\$4.98

Multi-Family Residential (per living unit)

≤ 5 units	75% of Base Consumption Rate	\$2.49
> 5 and < 10 units	100% of Base Consumption Rate	\$3.32
> 10 units	150% of Base Consumption Rate	\$4.98

Irrigation Customers

≤ 100% of Annual Water Budget	100% of Base Consumption Rate	\$3.32
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Irrigation Water Budget Model

The District implemented a water budget model in FY 2010-2011 that uses evapotranspiration factors and landscape areas as a basis for determining “appropriate water use” among irrigation customers. Waterfluence is our landscape irrigation consultant, and its owner, John Whitcomb, recites many interactions with landscapers, including the City’s Parks Maintenance Division, that are focused on how they can manage their water usage in compliance with the LWUR water budgets. As indicated earlier, the amount of “overwatering” has fallen from 39.6% to 15.7% since the tiered rate model was introduced.

Based upon the successful outcomes of the irrigation rate model, The Consultant recommends that it remain as the model for this customer class. The top tier of the rate model is recommended to be at \$5.43 / ccf. The rate structure for irrigation customers for FY 2015-2016 (when compared to the prior year) will be as follows:

Conservation-Based Water Rate Model (based on monthly allotments)	Proposed FY 2015-2016
Irrigation Customers	
< 100% of Annual Water Budget	\$ 4.13
> 100% of Annual Water Budget	\$ 5.43

Conservation-Based Water Rate Model (based on monthly allotments)	Current FY 2014-2015
Irrigation Customers	
< 100% of Annual Water Budget	100% of Base Consumption Rate \$ 3.32
> 100% of Annual Water Budget	150% of Base Consumption Rate \$ 4.98

Commercial Customers

The District Board has consistently held that commercial customers should continue to pay for water using flat rate due to two factors: 1) the complexities involved in establishing effective conservation-based rate models that take into account the differences in commercial customers and how to define “normal use” for varying customer types (e.g., office buildings vs. restaurants); and, 2) the fact that some

commercial customers are also irrigation customers where water conservation efforts would be most effective. Staff continues to explore options to provide rebate programs to commercial customers to incent conservation. However, staff recommends that the Commercial Customer rate structure be maintained by charging them the \$4.22 / ccf for FY 2015-2016. BWA concurred with the District's practice of using a single tier as commercial customers are too heterogeneous to be fairly placed in a tiered rate structure. The single tier methodology is also commonly used by many water agencies.

Private Fire Line Service Protection – Flat Rate Model

Public safety is an important matter to the community. Fire Lines mitigate the risks of fire damage to a property and the surrounding community. Water usage for these systems is used on an as-needed basis. Staff recommends a flat rate model as the basis for consumption, which for FY 2015-2016 is recommended to be \$4.22 / ccf.

Sustainability Fund / Rebate and Loan Programs

As of July 1, 2014, the Water Sustainability Fund had a balance of \$320,694. Staff is projecting estimated penalties for FY 2014-2015 of approximately \$48,000 and rebates and other expenditures of \$200,000. The water rate model conservatively projects that there will be \$168,694 available for FY 2015-2016 as of July 1, 2015. The proposed rates would generate \$200,000 in revenues to match the estimated expenditures of \$200,000 in FY 2015-2016.

The rebate programs provided by the District will continue to be funded through the Water Sustainability Fund. The District Board approved changes to the rebate model in July 2013 as follows:

Program / Element	Details
High-Efficiency Toilet Rebate Program (administered by BAWSCA)	
• Eligibility	Individual customers, multi-family apartment and condo complexes and commercial customers
• Specifications	Same
• Rebate Amount	\$150 per toilet, 3 maximum per home and/or living unit; no limit on commercial customers subject to advance approval
Washing Machine Rebates	\$125 per washing machine
Landscape Water Use Audit	
• Single Family Residential	
○ Eligibility	Customers using 40 ccf bi-monthly
○ Rebate	Free of charge
• Irrigation	
○ Eligibility	Exceeding water budget by more than 25%
○ Rebate	Free of charge
Synthetic Turf Rebate	
• Eligibility (subject to CC&R's)	Any customer of the District
• Rebate	\$4 per square foot up to \$3,000 maximum rebate for single-family residential units. \$100,000 maximum for irrigation and/or multi-family customers per landscaped area as defined by the District and capped at \$400,000 for this category.

Program / Element	Details
Smart Irrigation Controller Rebate	
<ul style="list-style-type: none"> • Single-Family Residential 	100% of cost up to \$250 maximum rebate, two controller maximum per home
<ul style="list-style-type: none"> • Irrigation 	100% of cost up to \$50 per station, \$7,500 maximum rebate per customer
Rotating Nozzles and Sprinkler Heads	
<ul style="list-style-type: none"> • Rebate 	\$4 per set based on approved list of water efficient, pressure-balancing sprinkler heads, 10 minimum; 15 set maximum for single family residential units, no maximum for multi-family residential and/or irrigation customers
“Lawn Be Gone” Lawn Conversion Program (administered by BAWSCA)	
<ul style="list-style-type: none"> • Eligibility 	Conversion of at least 200 square feet of lawn to approved list of drought-resistant plant materials
<ul style="list-style-type: none"> • Rebate – Single-Family Residential 	\$0.75 per square foot, up to \$1,000 maximum
<ul style="list-style-type: none"> • Rebate – Irrigation 	\$0.75 per square foot, up to \$5,000 maximum
Combination Domestic / Irrigation Meter Segregation	
<ul style="list-style-type: none"> • Eligibility 	HOA or multi-family residential units with combined domestic / irrigation meters
<ul style="list-style-type: none"> • Meter Installation 	No cost for meters and installation charges
<ul style="list-style-type: none"> • Loan Program 	Up to \$50,000 loan for construction costs at 5% interest, 36-month amortization period, payable on water bill

Rebates are honored on a first-come, first-served basis subject to fund availability by the District Manager or his / her designee.

Drought Implementation Issues

In a separate Staff Report at this meeting, the City Council received a report on water reliability, availability, and voluntary / mandatory rationing. The SFPUC continues to monitor water levels at the Hetch Hetchy Reservoir and throughout its system. The SFPUC, from whom the City purchases all of its water, called upon customers to voluntarily reduce consumption by 10%.²

How SFPUC Would Implement Mandatory Rationing

By the end of March, SFPUC will make a determination as to whether reservoir levels and precipitation forecasts require mandatory rationing. SFPUC staff would then prepare a report to the Commission on or about April 13, 2015 that would also be sent to all wholesale customers. The Commission would meet by the end of April to determine if voluntary rationing is appropriate or, instead, declare a water emergency and invoke mandatory rationing through the provisions of the DRIP plan.

The final allocation for each agency would be provided by SFPUC by the end of May 2015 with the associated penalties that would be exacted if the agency exceeds its

² The District issued its own press release on **January 16, 2014 calling for** the community to conserve water on a voluntary basis.

allotment. Under a drought allocation, the District would receive this notice of its allotment of water expressed in MGD based on annual usage from July 1, 2015 to June 30, 2016. The allotment is based on several factors, the two primary factors being 1) water consumption patterns over the past three completed fiscal years (FY 2011-2012 to FY 2013-2014), and 2) the water supply assurance for each agency. SFPUC would continue to measure consumption on a monthly basis, and at the end of the year determine if the District exceeded its drought allotment. It would then exact penalties on any water consumption exceeding the allotment in the invoice for June 2016 water consumption sent in July 2016 and would be payable in full within 15 days from the date of invoice.

One option that wholesale customers could exercise amongst each other would be the option to “trade” water allocation if one agency wanted to purchase water supply from another agency that has ample supply. That purchase price would likely be something just less than the cost of the penalties that would be charged by the SFPUC. This trading would likely take place during the April to June 2016 timeframe but would need to be in place prior to June 30, 2016.

Options Being Explored for Water Availability

As indicated in the Staff Report on water availability at this meeting, the SFPUC is exploring a couple of options that would allow the Hetch Hetchy System to tap into the Lower Cherry Aqueduct and water wheeling between intertied systems such as EBMUD. If, in an attempt to ensure the availability of water resources in a declared drought, the SFPUC determines that it would like to “fast track” the availability from these other resources, there might be cost implications that the SFPUC intends with its own Proposition 218 noticing to tack on to water bills as a “drought passthrough implementation fee” based on the costs associated with making those resources available. If the District incurred these costs, it would need to determine how to pass these costs along to customers.

Implications for District Customers and Rates

There are rate implications on District customers of either a drought declaration by the SFPUC or options explored for the availability of water to the Hetch Hetchy System that staff has identified for the Board’s consideration in establishing rates for FY 2015-2016 and implementing any passthrough fees that may come from SFPUC.

As indicated above, it is currently unknown whether or not the SFPUC will declare a drought and impose mandatory rationing and penalties for FY 2015-2016. This will not be known until after the District is required to issue its own Proposition 218 notice. The penalties would not be invoked until FY 2016-2017 based on a lookback of consumption for the full year that exceeds the allotment. Moreover, there is the opportunity for BAWSCA agencies to “trade” water supply assurance for a price set through negotiations of those agencies. In other words, there are significant uncertainties related to drought declaration on District customers.

On August 4, 2014, November 3, 2014 and January 20, 2015, Council adopted resolutions implementing water conservation measures. Current fines as established last year by the City Council via the adopted 2014-2015 Master Fees Schedule for violations of the declaration of water shortage emergency are as follows:

- 1) A charge of \$100 shall be paid prior to reactivating water service
- 2) A fine not exceeding \$100 for a first violation
- 3) A fine not exceeding \$200 for a second violation
- 4) A fine not exceeding \$500 for each additional violation within one year.

If the SFPUC declares a water emergency and implements mandatory rationing, District staff will schedule a public meeting with the District Board to discuss the impacts associated with the imposed mandatory rationing and discuss alternatives associated with the implementation of rationing amongst District customers.

However, staff does believe that it would be prudent for the District to include a “SFPUC Wholesale Passthrough Rate Increase for Water Availability” in its Proposition 218 notice to customers for FY 2015-2016 should the SFPUC determine, with BAWSCA concurrence, that a passthrough fee be implemented in order to ensure the availability of water. The wording in the Proposition 218 notice would include the following draft language:

“SFPUC Wholesale Passthrough Rate Increase for Water Availability

All of the District’s water originates from the San Francisco Public Utilities Commission. The lack of sufficient rainfall this Winter has necessitated the District’s request that customers voluntarily reduce their water consumption by 10%. In the event that the SFPUC declares a water emergency or otherwise imposes a cost associated with the availability of water for District customers, the District will implement a passthrough adjustment to customers’ bills no earlier than thirty (30) days after the adjustment has been enacted by the SFPUC and noticed to all District customers.”

POLICY DIRECTION

Staff seeks Board direction on the following policy questions:

1. Water Rate Model

- a. Does the Board wish to proceed with the recommended option scenario 4: Two Tier with Smoothing?

2. Sustainability Fund

- a. Does the Board wish to continue the use of a Water Sustainability Fund to fund conservation-based programs with a cap of \$200,000 for expenditures in any given year?

3. Rebate Programs

- a. Does the Board wish to maintain its water related rebate programs to customers at their current levels?

4. Drought Implementation Issues

- a. Does the Board wish to provide any input to District Staff as it considers potential drought implementation strategies to be brought back to the District Board at a future meeting in the event that the SFPUC declares a water emergency and invoke mandatory rationing for FY 2015-2016?

- b. Does the Board wish to include a “SFPUC Wholesale Passthrough Rate Increase for Water Availability” provision in the Proposition 218 notice to ratepayers advising them that the District Board may decide to implement a water rationing passthrough fee in the event that the SFPUC invokes a fee on the District to address water availability and/or mandatory rationing for FY 2015-2016 and in the event that penalties and other costs associated with the implementation of mandatory rationing measures require ratepayers to bear those costs?

PROPOSITION 218 NOTIFICATION

Per the requirements under Proposition 218, all ratepayers will receive a notice on or before April 13, 2015, based upon the District Board’s policy direction this evening. Due to the complexity of the rate model changes being recommended, a user-friendly notice will continue to be prepared that still meets the Proposition 218 noticing requirements. A public hearing will be held and the rates adopted on June 1, 2015. The rates will go into effect on July 1, 2015.

It should be noted that between the notification date and the public hearing date, the District Board will receive the FY 2015-2016 Preliminary Annual Budget and 5-Year Financial Plan. Any adjustments that occur based upon District Board direction at the Budget Study Session will be incorporated into an updated rate model at the time of the public hearing. However, it is the opinion of staff that conservative assumptions have been employed in the creation of the attached rate models. Accordingly, staff believes that the rates proposed herein are the maximum rates that would be recommended for FY 2015-2016. At the public hearing, the District Board would have the option of reducing rates lower than what was noticed to rate payers under Proposition 218 if budgetary estimates change, but it could not increase the rates above what was noticed.

Attachments:

- Exhibit A – Proposed Water Rates
- Bartle Wells Associates Memorandum on Water and Wastewater Rate Study

ESTERO MUNICIPAL IMPROVEMENT DISTRICT
 Proposed Water Rates for
 FY 2015-2016
 To be effective July 1, 2015

Conservation-Based Water Rate Model (based on bi-monthly allotments)	
	Proposed FY 2015-2016
Single Family Residential	
≤ 20 units	\$4.13
> 20 units	4.47
Multi-Family Residential (per living unit)	
≤ 10 units	\$4.13
> 10 units	4.48
Irrigation Customers	
≤ 100% of Annual Water Budget	\$4.13
> 100% of Annual Water Budget	5.43
Commercial and Fire Line Customers	
Base Consumption Rate	\$4.22
Monthly Meter Charge	
3/4"	\$17.25
1"	28.75
1-1/2"	69.00
2"	92.00
3"	201.25
4"	362.25
6"	805.00
8"	1,380.00
Private Fire Service Protection Meter Charge	
3/4"	\$24.15
1"	24.15
1-1/2"	24.15
2"	32.20
3"	70.45
4"	126.80
6"	281.75
8"	483.00
(Minimum charge is equivalent to 1-1/2" meter charge)	

ESTERO MUNICIPAL IMPROVEMENT DISTRICT
Current Water Rates for FY 2014-2015
Effective July 1, 2014

Conservation-Based Water Rate Model (based on bi-monthly allotments)

	Current FY 2014- 2015
Single Family Residential	
≤ 10 units	75% of Base Consumption Rate \$2.49
> 10 and < 20 units	100% of Base Consumption Rate 3.32
> 20 units	150% of Base Consumption Rate 4.98
Multi-Family Residential (per living unit)	
≤ 5 units	75% of Base Consumption Rate \$2.49
> 5 and ≤ 10 units	100% of Base Consumption Rate 3.32
> 10 units	150% of Base Consumption Rate 4.98
Irrigation Customers	
≤ 100% of Annual Water Budget	100% of Base Consumption Rate \$3.32
> 100% of Annual Water Budget	150% of Base Consumption Rate 4.98
Commercial and Fire Line Customers	
Base Consumption Rate	100% of Base Consumption Rate \$3.32
Monthly Meter Charge	
3/4"	16.00
1"	28.00
1-1/2"	80.00
2"	128.00
3"	224.00
4"	352.00
6"	672.00
8"	1,056.00
Private Fire Service Protection Meter Charge	
3/4"	\$28.00
1"	28.00
1-1/2"	28.00
2"	44.80
3"	78.40
4"	123.20
6"	235.20
8"	369.60
(Minimum charge is equivalent to 1-1/2" meter charge)	



DATE: March 18, 2015
TO: City of Foster City/Estero Municipal Improvement District
FROM: Bartle Wells Associates; Doug Dove and Aleks Levin
SUBJECT: Water and Wastewater Rate Study Results

SUMMARY OF FINDINGS AND RECOMMENDATIONS

Introduction and Background

The Estero Municipal Improvement District (District) engaged Bartle Wells Associates (BWA) to develop 10-year financial projections for the District's Water and Wastewater Enterprises and to recommend water and wastewater rate increases for the next five-year period. The District last conducted formal rate studies for these utilities in 2004 and has continued to perform an internal analysis of operating and maintenance costs annually since then. The District last increased water and wastewater service charges in FY2014. The District is currently in good financial shape with water and wastewater service rates being in the lower range compared to other agencies on the Peninsula. The District has a relatively young infrastructure for both enterprises and is currently debt free. The District faces unique infrastructure funding challenges in each enterprise.

Water

Currently, the San Francisco Public Utilities Commission (SFPUC), the sole source of water supply for the District, has released updated projections for their wholesale rate for water from \$2.93 in FY2015 to \$3.83 in FY2016 per hundred cubic feet (ccf) a 30.7% increase. The primary driver for the rate increases are the costs associated with the \$4.6 billion Water System Improvement Project (WSIP) to upgrade the Hetch Hetchy Water System. The District will also continue to make annual payments of approximately \$750,000 to the Bay Area Water Supply and Conservation Agency (BAWSCA) for the WSIP capital improvements that were funded through the issuance of bonds. The water enterprise's single largest cost is water purchases from SFPUC.

There is also a potential that the SFPUC will implement the Drought Reduction Implementation Plan (DRIP) due to very low precipitation during the Fall and Winter,

and the low Hetch Hetchy reservoir levels that could require mandatory rationing of all BAWSCA agencies.

Wastewater

The District has a Joint Exercises Powers Agreement with the City of San Mateo where the District receives treatment of its wastewater via the San Mateo Treatment Plant. The District is responsible for its share of operating and maintenance costs that San Mateo incurs treating the District's wastewater, as well as 25% of capital improvement costs at the plant. The City of San Mateo is expanding the wastewater treatment plant at an estimated cost of \$466 million over the next twenty years of which the District is responsible for approximately \$116 million. This is in addition to local capital projects for the District's own sewage collection system.

Bartle Wells conducted a water and wastewater rate survey of neighboring communities along the San Francisco Peninsula. The results of the water survey is summarized in Appendix I and the results of the wastewater survey is summarized in Appendix L.

The survey found that the District's water rates are among the lowest in the region. The average monthly water bill for the region (based on 9.5 ccf of monthly usage) is \$73.43 per month – the District's proposed average monthly residential water bill, under Option 4, for FY2016 is to be \$56.49 per month, or 23% less than the average of neighboring communities.

The District's wastewater rates are also low amongst its comparator agencies. The average monthly bill among the comparator agencies is \$83.55 – the District's proposed monthly residential wastewater bill, under Option 3, for FY2016 is to be \$51.47 per month, or 38% less than the average of the neighboring communities.

Water Enterprise Fund

The District currently provides water service to a population of approximately 32,500. Most of the District's customers are residential. Table 1 shows the approximately 8,120 meters that allow for water service and fire protection service.

Table 1
 City of Foster City / Estero Municipal Improvement District
 Water Meters By Size

Data as of: 02/07/14

Meter Size	Accounts	Meter Ratio ^{1,2}	Est. Meter Equivalents ³
Water Service			
3/4"	6,815	1.00	6,815
1"	407	1.67	678
1-1/2"	159	4.00	636
2"	374	5.33	1,995
3"	80	11.67	933
4"	49	21.00	1,029
6"	24	46.67	1,120
8"	15	80.00	1,200
Subtotal	7,923		14,406
Private Fire Protection Service			
3/4"	1	0.35	0
1"	7	0.58	4
1-1/2"	3	1.40	4
2"	0	1.87	0
3"	2	4.08	8
4"	27	7.35	198
6"	95	16.33	1,552
8"	62	28.00	1,736
Subtotal	197		3,503
Total	8,120		17,909

Source: Foster City/Estero Municipal Improvement District water use records

[1] The meter ratios shall be based on meter size in compliance with ratios established by the American Water Works Association (AWWA) Sizing Water Service Lines and Meters M22, Second Edition, 2004 (M22 Manual)

[2] Private fire protection service ratio based on the fire service line; Resolution No. 2715

[3] Equals the number of accounts multiplied by the meter ratio for each meter size.

Table 2 illustrates the current reserves that the District can draw down in case of emergency or to smooth any “rate shocks” to its customers.

Table 2
 City of Foster City / Estero Municipal Improvement District
 Water Enterprise Operating Reserves

Fund Reserve Component	July 1, 2014
	Beginning Cash Balance
Reserved for Maintenance & Operation	<u>\$2,685,544</u>
Total	2,685,544

Note: Rate model only includes fund reserve components available to fund ongoing operating expenditures.

Source: City of Foster City/Estero Municipal Improvement District Water and Sewer Equity Analysis FYE June 30, 2014

The wholesale water purchase rates that SFPUC is projecting over the next ten years are shown graphically in Chart A. The SFPUC also collects the BAWSCA Bond Surcharge from the District. So the chart incorporates the BAWSCA Bond Surcharge estimated at .35 cents per ccf. The SFPUC rates and BAWSCA surcharge combined are projected to increase from \$3.28/ccf (\$2.93 SFPUC + \$.35 BAWSCA) in FY2015 to \$5.28/ccf by FY2020.

CHART A

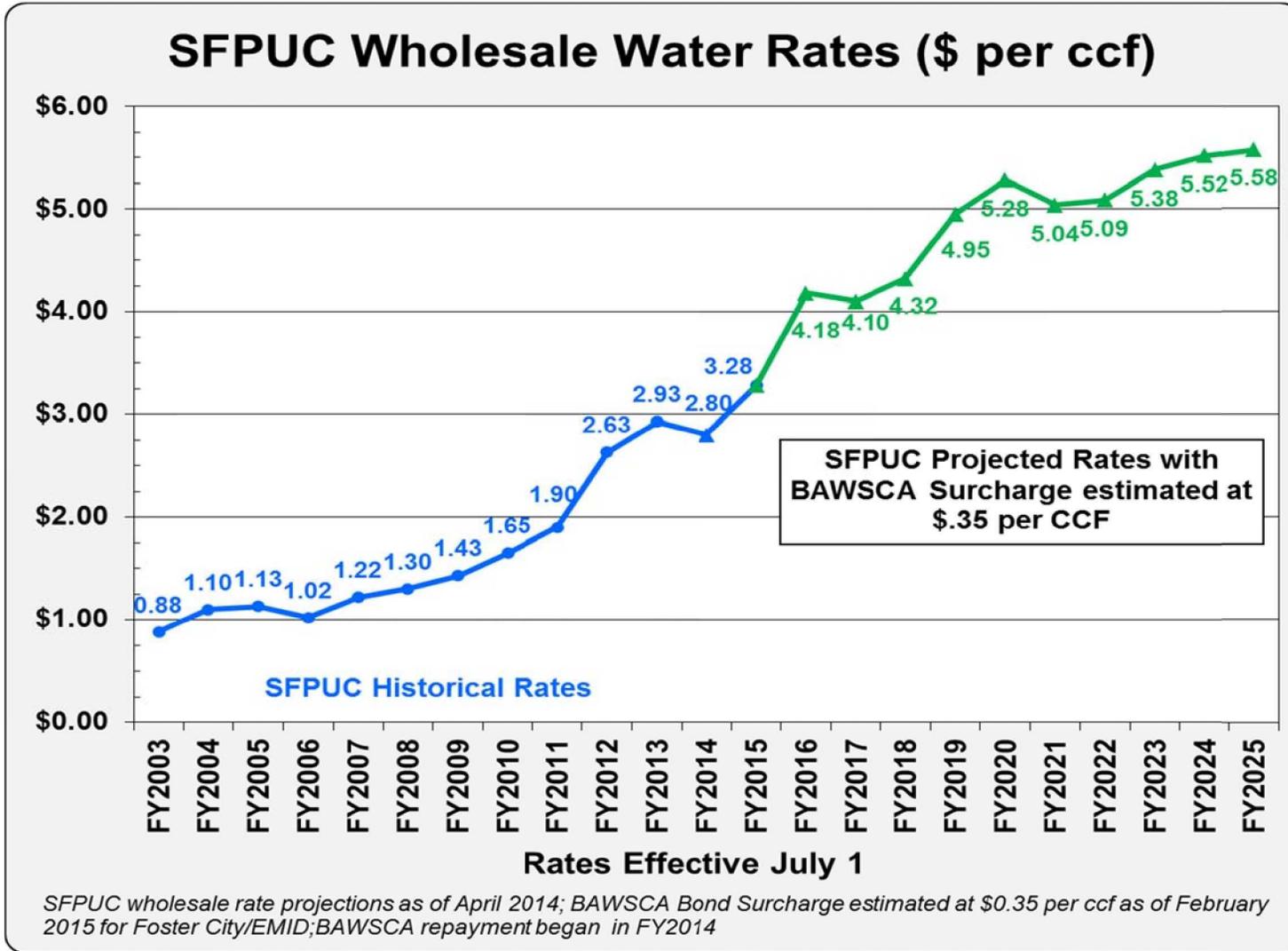


Table 3 summarizes the District’s projected operating expenditures which are anticipated to increase over the next five years by 51%. The largest driver of the operating cost increases are the SFPUC wholesale water purchase rates.

Table 3
 City of Foster City / Estero Municipal Improvement District
 Water Enterprise O&M Projection

Expenses	Five Year Projection (Prop 218)						Annual % Increase [1]
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	3.0%
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	2.5%
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	2.5%
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	2.5%
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	varies
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	2.5%
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	
TOTAL O&M Expenditures	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	
		19.1%	0.2%	5.4%	12.0%	6.5%	

[1] Based on historical results

As shown in CHART B, the District’s current revenues (\$11.6M) outpace expenditures (\$10.7M) in FY2015. Beginning in FY2016, if no rate adjustments are implemented then expenditures will outpace revenues.

CHART B

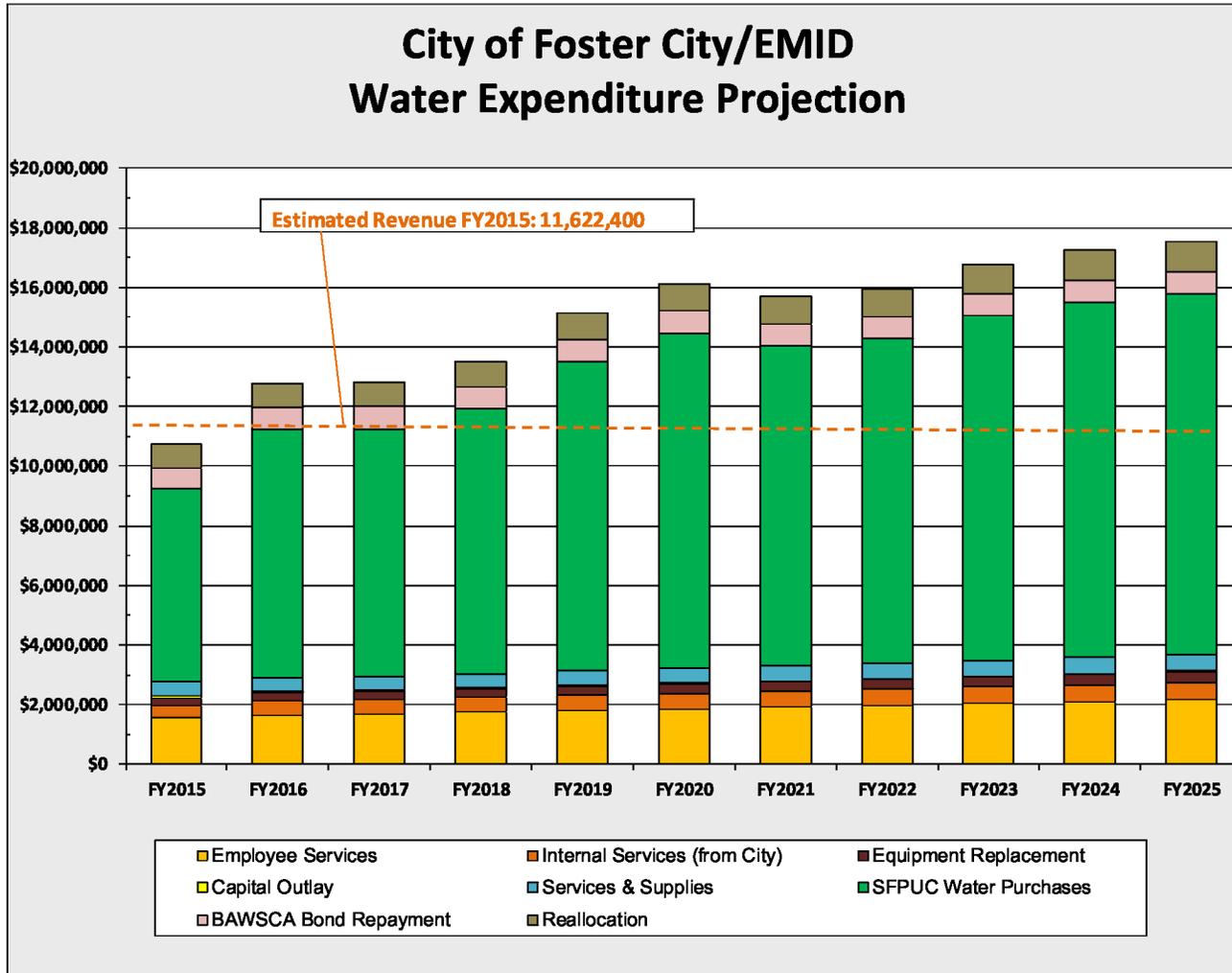


Table 4 summarizes the current water rates. The District has variable expenditures which are expenditures that are impacted by the amount of water its customers consume. These costs must be recouped via its volumetric water charge, \$3.32 per ccf in FY2015. Likewise the District's meter charges recover fixed expenditures, expenditures that are fixed regardless of amount of water that is consumed, \$16.00 for a ¾" meter in FY2015. The District currently has a tiered-rate model for its residential customers where higher levels of water consumption are subject to higher water rates. The District's Tier 2 rate of \$3.32 is the average residential cost and Tier 1 is set at 75% of the Tier 2 rate and Tier 3 is 150% of the Tier 2 rate, to encourage conservation. For its irrigation customers, the District has worked with John Whitcomb of Waterfluence to assign each irrigation customer a water budget. Any water consumed above the irrigation customers allotted amount is subject to a higher Tier 2 rate.

Table 4
 City of Foster City / Estero Municipal Improvement District
 Current Rates

Current
<u>2015</u>

Fixed Meter Charge

Monthly Meter Charge

<u>Meter Size</u>	
3/4"	\$16.00
1"	28.00
1-1/2"	80.00
2"	128.00
3"	224.00
4"	352.00
6"	672.00
8"	1,056.00

Bi-Monthly Water Consumption Rates

Single Family Residential

Tier 1	0-10 per ccf	\$2.49
Tier 2	11-20 per ccf	3.32
Tier 3	Over 20 per ccf	4.98

Multi-Family Residential

Tier 1	0-5 ccf per living unit	\$2.49
Tier 2	6-10 ccf per living unit	3.32
Tier 3	Over 10 ccf per living unit	4.98

Irrigation Customes

Tier 1	<=100% of annual budget	\$3.32
Tier 2	>100% of annual budget	4.98

Commercial and Fire Line

All usage	\$3.32
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Monthly Private Fire Protection Charge

% of Water Meter Charge

<u>Meter Size</u>	
3/4"	\$28.00
1"	28.00
1-1/2"	28.00
2"	44.80
3"	78.40
4"	123.20
6"	235.20
8"	369.60

Rate Option Scenarios

For all rate option scenarios, the largest factor effecting the District's rates is the SFPUC wholesale water rates. The volumetric component is calculated to recoup the costs of SFPUC water purchases, the BAWSCA Bond Surcharge and the District's conservation programs.

The District's meter charges likewise need to recover costs associated with fixed expenditures. The proposed rate increases for meter charges are the same across all four rate option scenarios. A proposed 7.75% increase in FY2016, 5.5% increase in FY2017, FY2018, and FY2019 and a 3.5% increase in FY2020 and no proposed increases the following five years. The fixed meter charge for a ¾" meter will go up from \$16.00 a month in FY2015 to \$20.95 a month, a 31% increase.

The District currently has three tiers. BWA recommends the following rate structure alternatives to better align the District with the standardized rate setting methodology.

Rate Option Scenario 1: Uniform Rate without Smoothing (Appendix A1)

This scenario would charge a single uniform rate, across all customer categories. This option would directly follow SFPUC rates and have rate and revenue volatility. The District's volumetric rate would be increased by 32.4% from \$3.32 per ccf to \$4.40 in FY2016. By FY2025 the District's rate based on projected SFPUC rates is recommended to be \$5.80 per ccf an increase of approximately 75%. This scenario would generate operating net revenues for all fiscal years.

Rate Option Scenario 2: Uniform with Smoothing (Appendix A2)

Under this scenario, the district would charge its customers a single uniform rate but the rate increases would be smoothed out over the years to avoid revenue volatility and rate shock customers. This option allows a more gradual increase in rates. The recommended volumetric rate for FY2025 is \$5.75 per ccf, an increase of approximately 73.2% of the FY2015 rate of \$3.32 per ccf.

Rate Option 3: Two Tier without Smoothing (Appendix A3)

This scenario would reduce the amount of tiers that the District currently has for residential customers from three to two and keep a two tier structure for Irrigation customers. The District's current Tier 1 and 2 breakpoints for single family residential and multi-family residential would be consolidated into their own respective Tier 1s. Tier 3, the old highest tier for residential customers would become Tier 2 and the additional revenue from that tier would fund the District's conservation programs. This rate scenario encourages conservation but at the same time is heavily reflective of the SFPUC rate. The Tier 1 volumetric rate by FY2025 is recommended to be \$5.66, an increase of approximately 70.5%. Commercial customers would still be charged a single tier because commercial customers are too heterogeneous to be fairly placed in a tiered rate structure; they are commonly placed in a single tier. For FY2016 Tier 1 (0 to 20 ccf used) the recommended rate for Single Family Residential Customers would be \$4.30 and Tier 2 recommended rate (greater than 20 ccf used) would be \$4.64.

Rate Option 4: Two Tier with Smoothing (Appendix A4)

This rate option scenario has the same structure as Option 3 but it proposes a smoothing of the rate increases, a similar approach that is used in Rate Option 2. As in Option 4, Commercial customers would still be charged a single tier because commercial customers are too heterogeneous to be fairly placed in a tiered rate structure; they are commonly placed in a single tier. For FY2016 Tier 1 (0 to 20 ccf used) the recommended rate for Single Family Residential Customers would be \$4.13 and Tier 2 recommended rate (greater than 20ccf used) would be \$4.47. The Tier 1 rate would increase by 34% from \$4.13 in FY2016 to \$5.55 by FY2025.

Chart C summarizes the projected water bill of a typical single family residential customer under all proposed rate option scenarios. The typical single family residential customer uses 19 ccf per bi-monthly period in FY2025 is as follows:

- Rate Option Scenario 1: Uniform Rate without Smoothing is projected to result in the highest monthly water bill of \$76.00 in FY2025 from \$43.39 in FY2015, an increase of approximately 75%.
- Rate Option 2: Uniform Rate with Smoothing typical bill is projected to be \$74.73
- Rate Option 3: Two Tier without Smoothing typical bill is projected to be \$75.58
- Rate Option Scenario 4: Two Tier with Smoothing will result in the lowest typical bill of approximately \$73.68, an increase of approximately 70%.

CHART C

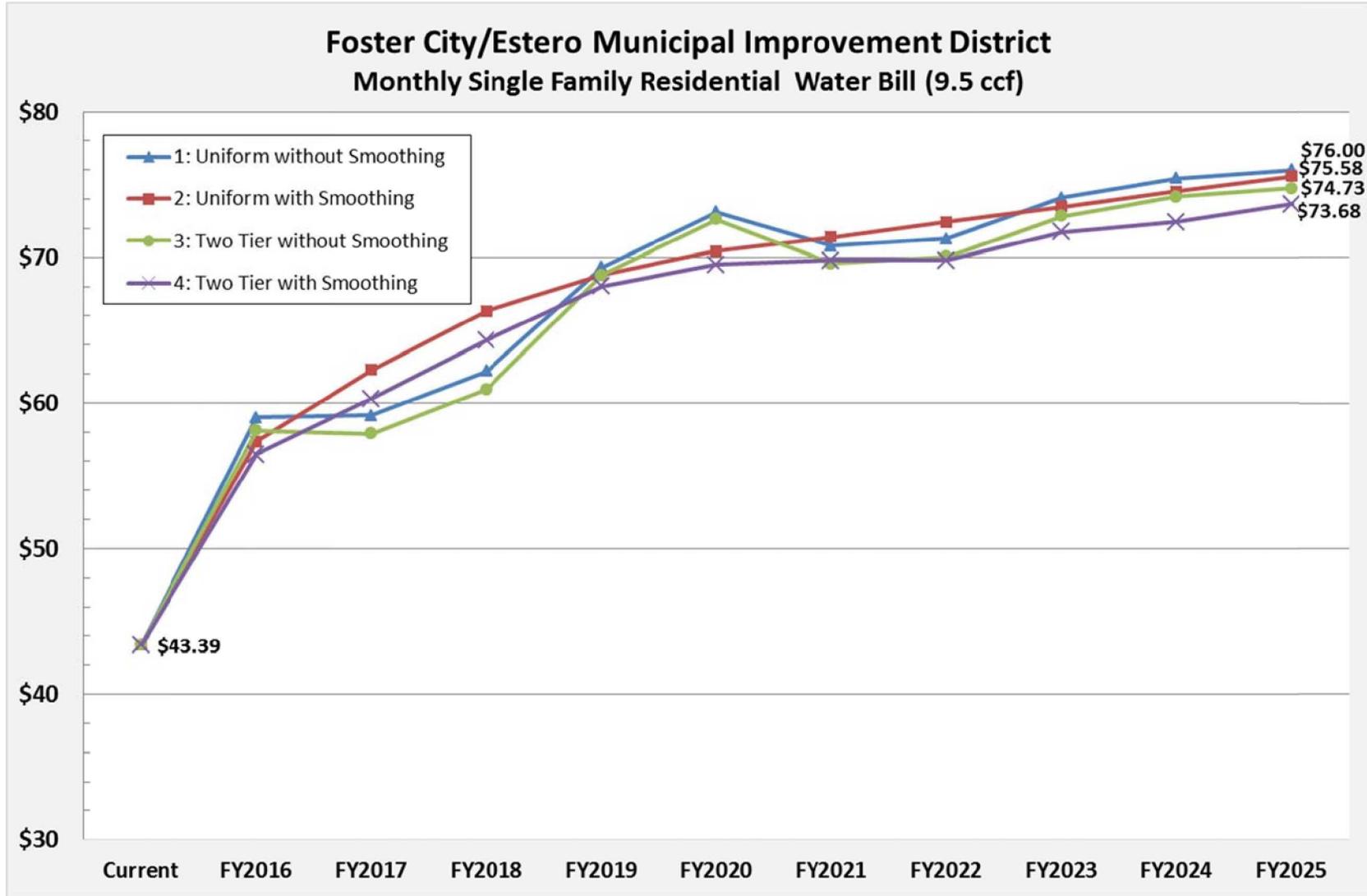


Table 5 shows the bill for a typical residential single family water customer for all four scenarios for a ten year time period.

Table 5
Foster City / Estero Municipal Improvement District
Projected Water Rate Impacts

	Five Year Projection						Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Scenario 1: Uniform Rate without Smoothing											
Single Family Residential Monthly Rate	\$43.39	\$59.00	\$59.13	\$62.20	\$69.31	\$73.14	\$70.80	\$71.30	\$74.09	\$75.44	\$76.00
\$ Increase		15.61	15.74	18.81	25.92	14.14	11.67	9.10	4.79	2.29	5.20
% Increase		36.0%	0.2%	5.2%	11.4%	5.5%	-3.2%	0.7%	3.9%	1.8%	0.8%
Scenario 2: Uniform Rate with Smoothing											
Single Family Residential Monthly Rate	\$43.39	\$57.34	\$62.28	\$66.32	\$68.80	\$70.45	\$71.40	\$72.44	\$73.49	\$74.53	\$75.58
\$ Increase		13.95	18.89	22.93	25.41	13.11	9.11	6.12	4.69	4.09	4.18
% Increase		32.2%	8.6%	6.5%	3.7%	2.4%	1.3%	1.5%	1.4%	1.4%	1.4%
Scenario 3: Two Tier without Smoothing											
Single Family Residential Monthly Rate	\$43.39	\$58.11	\$57.88	\$60.95	\$68.80	\$72.63	\$69.56	\$70.05	\$72.84	\$74.17	\$74.73
\$ Increase		14.72	14.49	17.56	25.41	14.52	11.68	9.09	4.04	1.54	5.17
% Increase		33.9%	-0.4%	5.3%	12.9%	5.6%	-4.2%	0.7%	4.0%	1.8%	0.8%
Scenario 4: Two Tier with Smoothing											
Single Family Residential Monthly Rate	\$43.39	\$56.49	\$60.29	\$64.33	\$68.04	\$69.50	\$69.78	\$69.78	\$71.78	\$72.44	\$73.68
\$ Increase		13.10	16.90	20.94	24.65	13.01	9.50	5.46	3.74	2.94	3.90
% Increase		30.2%	6.7%	6.7%	5.8%	2.1%	0.4%	0.0%	2.9%	0.9%	1.7%

Based on Single Family Residential Use of 9.5 ccf

Table 6 shows the rate impact on various single family residential users under the four rate scenarios. The “Low User” will have their bill increased by the most amounts in all rate option scenarios; this is due to the elimination of the old Tier 1, which charged consumers for water at a reduced rate. The “Current Median User” will also have a large increase in their water utility bill for the same reason. The “High User” benefits from the uniform rate structures due to the adjustments of the new tier structures and projected to have a lower bill under rate options 1,2, and 4. Table 6 also shows the number of single family residential bills that were in each tier for FY2014.

Table 6
Foster City / Estero Municipal Improvement District
Projected Water Rate Impacts

	Current		Projected Rate Options - Fiscal Year Ending June 30 2016				
	Rates	Number of Bills	Percent	Uniform no Smoothing	Uniform Smoothing	Two Tier no Smoothing	Two Tier with Smoothing
Monthly meter charge	\$16.00			\$17.25	\$17.25	\$17.25	\$17.25
% Change from FY2015				7.8%	7.8%	7.8%	7.8%
Single Family Residential Bi-Monthly Tiers							
Tier 1: 0 to 10 ccf	\$2.49	5,120	19%	\$4.40	\$4.22	\$4.30	\$4.13
Tier 2: 11 to 20 ccf	\$3.32	9,868	36%	\$4.40	\$4.22	\$4.30	\$4.13
Tier 3: over 20 ccf	\$4.98	12,493	45%	\$4.40	\$4.22	\$4.64	\$4.47
Total Number of Bills		27,481	100%				
Water Use Level	Monthly Use (ccf)						
Low User	5	\$28.45		\$39.23	\$38.35	\$38.75	\$37.90
\$ Increase				10.78	9.90	10.30	9.45
% Increase				37.9%	34.8%	36.2%	33.2%
Current Median User [1]	9.5	\$43.39		\$59.00	\$57.34	\$58.11	\$56.49
\$ Increase				15.61	13.95	14.72	13.10
% Increase				36.0%	32.2%	33.9%	30.2%
Med-High User	20	\$94.85		\$105.15	\$101.65	\$106.69	\$103.28
\$ Increase				10.30	6.80	11.84	8.43
% Increase				10.9%	7.2%	12.5%	8.9%
High User	50	\$244.25		\$237.00	\$228.25	\$245.98	\$237.45
\$ Increase				(7.25)	(16.00)	1.73	(6.80)
% Increase				-3.0%	-6.6%	0.7%	-2.8%

Based on use of Single Family Residential Customers over a Bi-Monthly Billing Period

Tables 7 shows the rates for Rate Option 4: Two Tier with Smoothing across a ten year period.

Table 7 City of Foster City / Estero Municipal Improvement District Proposed Water Rates - Two Tier with Smoothing				TWO TIER WITH SMOOTHING									
	2012	2013	Current Rates	Proposed Rates Two Tier FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00
Conservation-Based Water Rate Model (based on bi-monthly allotments)													
<i>Single Family Residential</i>													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 3: over 20 ccf	4.70	4.70	\$4.98	4.47	4.78	5.11	5.29	5.36	5.49	5.49	5.70	5.76	5.90
<i>Multi-Family Residential (per living unit)</i>													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 3: over 10 ccf	4.70	4.70	\$4.98	4.48	4.81	5.13	5.32	5.39	5.51	5.51	5.72	5.79	5.92
<i>Irrigation Customers</i>													
≤ 100% of Annual Water Budget	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
> 100% of Annual Water Budget	4.70	4.70	\$4.98	5.43	5.85	6.20	6.33	6.37	6.58	6.58	6.78	6.85	7.01
<i>Commercial and Fire Line Customers</i>													
Base Consumption Rate	3.13	3.13	\$3.32	4.22	4.52	4.85	5.05	5.13	5.24	5.24	5.45	5.51	5.64
Monthly Private Fire Service Protection Meter Charge													
3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80
(Minimum charge is equivalent to 1-1/2" meter charge)													

Recommendation: BWA recommends Rate Option Scenario 4: Two Tier with Smoothing. This rate option allows for the enterprise to remain financially strong while impacting the ratepayers by the least amount and encourages conservation.

Wastewater Enterprise Fund

There are approximately 12,919 wastewater accounts serviced by the District. The majority of accounts, approximately 92% are residential with the remainder being made up of commercial and institutional accounts as shown in Table 8.

Table 8
Foster City / Estero Municipal Improvement District
Wastewater Service Accounts

Data as of:	02/07/15
-------------	----------

Customer Class	Number of Accounts
<u>Residential</u>	
Single Family	4,534
Townhouse/Duplex	2,222
Apartment/Condominium (Pools w/ Restrooms)	<u>5,941</u>
Residential Total	12,697
<u>Commercial</u>	
Restaurants	46
Commercial/Hotels/Offices/Industrial/Laundromats	<u>141</u>
Commercial Total	187
<u>Institutional</u>	
Institutional/Schools	<u>35</u>
Institutional Total	35
Total	12,919

Source: Cognos Sewer Customer Count Report

The District has approximately \$1.6 million in its maintenance and operations reserve fund that the District can draw upon in case of an emergency or to mitigate “rate shocks” as shown in Table 9.

Table 9
Foster City / Estero Municipal Improvement District
Wastewater Operating Fund Reserves

Fund Reserve Component	July 1, 2014 Balance
Reserved for Maintenance & Operation	\$1,638,605
Total	\$1,638,605

Note: Rate model only includes fund reserve components available to fund ongoing operating and capital expenditures.

Source: City of Foster City/Estero Municipal Improvement District Water and Sewer Equity Analysis FYE June 30, 2014

Table 10 summarizes the current wastewater service rates.

Table 10
Foster City / Estero Municipal Improvement District
Current Wastewater Rates

Fiscal Year Ending June 30	Current 2015
Residential (flat monthly rate)	
Single Family	\$47.00
Townhouse/Duplex	39.55
Apartment/Condominium (Pools w/ Restrooms)	39.55
Commercial (rate per ccf of water use)	
Restaurants	8.54
Commercial/Hotels/Offices/Industrial/Laundromats	3.00
Institutional (rate per ccf of water use)	
Institutional/Schools	1.69

Table 11 summarizes the operating expenditures of the enterprise. Costs are expected to remain relatively stable over the next five years. The largest portion of the District's operating and maintenance costs are related to the treatment of wastewater by San Mateo. The District is also responsible for 25% of ongoing Wastewater Treatment Plant capital costs estimated at \$1,000,000 annually.

Table 11
City of Foster City / Estero Municipal Improvement District
Wastewater Enterprise O&M Projection

Expenses	Five Year Projection (Prop 218)						Annual %
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	Increase [1]
Employee Services	1,601,200	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	3.0%
Internal Services (from City)	537,084	590,369	605,000	620,000	636,000	652,000	2.5%
Internal Services -ERF	276,319	360,436	369,000	378,000	387,000	397,000	2.5%
Services & Supplies	619,850	729,200	747,000	766,000	785,000	805,000	2.5%
EMID Share WWTP O&M	1,800,000	1,961,000	2,131,000	2,201,000	2,309,000	2,374,000	varies
EMID Share WWTP Capital Improvements	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	
Reallocation	719,966	738,000	756,000	775,000	794,000	814,000	2.5%
TOTAL O&M Expenditures	6,554,419	7,075,005	7,355,000	7,539,000	7,764,000	7,951,000	
		7.9%	4.0%	2.5%	3.0%	2.4%	

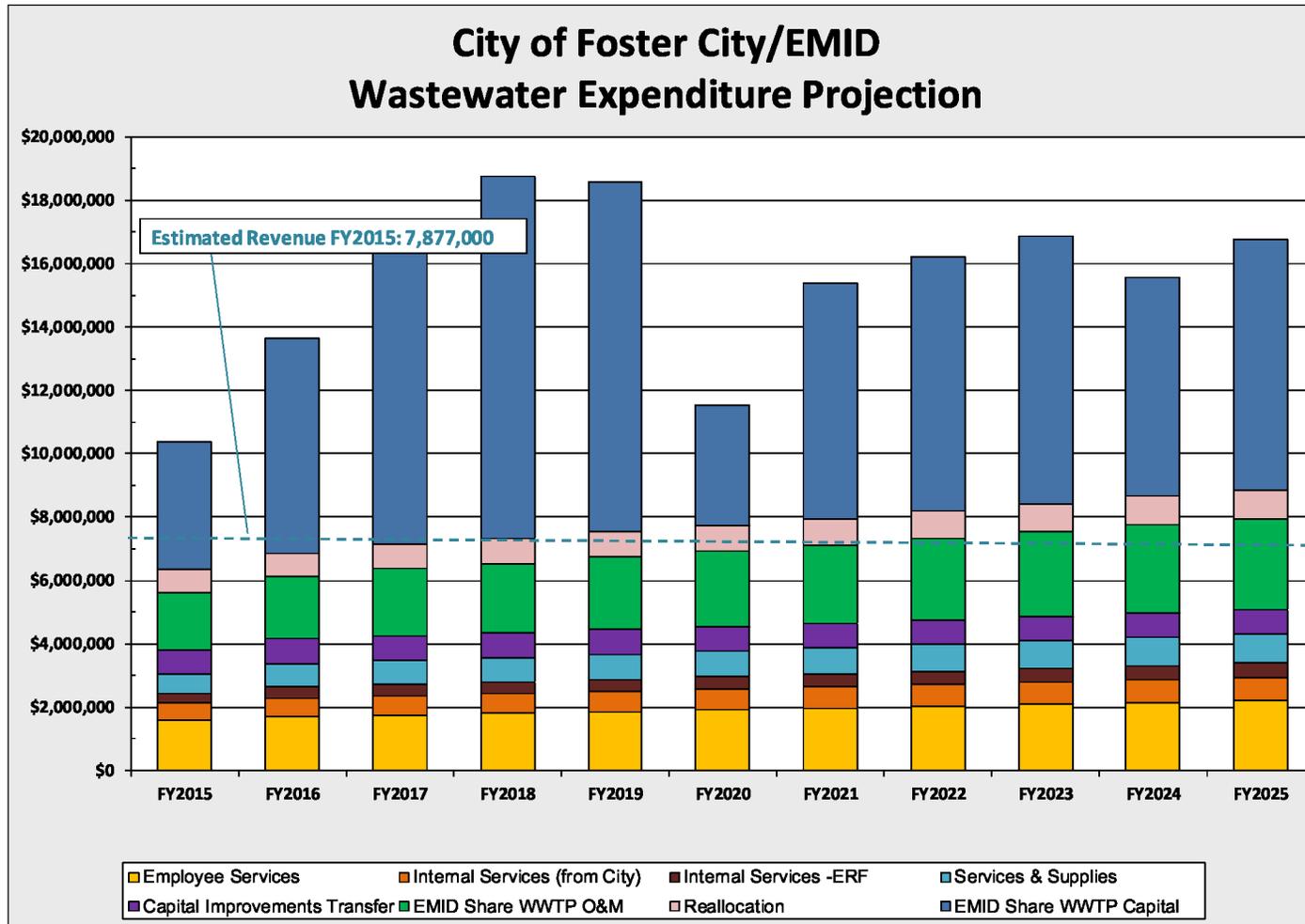
[1] Based on historical results

Chart D shows all estimated expenditures that the District is expecting to incur over the next ten years. This includes the operating expenditures found in Table 11, along with its share of the San Mateo Wastewater Plant Master Plan Improvements

Project and transfers to the District’s local wastewater capital fund that is used to fund the District’s ongoing capital improvements and repairs.

CHART D

7.1 - 99



Rate Option Scenarios

The first rate option scenario (Appendix J1) of pay-as-you-go results in a steep increase in wastewater rates of 175% in FY2016, followed by no rate increases in FY2017 and FY2018 then a rate reduction of 5% in FY2019 and a 10% rate reduction in FY2020. This results in an approximate 135% increase in the residential wastewater bill from \$47.00 in FY2016 to \$110.51 in FY2025. This option results in the District taking on no debt. The District is projected to not have enough revenue and reserves to cover all expenditures through FY2015 and remain financially solvent. Rate Option 1 includes a transfer from the District's wastewater capital fund in FY2015 to pay for its share of the San Mateo Wastewater Plant Master Plan Improvements Project Costs for that year of approximately \$4,056,000 in FY2015. The District would pay this interfund "loan" back in FY2016. The primary driver of rate increases in this option is San Mateo WWTP Capital Costs.

The second rate option scenario (Appendix J2) includes financing the San Mateo Wastewater Plant Master Plan Improvements Project through both SRF loans and bond issues. The breakdown of projects to be financed through SRF and bond is based off of the latest projections of how the City of San Mateo is planning to fund these projects. This rate option proposes annual rate increases of 9.00% from for FY2016 through FY2020 followed by 5.1% rate increase for FY2021 and 5.0% annual rate increases through FY2025. This rate option scenario will result in a residential wastewater bill increase of 97% from \$47.00 in FY2015 to \$92.38 in FY2025. State Revolving Fund Loans require that the District set aside a reserve fund that is equal to one year's debt service for the loan. The bonds issued have the same requirement but the cash reserve fund is built into the bond proceeds themselves. With SRF financing, the District will have to make transfers to the SRF reserve fund. Both SRF and bond require that the District maintain a debt service ratio of 1.2. This means that annual operating net revenue is 120% of annual debt service payments. This is to ensure that if the District experiences any revenue volatility or financial emergency, it will have a buffer against which to continue to make debt service payments. This scenario includes an interfund loan in FY2015 from the local wastewater capital fund. The interfund loan will be repaid through the first bond issue in FY2016. In order to be able to pay back the interfund loan

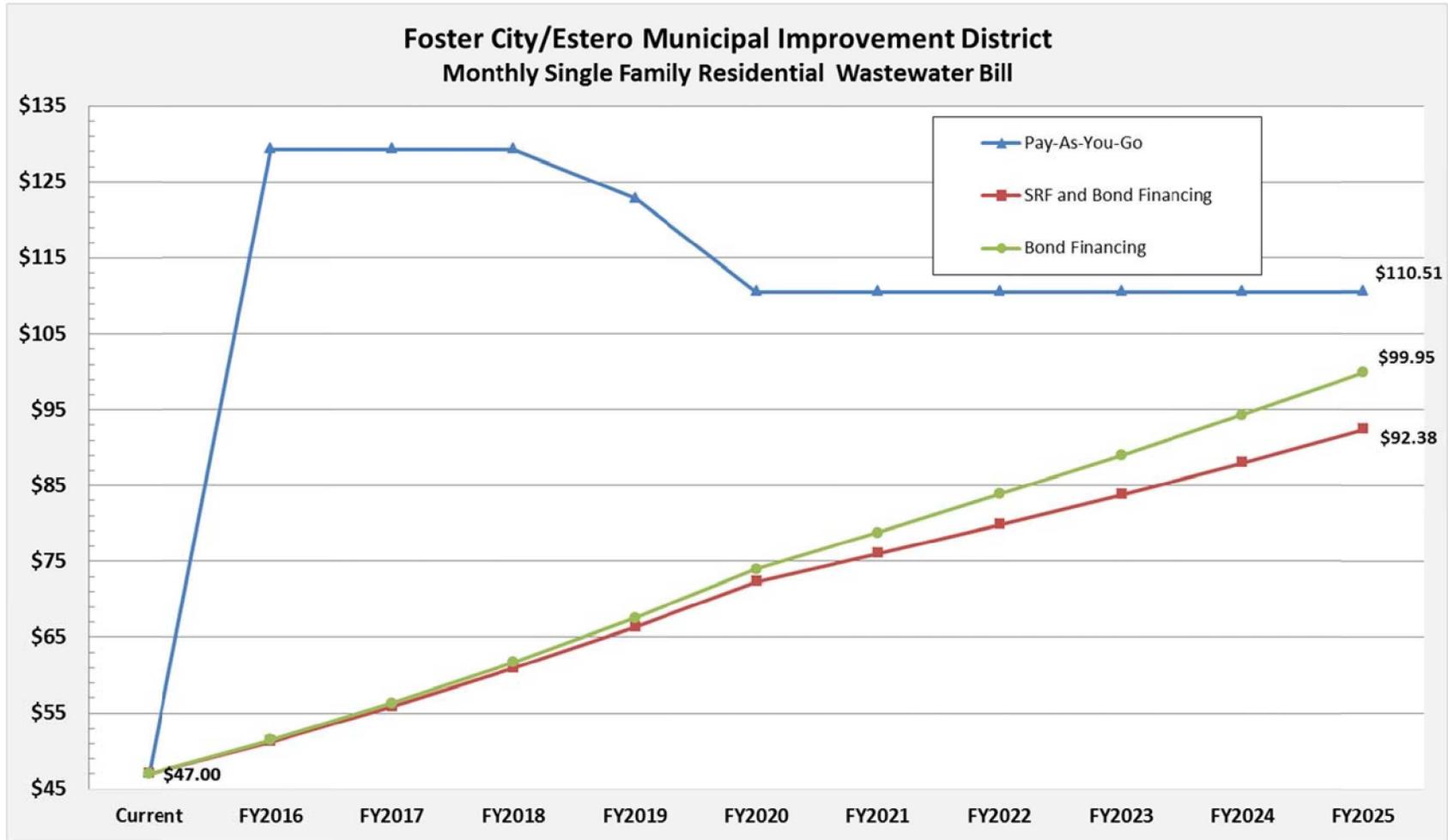
through debt proceeds, the District must pass a reimbursement resolution. Without the reimbursement resolution the district can only reimburse capital costs occurring 60 days before the bond issue. The primary driver of rate increases for this option is to maintain adequate debt service coverage.

The third rate option (Appendix J3) scenario would fund all expenditures associated with the San Mateo Wastewater Plant Master Plan Improvements Project through bond proceeds only (no SRF). This would result in 9.5% rate increases in FY2016 through FY2020 followed by 6.5% rate increases in FY2021 and FY2022 and 6.00% rate increases from FY2023 to FY2025. This rate option scenario results in a single family residential wastewater bill of for FY2025 \$99.95 up from \$47.00 in FY2015, a 113% increase. This option also includes an interfund loan to be paid back through bond proceeds. The primary driver of this rate increase scenario is to maintain adequate debt service coverage.

Chart E shows the monthly residential wastewater bill for all three rate option scenarios that will keep the enterprise financially strong.

- Option 1 Pay-As-You pay as you go will result in the highest residential wastewater bill of \$110.51 by FY2025. While this option results in the highest rate for the customers, it will keep the District debt free.
- Options 2 and 3 include using debt proceeds to help finance the Wastewater Treatment Plant Project.
 - Option 2 results in the lowest single family residential wastewater bill of \$92.38 by FY2025
 - Option 3 results in a bill of \$99.95 by FY2025.

CHART E



Tables 12 and 13 show the calculations for the debt issue size and annual debt service payments for Option 2 and 3 respectively. The estimated borrowing amount of bonds for Option 2 is estimated to be \$52 million with an additional \$38 million to be borrowed through State Revolving Fund (SRF) loans. The borrowing amount under Option 3 is estimated at approximately \$93.6 million.

Table 12
 City of Foster City / Estero Municipal Improvement District
 Estimated Debt Service Costs for Financing Wastewater Projects
 Bond Calculations For Scenario 2: SRF and Bond Financing

	30-Year 2016 Bond	30-Year 2017 Bond	30-Year 2018 Bond	30-Year 2019 Bond	30-Year 2020 Bond	30-Year 2021 Bond	30-Year 2022 Bond	30-Year 2023 Bond
Debt Issue Size	11,830,000	10,748,000	9,509,000	8,632,000	1,143,000	3,340,000	3,348,000	3,435,000
Proceeds For Construction	\$10,845,000	\$9,854,000	\$8,718,000	\$7,897,000	\$1,046,000	\$3,056,000	\$3,063,000	\$3,136,000
Total All Costs	236,600	214,960	190,180	172,640	22,860	66,800	66,960	68,700
Cash Reserve Fund	748,000	679,000	601,000	562,000	74,000	217,000	218,000	230,000
Principal Maturities	30	30	30	30	30	30	30	30
Assumed Avg Interest Rate	4.75%	4.75%	4.75%	5.00%	5.00%	5.00%	5.00%	5.25%
Average Annual Payment	748,000	679,000	601,000	562,000	74,000	217,000	218,000	230,000
Less Interest Earnings on Reserve ¹	11,200	10,200	9,000	8,400	1,100	3,300	3,300	3,500
Net annual Payment	736,800	668,800	592,000	553,600	72,900	213,700	214,700	226,500
Total of All Payments ²	21,356,000	19,385,000	17,159,000	16,046,000	2,113,000	6,194,000	6,223,000	6,565,000
Present Value of Payments ³	11,656,000	10,581,000	9,366,000	8,510,000	1,121,000	3,285,000	3,300,000	3,385,000

[1] Earnings at 1.5%
 [2] Net of reserve fund and interest earned on reserve fund.
 [3] Discounted at assumed bond rate.

Table 13
 City of Foster City / Estero Municipal Improvement District
 Estimated Debt Service Costs for Financing Wastewater Projects
 Bond Calculations For Scenario 3: Bond Financing

	30-Year 2016 Bond	30-Year 2017 Bond	30-Year 2018 Bond	30-Year 2019 Bond	30-Year 2020 Bond	30-Year 2021 Bond	30-Year 2022 Bond	30-Year 2023 Bond	30-Year 2024 Bond	30-Year 2025 Bond
Debt Issue Size	11,830,000	10,748,000	12,478,000	12,066,000	4,179,000	8,129,000	8,767,000	9,256,000	7,546,000	8,644,000
Proceeds For Construction	\$10,845,000	\$9,854,000	\$11,439,000	\$11,040,000	\$3,823,000	\$7,437,000	\$8,022,000	\$8,452,000	\$6,890,000	\$7,893,000
Total All Costs	236,600	214,960	249,560	241,320	83,580	162,580	175,340	185,120	150,920	172,880
Cash Reserve Fund	748,000	679,000	789,000	785,000	272,000	529,000	570,000	619,000	505,000	578,000
Principal Maturities	30	30	30	30	30	30	30	30	30	30
Assumed Avg Interest Rate	4.75%	4.75%	4.75%	5.00%	5.00%	5.00%	5.00%	5.25%	5.25%	5.25%
Average Annual Payment	748,000	679,000	789,000	785,000	272,000	529,000	570,000	619,000	505,000	578,000
Less Interest Earnings on Reserve ¹	11,200	10,200	11,800	11,800	4,100	7,900	8,600	9,300	7,600	8,700
Net annual Payment	736,800	668,800	777,200	773,200	267,900	521,100	561,400	609,700	497,400	569,300
Total of All Payments ²	21,356,000	19,385,000	22,527,000	22,411,000	7,765,000	15,104,000	16,272,000	17,672,000	14,417,000	16,501,000
Present Value of Payments ³	11,656,000	10,581,000	12,296,000	11,886,000	4,118,000	8,011,000	8,630,000	9,111,000	7,433,000	8,508,000

[1] Earnings at 1.5%

[2] Net of reserve fund and interest earned on reserve fund.

[3] Discounted at assumed bond rate.

Table 14 shows what the impact on each customer class would be under each different rate option scenario.

Table 14
City of Foster City / Estero Municipal Improvement District
Projected Wastewater Rate Impacts

	Current	Projected - Fiscal Year Ending June 30				
	2015	2016	2017	2018	2019	2020
Rate Increase Option 1: Pay-As-You-Go		175%	0%	0%	-5%	-10%
Residential (flat monthly rate)						
Single Family	\$47.00	\$129.25	\$129.25	\$129.25	\$122.79	\$110.51
Increase (Decrease)		82.25	0.00	0.00	(6.46)	(12.28)
Townhouse/Duplex	39.55	108.76	108.76	108.76	103.32	92.99
Increase (Decrease)		69.21	0.00	0.00	(5.44)	(10.33)
Apartment/Condominium (Pools w/ Restrooms)	39.55	108.76	108.76	108.76	103.32	92.99
Increase (Decrease)		69.21	0.00	0.00	(5.44)	(10.33)
Commercial (rate per ccf of water use)						
Restaurants	8.54	23.49	23.49	23.49	22.32	20.09
Increase (Decrease) per ccf		14.95	0.00	0.00	(1.17)	(2.23)
Commercial/Hotels/Offices/Industrial/Laundromats	3.00	8.25	8.25	8.25	7.84	7.06
Increase (Decrease) per ccf		5.25	0.00	0.00	(0.41)	(0.78)
Institutional (rate per ccf of water use)						
Institutional/Schools	1.69	4.65	4.65	4.65	4.42	3.98
Increase (Decrease) per ccf		2.96	0.00	0.00	(0.23)	(0.44)
Rate Increase Option 2 - SRF and Bond Financing		9.00%	9.00%	9.00%	9.00%	9.00%
Residential (flat monthly rate)						
Single Family	\$47.00	\$51.23	\$55.84	\$60.87	\$66.35	\$72.32
Increase (Decrease)		4.23	4.61	5.03	5.48	5.97
Townhouse/Duplex	39.55	43.11	46.99	51.22	55.83	60.85
Increase (Decrease)		3.56	3.88	4.23	4.61	5.02
Apartment/Condominium (Pools w/ Restrooms)	39.55	43.11	46.99	51.22	55.83	60.85
Increase (Decrease)		3.56	3.88	4.23	4.61	5.02
Commercial (rate per ccf of water use)						
Restaurants	8.54	9.31	10.15	11.06	12.06	13.15
Increase (Decrease) per ccf		0.77	0.84	0.91	1.00	1.09
Commercial/Hotels/Offices/Industrial/Laundromats	3.00	3.27	3.56	3.88	4.23	4.61
Increase (Decrease) per ccf		0.27	0.29	0.32	0.35	0.38
Institutional (rate per ccf of water use)						
Institutional/Schools	1.69	1.84	2.01	2.19	2.39	2.61
Increase (Decrease) per ccf		0.15	0.17	0.18	0.20	0.22
Rate Increase Option 3 - Bond Financing		9.5%	9.5%	9.5%	9.5%	9.5%
Residential (flat monthly rate)						
Single Family	\$47.00	\$51.47	\$56.36	\$61.71	\$67.57	\$73.99
Increase (Decrease)		4.47	4.89	5.35	5.86	6.42
Townhouse/Duplex	39.55	43.31	47.42	51.92	56.85	62.25
Increase (Decrease)		3.76	4.11	4.50	4.93	5.40
Apartment/Condominium (Pools w/ Restrooms)	39.55	43.31	47.42	51.92	56.85	62.25
Increase (Decrease)		3.76	4.11	4.50	4.93	5.40
Commercial (rate per ccf of water use)						
Restaurants	8.54	9.35	10.24	11.21	12.27	13.44
Increase (Decrease) per ccf		0.81	0.89	0.97	1.06	1.17
Commercial/Hotels/Offices/Industrial/Laundromats	3.00	3.29	3.60	3.94	4.31	4.72
Increase (Decrease) per ccf		0.29	0.31	0.34	0.37	0.41
Institutional (rate per ccf of water use)						
Institutional/Schools	1.69	1.85	2.03	2.22	2.43	2.66
Increase (Decrease) per ccf		0.16	0.18	0.19	0.21	0.23

Table 15 shows for Scenario 2: SRF and Bond Financing what portion of the projects for the San Mateo Wastewater Plant Master Plan Improvements Project will be funded through SRF proceeds and which will be funded through bond proceeds.

Table 15
 City of Foster City / Estero Municipal Improvement District
 Sources and Uses of Wastewater Plant Master Plan Improvements Project

	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimated Project Costs	3,527,000	5,903,000	8,569,000	9,947,000	9,600,000	3,325,000	6,467,000	6,976,000	7,350,000	5,991,000	6,864,000
15% Contingency	<u>529,000</u>	<u>886,000</u>	<u>1,285,000</u>	<u>1,492,000</u>	<u>1,440,000</u>	<u>498,000</u>	<u>970,000</u>	<u>1,046,000</u>	<u>1,102,000</u>	<u>899,000</u>	<u>1,029,000</u>
Total Estimated Project Costs	4,056,000	6,789,000	9,854,000	11,439,000	11,040,000	3,823,000	7,437,000	8,022,000	8,452,000	6,890,000	7,893,000
SRF	0	0	0	2,721,000	3,143,000	2,777,000	4,381,000	4,959,000	5,861,000	6,685,000	7,553,000
Bond	0	10,845,000	9,854,000	8,718,000	7,897,000	1,046,000	3,056,000	3,063,000	2,591,000	205,000	340,000
Interfund Loan	4,056,000	(4,056,000)	0	0	0	0	0	0	0	0	0

Recommendation: BWA recommends that the District pursue Rate Option Scenario 3: Bond Financing.

APPENDIX A: Cash Flow Projections for Water Rate Option Scenarios 1, 2, 4 and 4

APPENDIX A1

City of Foster City / Estero Municipal Improvement District

Water Enterprise Cash Flow Projection - Uniform Rate Structure without Smoothing

UNIFORM WITHOUT SMOOTHING											
Fiscal Year Ending June 30	Five Year Projection						Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth [1]		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Fixed Charge	\$ 16.00	\$ 17.25	\$ 18.20	\$ 19.20	\$ 20.25	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95
Fixed Rate Adjustment		7.75%	5.50%	5.50%	5.50%	3.50%	0.0%	0.0%	0.0%	0.0%	0.0%
SFR Variable Charge	\$ 3.32	\$ 4.40	\$ 4.31	\$ 4.53	\$ 5.16	\$ 5.49	\$ 5.25	\$ 5.30	\$ 5.59	\$ 5.74	\$ 5.80
Variable Rate Adjustment		32.4%	-2.0%	5.0%	14.1%	6.4%	-4.5%	1.0%	5.6%	2.5%	1.0%
Monthly Service Charge Single Family (9.5 ccf)	\$43.39	\$59.00	\$59.13	\$62.20	\$69.31	\$73.14	\$70.80	\$71.30	\$74.09	\$75.44	\$76.00
Rate Adjustment		36.0%	0.2%	5.2%	11.4%	5.5%	-3.2%	0.7%	3.9%	1.8%	0.8%
Beginning Fund Balance	\$2,685,544	\$3,361,000	\$3,579,000	\$3,756,000	\$4,109,000	\$4,572,000	\$5,146,000	\$5,625,000	\$6,006,000	\$6,285,000	\$6,459,000
Revenues											
<i>Water Sales & Service Charges</i>											
Motor Charge Revenue Estimate (Table 9)	3,624,000	3,755,000	4,011,000	4,285,000	4,575,000	4,791,000	4,803,000	4,815,000	4,827,000	4,839,000	4,851,000
Volumetric Revenue Estimate (Table 9)	7,250,000	9,300,000	9,229,000	9,817,000	11,335,000	12,208,000	11,692,000	11,834,000	12,525,000	12,876,000	13,045,000
Connection Fees [1]	590,400	278,000	77,000	77,000	0	0	0	0	0	0	0
Interest Earnings - Operating Reserve [2]	70,000	34,000	36,000	38,000	41,000	46,000	51,000	56,000	60,000	63,000	65,000
Interest Earnings - Capital Improvement Fund [3]	50,000	52,000	53,000	55,000	54,000	52,000	52,000	52,000	52,000	52,000	52,000
Water Sustainability Fund Revenue	38,000	0	0	0	0	0	0	0	0	0	0
Operating Revenues	11,622,400	13,419,000	13,406,000	14,272,000	16,005,000	17,097,000	16,598,000	16,757,000	17,464,000	17,830,000	18,013,000
Expenses											
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	541,000	555,000	569,000	583,000	598,000
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	309,000	317,000	325,000	333,000	341,000
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	505,000	518,000	531,000	544,000	558,000
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	10,742,000	10,884,000	11,575,000	11,926,000	12,095,000
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	923,000	946,000	970,000	994,000	1,019,000
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Operating Expenses	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	15,714,000	15,971,000	16,780,000	17,251,000	17,545,000
Operating Net Revenues	880,224	623,000	582,000	758,000	868,000	979,000	884,000	786,000	684,000	579,000	468,000
Water Sustainability Fund Transfer	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital Improvement Transfer [4]	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Total Expenses	10,947,176	13,201,000	13,229,000	13,919,000	15,542,000	16,523,000	16,119,000	16,376,000	17,185,000	17,656,000	17,950,000
Revenues Less O&M Expenses	880,224	623,000	582,000	758,000	868,000	979,000	884,000	786,000	684,000	579,000	468,000
Revenues Less Total Expenses	675,224	218,000	177,000	353,000	463,000	574,000	479,000	381,000	279,000	174,000	63,000
Ending Fund Balance	3,360,768	3,579,000	3,756,000	4,109,000	4,572,000	5,146,000	5,625,000	6,006,000	6,285,000	6,459,000	6,522,000
Revenue Test: Annual Revenues > O&M Expenses											
Annual Revenues Less O&M Expenses	880,224	623,000	582,000	758,000	868,000	979,000	884,000	786,000	684,000	579,000	468,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	3,360,768	3,579,000	3,756,000	4,109,000	4,572,000	5,146,000	5,625,000	6,006,000	6,285,000	6,459,000	6,522,000
25% operating expenses	2,690,000	3,200,000	3,210,000	3,380,000	3,780,000	4,030,000	3,930,000	3,990,000	4,200,000	4,310,000	4,390,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Based on CDD and City of Foster City/EMID estimates

[2] Calculated as 1% of the Beginning Fund Balance of the Water Revenue Fund

[3] Calculated as 1% of the Beginning Fund Balance of the Water Capital Improvement Project Fund

[4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX A2

City of Foster City / Estero Municipal Improvement District
Water Enterprise Cash Flow Projection - Uniform Rate Structure with Smoothing

UNIFORM WITH SMOOTHING											
Fiscal Year Ending June 30	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth [1]		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Fixed Charge	\$ 16.00	\$ 17.25	\$ 18.20	\$ 19.20	\$ 20.25	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95
Fixed Rate Adjustment		7.8%	5.5%	5.5%	5.5%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%
SFR Variable Charge	\$ 3.32	\$ 4.22	\$ 4.64	\$ 4.96	\$ 5.11	\$ 5.21	\$ 5.31	\$ 5.42	\$ 5.53	\$ 5.64	\$ 5.75
Variable Rate Adjustment		27.1%	10.0%	6.9%	3.0%	2.0%	1.9%	2.1%	2.0%	2.0%	2.0%
Monthly Service Charge Single Family (9.5 ccf)	\$43.39	\$57.34	\$62.28	\$66.32	\$68.80	\$70.45	\$71.40	\$72.44	\$73.49	\$74.53	\$75.58
Rate Adjustment		32.2%	8.6%	6.5%	3.7%	2.4%	1.3%	1.5%	1.4%	1.4%	1.4%
Beginning Fund Balance	\$2,685,544	\$3,361,000	\$3,209,000	\$4,092,000	\$5,389,000	\$5,746,000	\$5,700,000	\$6,324,000	\$6,981,000	\$7,127,000	\$7,095,000
Revenues											
Water Sales & Service Charges											
Meter Charge Revenue Estimate (Table 9)	3,624,000	3,755,000	4,011,000	4,285,000	4,575,000	4,791,000	4,803,000	4,815,000	4,827,000	4,839,000	4,851,000
Volumetric Revenue Estimate (Table 9)	7,250,000	8,930,000	9,939,000	10,758,000	11,216,000	11,577,000	11,831,000	12,103,000	12,382,000	12,662,000	12,943,000
Connection Fees [1]	590,400	278,000	77,000	77,000	0	0	0	0	0	0	0
Interest Earnings - Operating Reserve [2]	70,000	34,000	32,000	41,000	54,000	57,000	57,000	63,000	70,000	71,000	71,000
Interest Earnings - Capital Improvement Fund [3]	50,000	52,000	53,000	55,000	54,000	52,000	52,000	52,000	52,000	52,000	52,000
Water Sustainability Fund Revenue	38,000	0	0	0	0	0	0	0	0	0	0
Operating Revenues	11,622,400	13,049,000	14,112,000	15,216,000	15,899,000	16,477,000	16,743,000	17,033,000	17,331,000	17,624,000	17,917,000
Expenses											
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	541,000	555,000	569,000	583,000	598,000
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	309,000	317,000	325,000	333,000	341,000
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	505,000	518,000	531,000	544,000	558,000
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	10,742,000	10,884,000	11,575,000	11,926,000	12,095,000
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	923,000	946,000	970,000	994,000	1,019,000
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Operating Expenses	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	15,714,000	15,971,000	16,780,000	17,251,000	17,545,000
Operating Net Revenues	880,224	253,000	1,288,000	1,702,000	762,000	359,000	1,029,000	1,062,000	551,000	373,000	372,000
Water Sustainability Fund Transfer	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital Improvement Transfer [4]	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Total Expenses	10,947,176	13,201,000	13,229,000	13,919,000	15,542,000	16,523,000	16,119,000	16,376,000	17,185,000	17,656,000	17,950,000
Revenues Less O&M Expenses	880,224	253,000	1,288,000	1,702,000	762,000	359,000	1,029,000	1,062,000	551,000	373,000	372,000
Revenues Less Total Expenses	675,224	(152,000)	883,000	1,297,000	357,000	(46,000)	624,000	657,000	146,000	(32,000)	(33,000)
Ending Fund Balance	3,360,768	3,209,000	4,092,000	5,389,000	5,746,000	5,700,000	6,324,000	6,981,000	7,127,000	7,095,000	7,062,000
Revenue Test: Annual Revenues > O&M Expenses											
Annual Revenues Less O&M Expenses	880,224	253,000	1,288,000	1,702,000	762,000	359,000	1,029,000	1,062,000	551,000	373,000	372,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	3,360,768	3,209,000	4,092,000	5,389,000	5,746,000	5,700,000	6,324,000	6,981,000	7,127,000	7,095,000	7,062,000
25% operating expenses	2,690,000	3,200,000	3,210,000	3,380,000	3,780,000	4,030,000	3,930,000	3,990,000	4,200,000	4,310,000	4,390,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Based on CDD and City of Foster City/EMID estimates

[2] Calculated as 1% of the Beginning Fund Balance of the Water Revenue Fund

[3] Calculated as 1% of the Beginning Fund Balance of the Water Capital Improvement Project Fund

[4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX A3

City of Foster City / Estero Municipal Improvement District

Water Enterprise Cash Flow Projection - Residential Two Tier Rate Structure without Smoothing

TWO TIER WITHOUT SMOOTHING											
Fiscal Year Ending June 30	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth [1]		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Fixed Charge	\$16.00	\$17.25	\$18.20	\$19.20	\$20.25	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95
Fixed Rate Adjustment		7.81%	5.51%	5.49%	5.47%	3.46%	0%	0%	0%	0%	0%
SFR Variable Charge	\$3.32	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
Variable Rate Adjustment		29.5%	-2.0%	5.2%	15.2%	6.5%	-5.9%	1.0%	5.7%	2.6%	1.1%
Monthly Service Charge Single Family (9.5 ccf)	\$43.39	\$58.11	\$58.24	\$61.32	\$68.80	\$72.63	\$69.56	\$70.05	\$72.84	\$74.17	\$74.73
Rate Adjustment		33.9%	0.2%	5.3%	12.2%	5.6%	-4.2%	0.7%	4.0%	1.8%	0.8%
Beginning Fund Balance	\$2,685,544	\$3,361,000	\$3,629,000	\$3,857,000	\$4,263,000	\$4,815,000	\$5,480,000	\$5,941,000	\$6,304,000	\$6,566,000	\$6,724,000
Revenues											
Water Sales & Service Charges											
Meter Charge Revenue Estimate (Table 9)	3,624,000	3,755,000	4,011,000	4,285,000	4,575,000	4,791,000	4,803,000	4,815,000	4,827,000	4,839,000	4,851,000
Volumetric Revenue Estimate (Table 9)	7,250,000	9,350,000	9,280,000	9,869,000	11,422,000	12,297,000	11,670,000	11,813,000	12,505,000	12,857,000	13,027,000
Connection Fees [1]	590,400	278,000	77,000	77,000	0	0	0	0	0	0	0
Interest Earnings - Operating Reserve [2]	70,000	34,000	36,000	39,000	43,000	48,000	55,000	59,000	63,000	66,000	67,000
Interest Earnings - Capital Improvement Fund [3]	50,000	52,000	53,000	55,000	54,000	52,000	52,000	52,000	52,000	52,000	52,000
Water Sustainability Fund Revenue	38,000	0	0	0	0	0	0	0	0	0	0
Operating Revenues	11,622,400	13,469,000	13,457,000	14,325,000	16,094,000	17,188,000	16,580,000	16,739,000	17,447,000	17,814,000	17,997,000
Expenses											
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	541,000	555,000	569,000	583,000	598,000
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	309,000	317,000	325,000	333,000	341,000
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	505,000	518,000	531,000	544,000	558,000
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	10,742,000	10,884,000	11,575,000	11,926,000	12,095,000
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	923,000	946,000	970,000	994,000	1,019,000
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Operating Expenses	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	15,714,000	15,971,000	16,780,000	17,251,000	17,545,000
Operating Net Revenues	880,224	673,000	633,000	811,000	957,000	1,070,000	866,000	768,000	667,000	563,000	452,000
Water Sustainability Fund Transfer	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital Improvement Transfer [4]	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Total Expenses	10,947,176	13,201,000	13,229,000	13,919,000	15,542,000	16,523,000	16,119,000	16,376,000	17,185,000	17,656,000	17,950,000
Revenues Less O&M Expenses	880,224	673,000	633,000	811,000	957,000	1,070,000	866,000	768,000	667,000	563,000	452,000
Revenues Less Total Expenses	675,224	268,000	228,000	406,000	552,000	665,000	461,000	363,000	262,000	158,000	47,000
Ending Fund Balance	3,360,768	3,629,000	3,857,000	4,263,000	4,815,000	5,480,000	5,941,000	6,304,000	6,566,000	6,724,000	6,771,000
Revenue Test: Annual Revenues > O&M Expenses											
Annual Revenues Less O&M Expenses	880,224	673,000	633,000	811,000	957,000	1,070,000	866,000	768,000	667,000	563,000	452,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	3,360,768	3,629,000	3,857,000	4,263,000	4,815,000	5,480,000	5,941,000	6,304,000	6,566,000	6,724,000	6,771,000
25% operating expenses	2,690,000	3,200,000	3,210,000	3,380,000	3,780,000	4,030,000	3,930,000	3,990,000	4,200,000	4,310,000	4,390,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Based on CDD and City of Foster City/EMID estimates

[2] Calculated as 1% of the Beginning Fund Balance of the Water Revenue Fund

[3] Calculated as 1% of the Beginning Fund Balance of the Water Capital Improvement Project Fund

[4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX A4

City of Foster City / Estero Municipal Improvement District
 Water Enterprise Cash Flow Projection - Residential Two Tier Rate Structure

TWO TIER WITH SMOOTHING											
Fiscal Year Ending June 30	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth [1]		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Fixed Charge	\$16.00	\$17.25	\$18.20	\$19.20	\$20.25	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95	\$20.95
Fixed Rate Adjustment		7.81%	5.51%	5.49%	5.47%	3.46%	0%	0%	0%	0%	0%
SFR Variable Charge	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Variable Rate Adjustment		24.4%	7.3%	7.2%	5.9%	1.6%	0.6%	0.0%	4.1%	1.3%	2.4%
Monthly Service Charge Single Family (9.5 ccf)	\$43.39	\$56.49	\$60.29	\$64.33	\$68.04	\$69.50	\$69.78	\$69.78	\$71.78	\$72.44	\$73.68
Rate Adjustment		30.2%	6.7%	6.7%	5.8%	2.1%	0.4%	0.0%	2.9%	0.9%	1.7%
Beginning Fund Balance	\$2,685,544	\$3,361,000	\$3,259,000	\$3,953,000	\$5,064,000	\$5,447,000	\$5,375,000	\$5,890,000	\$6,191,000	\$6,199,000	\$5,933,000
Revenues											
Water Sales & Service Charges											
Meter Charge Revenue Estimate (Table 9)	3,624,000	3,755,000	4,011,000	4,285,000	4,575,000	4,791,000	4,803,000	4,815,000	4,827,000	4,839,000	4,851,000
Volumetric Revenue Estimate (Table 9)	7,250,000	8,980,000	9,749,000	10,573,000	11,245,000	11,554,000	11,725,000	11,751,000	12,252,000	12,437,000	12,767,000
Connection Fees [1]	590,400	278,000	77,000	77,000	0	0	0	0	0	0	0
Interest Earnings - Operating Reserve [2]	70,000	34,000	33,000	40,000	51,000	54,000	54,000	59,000	62,000	62,000	59,000
Interest Earnings - Capital Improvement Fund [3]	50,000	52,000	53,000	55,000	54,000	52,000	52,000	52,000	52,000	52,000	52,000
Other	38,000	0	0	0	0	0	0	0	0	0	0
Operating Revenues	11,622,400	13,099,000	13,923,000	15,030,000	15,925,000	16,451,000	16,634,000	16,677,000	17,193,000	17,390,000	17,729,000
Expenses											
Employee Services	1,555,000	1,647,000	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000
Internal Services - Others	412,479	478,000	490,000	502,000	515,000	528,000	541,000	555,000	569,000	583,000	598,000
Internal Services - ERF	247,858	273,000	280,000	287,000	294,000	301,000	309,000	317,000	325,000	333,000	341,000
Services & Supplies	478,050	447,000	458,000	469,000	481,000	493,000	505,000	518,000	531,000	544,000	558,000
SFPUC Water Purchases	6,480,504	8,350,000	8,279,000	8,867,000	10,385,000	11,258,000	10,742,000	10,884,000	11,575,000	11,926,000	12,095,000
BAWSCA Bond Repayment	692,518	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Reallocation	795,767	816,000	836,000	857,000	878,000	900,000	923,000	946,000	970,000	994,000	1,019,000
Capital Outlay	80,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Operating Expenses	10,742,176	12,796,000	12,824,000	13,514,000	15,137,000	16,118,000	15,714,000	15,971,000	16,780,000	17,251,000	17,545,000
Operating Net Revenues	880,224	303,000	1,099,000	1,516,000	788,000	333,000	920,000	706,000	413,000	139,000	184,000
Water Sustainability Fund Transfer	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital Improvement Transfer [4]	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000	205,000
Total Expenses	10,947,176	13,201,000	13,229,000	13,919,000	15,542,000	16,523,000	16,119,000	16,376,000	17,185,000	17,656,000	17,950,000
Revenues Less O&M Expenses	880,224	303,000	1,099,000	1,516,000	788,000	333,000	920,000	706,000	413,000	139,000	184,000
Revenues Less Total Expenses	675,224	(102,000)	694,000	1,111,000	383,000	(72,000)	515,000	301,000	8,000	(266,000)	(221,000)
Ending Fund Balance	3,360,768	3,259,000	3,953,000	5,064,000	5,447,000	5,375,000	5,890,000	6,191,000	6,199,000	5,933,000	5,712,000
Revenue Test: Annual Revenues > O&M Expenses											
Annual Revenues Less O&M Expenses	880,224	303,000	1,099,000	1,516,000	788,000	333,000	920,000	706,000	413,000	139,000	184,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	3,360,768	3,259,000	3,953,000	5,064,000	5,447,000	5,375,000	5,890,000	6,191,000	6,199,000	5,933,000	5,712,000
25% operating expenses	2,690,000	3,200,000	3,210,000	3,380,000	3,780,000	4,030,000	3,930,000	3,990,000	4,200,000	4,310,000	4,390,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

APPENDIX B: Rates over ten years for Rate Option Scenarios 1, 2, 3 and 4

APPENDIX B1

City of Foster City / Estero Municipal Improvement District
Proposed Water Rates - Uniform without Smoothing

UNIFORM WITHOUT SMOOTHING

	2012	2013	Current Rates	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00

Conservation-Based Water Rate Model (based on bi-monthly allotments)

Single Family Residential													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Tier 3: over 20 ccf	4.70	4.70	\$4.98	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Multi-Family Residential (per living unit)													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Tier 3: over 10 ccf	4.70	4.70	\$4.98	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Irrigation Customers													
< 100% of Annual Water Budget	3.13	3.13	\$3.32	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
> 100% of Annual Water Budget	4.70	4.70	\$4.98	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80
Commercial and Fire Line Customers													
Base Consumption Rate	3.13	3.13	\$3.32	\$4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80

Monthly Private Fire Service Protection Meter Charge

3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80

(Minimum charge is equivalent to 1-1/2" meter charge)

UNIFORM WITH SMOOTHING

	2012	2013	Current Rates	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00

Conservation-Based Water Rate Model (based on bi-monthly allotments)													
Single Family Residential													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Tier 3: over 20 ccf	4.70	4.70	\$4.98	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Multi-Family Residential (per living unit)													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Tier 3: over 10 ccf	4.70	4.70	\$4.98	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Irrigation Customers													
< 100% of Annual Water Budget	3.13	3.13	\$3.32	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
> 100% of Annual Water Budget	4.70	4.70	\$4.98	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75
Commercial and Fire Line Customers													
Base Consumption Rate	3.13	3.13	\$3.32	\$4.22	4.64	4.96	5.11	5.21	5.31	5.42	5.53	5.64	5.75

Monthly Private Fire Service Protection Meter Charge													
3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80

(Minimum charge is equivalent to 1-1/2" meter charge)

7.1 - 112

TWO TIER WITHOUT SMOOTHING

	2012	2013	Current Rates	Proposed Rates Two Tier FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00
Conservation-Based Water Rate Model (based on bi-monthly allotments)													
Single Family Residential													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
Tier 3: over 20 ccf	4.70	4.70	\$4.98	4.64	4.55	4.77	5.37	5.70	5.46	5.51	5.81	5.96	6.02
Multi-Family Residential (per living unit)													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
Tier 3: over 10 ccf	4.70	4.70	\$4.98	4.67	4.58	4.79	5.40	5.73	5.49	5.54	5.84	5.98	6.04
Irrigation Customers													
< 100% of Annual Water Budget	3.13	3.13	\$3.32	4.30	4.22	4.43	5.11	5.44	5.12	5.17	5.46	5.60	5.66
> 100% of Annual Water Budget	4.70	4.70	\$4.98	5.65	5.57	5.79	6.43	6.78	6.54	6.61	6.92	7.08	7.16
Commercial and Fire Line Customers													
Base Consumption Rate	3.13	3.13	\$3.32	4.40	4.31	4.53	5.13	5.46	5.21	5.26	5.56	5.70	5.76
Monthly Private Fire Service Protection Meter Charge													
3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80
(Minimum charge is equivalent to 1-1/2" meter charge)													

7.1 - 113

TWO TIER WITH SMOOTHING

	2012	2013	Current Rates	Proposed Rates Two Tier FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Monthly Meter Charge													
3/4"	\$15.80	\$15.80	\$16.00	\$17.25	18.20	19.20	20.25	20.85	20.85	20.85	20.85	20.85	20.85
1"	27.65	27.65	28.00	28.75	30.35	32.00	33.75	34.75	34.75	34.75	34.75	34.75	34.75
1-1/2"	79.00	79.00	80.00	69.00	72.80	76.80	81.00	83.40	83.40	83.40	83.40	83.40	83.40
2"	126.40	126.40	128.00	92.00	97.10	102.40	108.00	111.20	111.20	111.20	111.20	111.20	111.20
3"	221.20	221.20	224.00	201.25	212.35	224.00	236.25	243.25	243.25	243.25	243.25	243.25	243.25
4"	347.60	347.60	352.00	362.25	382.20	403.20	425.25	437.85	437.85	437.85	437.85	437.85	437.85
6"	663.60	663.60	672.00	805.00	849.35	896.00	945.00	973.00	973.00	973.00	973.00	973.00	973.00
8"	1042.80	1042.80	1,056.00	1,380.00	1456.00	1536.00	1620.00	1668.00	1668.00	1668.00	1668.00	1668.00	1668.00
Conservation-Based Water Rate Model (based on bi-monthly allotments)													
<i>Single Family Residential</i>													
Tier 1: 0 to 10 ccf	2.35	2.35	\$2.49	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 2: 11 to 20 ccf	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 3: over 20 ccf	4.70	4.70	\$4.98	4.47	4.78	5.11	5.29	5.36	5.49	5.49	5.70	5.76	5.90
<i>Multi-Family Residential (per living unit)</i>													
Tier 1: 0 to 5 ccf	2.35	2.35	\$2.49	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 2: 6 to 10 ccf	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
Tier 3: over 10 ccf	4.70	4.70	\$4.98	4.48	4.81	5.13	5.32	5.39	5.51	5.51	5.72	5.79	5.92
<i>Irrigation Customers</i>													
≤ 100% of Annual Water Budget	3.13	3.13	\$3.32	4.13	4.43	4.75	5.03	5.11	5.14	5.14	5.35	5.42	5.55
> 100% of Annual Water Budget	4.70	4.70	\$4.98	5.43	5.85	6.20	6.33	6.37	6.58	6.58	6.78	6.85	7.01
<i>Commercial and Fire Line Customers</i>													
Base Consumption Rate	3.13	3.13	\$3.32	4.22	4.52	4.85	5.05	5.13	5.24	5.24	5.45	5.51	5.64
Monthly Private Fire Service Protection Meter Charge													
3/4"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
1-1/2"	27.65	27.65	28.00	24.15	25.50	26.90	28.35	29.20	29.20	29.20	29.20	29.20	29.20
2"	44.25	44.25	44.80	32.20	34.00	35.85	37.80	38.95	38.95	38.95	38.95	38.95	38.95
3"	77.45	77.45	78.40	70.45	74.35	78.40	82.70	85.15	85.15	85.15	85.15	85.15	85.15
4"	121.70	121.70	123.20	126.80	133.80	141.15	148.85	153.25	153.25	153.25	153.25	153.25	153.25
6"	232.30	232.30	235.20	281.75	297.30	313.60	330.75	340.55	340.55	340.55	340.55	340.55	340.55
8"	365.00	365.00	369.60	483.00	509.60	537.60	567.00	583.80	583.80	583.80	583.80	583.80	583.80
(Minimum charge is equivalent to 1-1/2" meter charge)													

7.1 - 114

Appendix C
 Foster City / Estero Municipal Improvement District
 Water Enterprise Fixed & Variable Breakdown (Uniform with Smoothing)
 For Informational Purposes

Data for Fiscal Year Ending June 30: 2016

	Total	Allocation %		Allocation \$	
		Fixed	Variable	Fixed	Variable
Revenues					
Water Sales & Service Charges					
Fixed Meter Charges (est.) (Table 5)	\$3,755,000	100%	0%	\$3,755,000	\$0
Water Quantity Charges (est.) (Table 5)	8,930,000	0%	100%	0	8,930,000
Connection Fees	278,000		100%	0	278,000
Interest Earnings - Operating Reserve	34,000	100%	0%	34,000	0
Interest Earnings - Capital Improvement Fund	52,000	100%	0%	52,000	0
Other	0	100%	0%	0	0
Total Revenues	13,049,000	29.4%	68.4%	3,841,000	8,930,000

Expenses					
Employee Services	1,647,000	100%	0%	1,647,000	0
Internal Services - Others	478,000	100%	0%	478,000	0
Internal Services - ERF	273,000	100%	0%	273,000	0
Services & Supplies	447,000	100%	0%	447,000	0
SFPUC Water Purchases	8,350,000	0%	100%	0	8,350,000
BAWSCA Bond Repayment	750,000	0%	100%		750,000
Reallocation	816,000	100%	0%	816,000	0
Capital Outlay	35,000	100%	0%	35,000	0
Water Sustainability Transfer	200,000	0%	100%	200,000	0
Capital Improvement Transfer	205,000	0%	100%	205,000	0
Total	13,201,000	31.1%	68.9%	4,101,000	9,100,000
Excess Revenues Over (Under) Expenses	(152,000)			(260,000)	(170,000)

Fixed means revenue or expense is not directly affected by variations in water consumption.
Variable means revenue or expense is directly affected by variations in water consumption.

10-YEAR RATE SMOOTHING MODEL

Fiscal Year Ending June 30	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fixed Meter Charge Increase	0.0%	7.75%	5.50%	5.50%	5.50%	3.50%	0.0%	0.0%	0.0%	0.0%	0.0%
Fixed Revenues +/- 5% of Fixed Costs?		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Base Consumption Rate Increase	0.0%	27.0%	10.0%	7.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Base Consumption Rate > SFPUC Rate+BAWSCA?		YES	YES	YES	YES	NO	YES	YES	YES	YES	YES
Reserves % Above (Below) Reserve Target		0.3%	27.5%	59.4%	52.0%	41.4%	60.9%	75.0%	69.7%	64.6%	60.9%
Reserve Target Met? (See Table 4)		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Meter Charge Revenue Estimate	\$ 3,624,000	\$ 3,755,000	\$ 4,011,000	\$ 4,285,000	\$ 4,575,000	\$ 4,791,000	\$ 4,803,000	\$ 4,815,000	\$ 4,827,000	\$ 4,839,000	\$ 4,851,000
Other Fixed Revenue Estimate	\$ 710,400	\$ 364,000	\$ 162,000	\$ 173,000	\$ 108,000	\$ 109,000	\$ 109,000	\$ 115,000	\$ 122,000	\$ 123,000	\$ 123,000
Volumetric Revenue Estimate	\$ 7,250,000	\$ 8,930,000	\$ 9,939,000	\$ 10,758,000	\$ 11,216,000	\$ 11,577,000	\$ 11,831,000	\$ 12,103,000	\$ 12,382,000	\$ 12,662,000	\$ 12,943,000
Total Projected Revenue	\$ 11,584,400	\$ 13,049,000	\$ 14,112,000	\$ 15,216,000	\$ 15,898,000	\$ 16,477,000	\$ 16,743,000	\$ 17,033,000	\$ 17,331,000	\$ 17,624,000	\$ 17,917,000
Total Projected Revenue (Rounded '000's)	\$ 11,584,000	\$ 13,049,000	\$ 14,112,000	\$ 15,216,000	\$ 15,898,000	\$ 16,477,000	\$ 16,743,000	\$ 17,033,000	\$ 17,331,000	\$ 17,624,000	\$ 17,917,000
Revenue Allocation											
Fixed	37.4%	31.6%	29.6%	29.3%	29.5%	29.7%	29.3%	28.9%	28.6%	28.2%	27.8%
Variable	62.6%	68.4%	70.4%	70.7%	70.5%	70.3%	70.7%	71.1%	71.4%	71.8%	72.2%
Cost Analysis											
Fixed	34.5%	31.1%	31.7%	30.9%	28.4%	27.3%	28.7%	29.0%	28.3%	28.2%	28.4%
Variable	65.5%	68.9%	68.3%	69.1%	71.6%	72.7%	71.3%	71.0%	71.7%	71.8%	71.6%
Base Meter Charge Calculation											
Monthly charge per meter equivalent (Rounded to nearest \$0.05)	\$ 16.00	\$ 17.25	\$ 18.20	\$ 19.20	\$ 20.25	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95	\$ 20.95
Annual charge per meter equivalent	\$ 192.00	\$ 207.00	\$ 218.40	\$ 230.40	\$ 243.00	\$ 251.40	\$ 251.40	\$ 251.40	\$ 251.40	\$ 251.40	\$ 251.40
Meter equivalents [1]	18,871	18,138	18,367	18,597	18,826	19,056	19,104	19,152	19,200	19,248	19,296
Fixed Revenue Estimate	\$ 3,624,000	\$ 3,755,000	\$ 4,011,000	\$ 4,285,000	\$ 4,575,000	\$ 4,791,000	\$ 4,803,000	\$ 4,815,000	\$ 4,827,000	\$ 4,839,000	\$ 4,851,000
Base Consumption Rate Calculation											
EMID Proposed Rate (Rounded to nearest \$0.01)	\$ 3.32	\$ 4.22	\$ 4.64	\$ 4.96	\$ 5.11	\$ 5.21	\$ 5.31	\$ 5.42	\$ 5.53	\$ 5.64	\$ 5.75
Projected annual water sales (ccf) [2]	2,183,704	2,116,000	2,142,000	2,169,000	2,195,000	2,222,000	2,228,000	2,233,000	2,239,000	2,245,000	2,251,000
Variable revenue estimate	\$7,250,000	\$8,930,000	\$9,939,000	\$10,758,000	\$11,216,000	\$11,577,000	\$11,831,000	\$12,103,000	\$12,382,000	\$12,662,000	\$12,943,000
% Spread between EMID and SFPUC Surcharge											
SFPUC PROJECTED RATES	\$2.93	\$3.83	\$3.75	\$3.97	\$4.60	\$4.93	\$4.69	\$4.74	\$5.03	\$5.17	\$5.23
Increase (Decrease) %		30.7%	(2.1%)	5.9%	15.9%	7.2%	(4.9%)	1.1%	6.1%	2.8%	1.2%
BAWSCA Surcharge	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35						
SFPUC Rate + BAWSCA Surcharge	\$3.28	\$4.18	\$4.10	\$4.32	\$4.95	\$5.28	\$5.04	\$5.09	\$5.38	\$5.52	\$5.58
EMID Fixed Meter Charge Increase (Decrease)		7.8%	5.5%	5.5%	5.5%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%
EMID Base Consumption Rate Increase (Decrease)		27.1%	10.0%	6.9%	3.0%	2.0%	1.9%	2.1%	2.0%	2.0%	2.0%
Raw rate without Smoothing	4.40	4.31	4.53	5.16	5.49	5.25	5.30	5.59	5.74	5.80	5.80

Note:
 [1] Household growth based on projections from the CDD.; FY2016 onwards uses updated meter ratios
 [2] Includes 2% water loss factor

7.1 - 116

Appendix E
 City of Foster City / Estero Municipal Improvement District
 Uniform Rate Structure - Raw Rate Calculation

Uniform Rate Structure			
	FY2016		
	Total Cost	Total Water Sales	Unit Cost (CCF)
Uniform Tier Structure - All Tiers			
SFPUC Water Purchases	8,350,000		
BAWSCA Bond Surcharge	750,000		
Water Sustainability Fund	<u>200,000</u>		
	9,300,000	2,116,000	4.40

Appendix F

City of Foster City / Estero Municipal Improvement District

Two Tier Conservation Based Rate Structure - Raw Rate Calculation

FY2016			Volumetric Water Costs	
Class	Usage per class	% of total usage	Base Charge Costs	Conservation Charge Costs
SFR	603,710	29%	\$ 2,653,356.59	\$ 57,061.43
MFR	704,142	33%	\$ 3,094,762.55	\$ 66,554.03
Commercial	284,176	13%	\$ 1,248,976.23	\$ 26,859.70
Fire Line	162	0%	\$ 712.40	\$ 15.32
Irrigation	523,811	25%	\$ 2,302,192.24	\$ 49,509.51
	<u>2,116,000.00</u>	<u>100%</u>	<u>\$ 9,300,000.00</u>	<u>\$ 200,000.00</u>

Class	Tier 1 Rate	Net Basic Cost	Over Water Allotment	Conservation Charge (Tier 2)	Tier 2 Rate
SFR	4.30	\$ 2,596,295.16	166,566.41	0.34	4.64
MFR	4.30	\$ 3,028,208.51	180,547.56	0.37	4.67
Commercial	4.40	\$ 1,248,976.23	~		
Fire Line	4.40	\$ 712.40	N/A		
Irrigation	4.30	\$ 2,252,682.73	36,618.50	1.35	5.65
		<u>\$ 9,126,875.02</u>			

7.1 - 118

Appendix G
 City of Foster City / Estero Municipal Improvement District
 Historical Water Sales

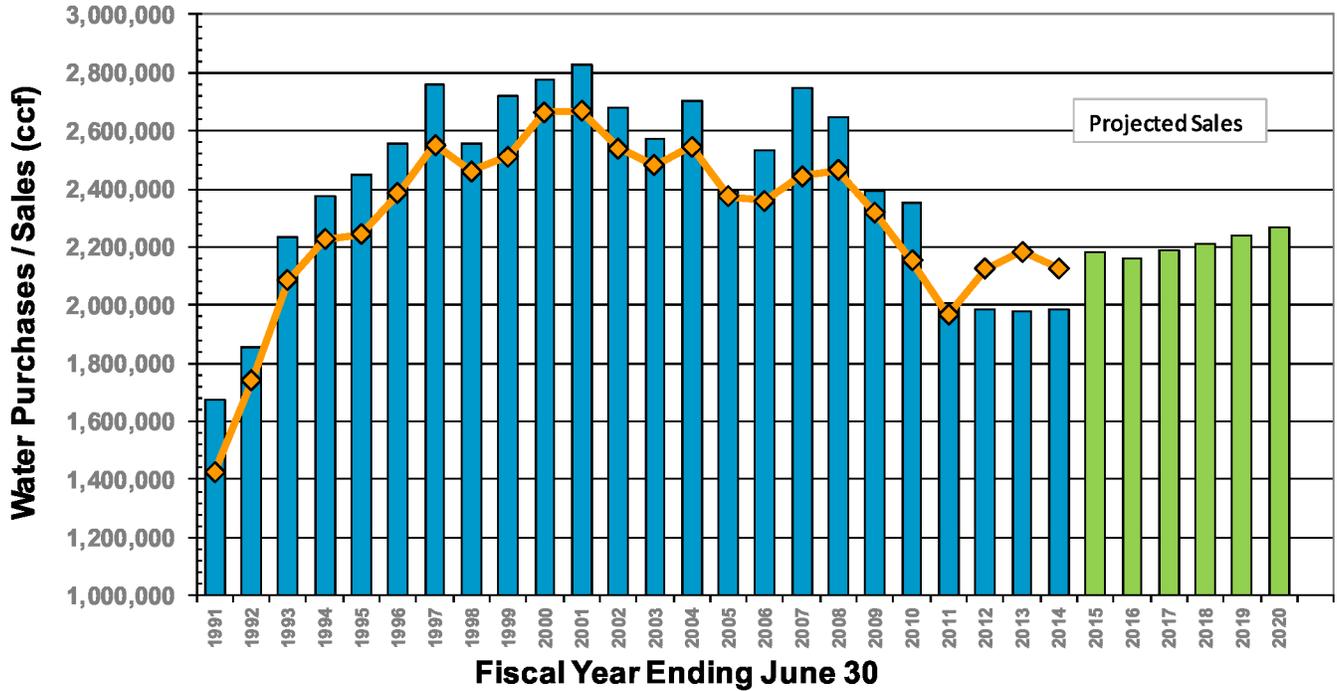
	EMID Annual Water Purchases [1]		
	FY 2012	FY2013	FY2014
July	242,276	226,969	250,440
Aug	213,098	212,499	212,385
Sep	206,793	246,726	219,590
Oct	223,402	179,907	192,215
Nov	155,130	180,045	158,900
Dec	137,791	73,781	137,795
Jan	121,271	90,201	125,750
Feb	121,602	108,685	125,549
Mar	122,041	132,833	86,166
Apr	123,211	143,297	105,675
May	107,071	180,448	170,100
Jun	208,605	201,635	198,808
	<u>1,982,291</u>	<u>1,977,026</u>	<u>1,983,373</u>
Water Sales	2,126,000	2,185,000	2,128,000
	7.2%	10.5%	7.3%

Source: Foster City/EMID 'EMID Monthly Water Purchases'; Billing Details
 FY2012-2014

[1] Units in ccf

[2] Consumption charged for Water, Irrigation and Fire Line Services

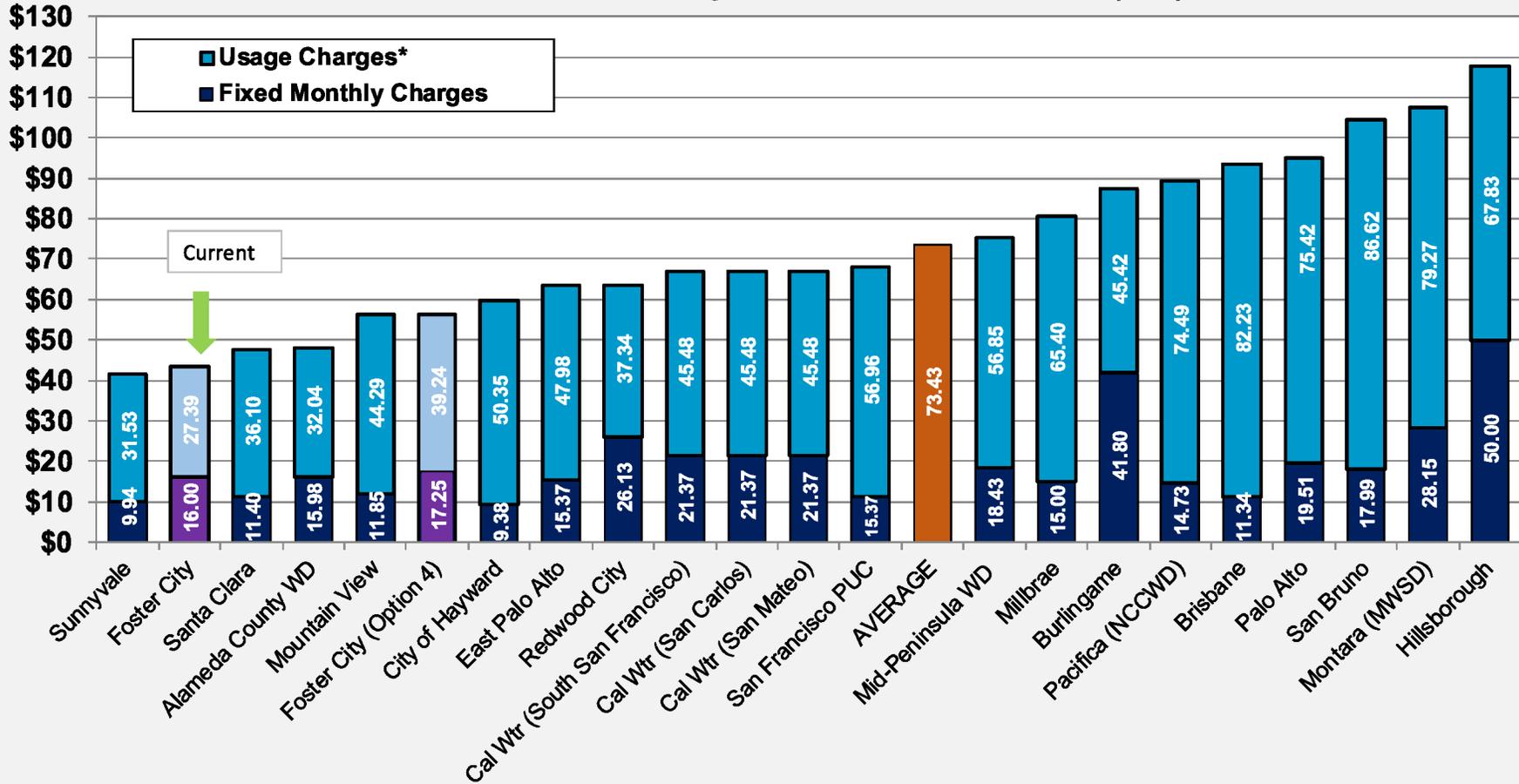
City of Foster City / EMID Historical SFPUC Wholesale Water Purchases vs. EMID Water Sales (ccf)



Note: Water purchases are billed by SFPUC monthly.
Water sales are billed by EMID on a bi-monthly, rotating basis.
Water meters that were malfunctioning have been replaced

█ Purchases ◆ Sales

Single Family Residential Monthly Water Rates, March 2015
Based on 9.5 ccf monthly water use, base meter size (3/4")



* Includes miscellaneous surcharges where applicable.

121 - 121

APPENDIX J: Cash Flow Projections for Wastewater Rate Options 1, 2, and 3

APPENDIX J1
 City of Foster City / Estero Municipal Improvement District
 Wastewater Enterprise Cash Flow Projection: Pay-As-You-Go

	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Monthly Service Charge for Single Family	\$47.00	\$129.25	\$129.25	\$129.25	\$122.79	\$110.51	\$110.51	\$110.51	\$110.51	\$110.51	\$110.51
Rate Adjustment		175%	0%	0%	-5%	-10%	0%	0%	0%	0%	0%
Beginning Fund Balance	\$1,638,605	\$2,181,200	\$2,827,200	\$4,101,700	\$3,866,200	\$2,990,200	\$7,503,200	\$8,265,200	\$8,263,200	\$7,638,200	\$8,364,200
Revenues											
Service Charges	6,820,000	18,842,000	19,079,000	19,317,000	18,589,000	16,957,000	16,999,000	17,041,000	17,084,000	17,127,000	17,170,000
Connection Fees [1]	796,000	418,000	87,500	87,500	0	0	0	0	0	0	0
Interest Earnings - Operating Reserves [2]	32,000	22,000	28,000	41,000	39,000	30,000	75,000	83,000	83,000	76,000	84,000
Interest Earnings - Capital Improvement Funds [3]	228,000	63,000	68,000	76,000	79,000	79,000	79,000	79,000	79,000	79,000	79,000
Other Revenue	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Operating Revenue	7,877,000	19,346,000	19,263,500	19,522,500	18,708,000	17,067,000	17,154,000	17,204,000	17,247,000	17,283,000	17,334,000
Interfund Loan	4,056,000	0	0	0	0	0	0	0	0	0	0
	4,056,000	0	0	0	0	0	0	0	0	0	0
Total Revenue	11,933,000	19,346,000	19,263,500	19,522,500	18,708,000	17,067,000	17,154,000	17,204,000	17,247,000	17,283,000	17,334,000
Expenses											
Employee Services	1,601,200	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000	2,213,000
EMID Share WWTP O&M	1,800,000	1,961,000	2,131,000	2,201,000	2,309,000	2,374,000	2,475,000	2,576,000	2,682,000	2,793,000	2,866,000
EMID Share WWTP Capital Improvements	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Internal Services (from City)	537,084	590,369	605,000	620,000	636,000	652,000	668,000	685,000	702,000	720,000	738,000
Internal Services -ERF	276,319	360,436	369,000	378,000	387,000	397,000	407,000	417,000	427,000	438,000	449,000
Services & Supplies	619,850	729,200	747,000	766,000	785,000	805,000	825,000	846,000	867,000	889,000	911,000
Reallocation	719,966	738,000	756,000	775,000	794,000	814,000	834,000	855,000	876,000	898,000	920,000
Operating Expenditures	6,554,419	7,075,005	7,355,000	7,539,000	7,764,000	7,951,000	8,175,000	8,404,000	8,640,000	8,887,000	9,087,000
Operating Net Revenue	1,322,581	12,270,995	11,908,500	11,983,500	10,944,000	9,116,000	8,979,000	8,800,000	8,607,000	8,396,000	8,247,000
Capital Improvements Transfer [4]	780,000	4,836,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000
EMID Share WWTP Expansion	4,056,000	6,789,000	9,854,000	11,439,000	11,040,000	3,823,000	7,437,000	8,022,000	8,452,000	6,890,000	7,893,000
	4,836,000	11,625,000	10,634,000	12,219,000	11,820,000	4,603,000	8,217,000	8,802,000	9,232,000	7,670,000	8,673,000
Total Expenditures	11,390,419	18,700,005	17,989,000	19,758,000	19,584,000	12,554,000	16,392,000	17,206,000	17,872,000	16,557,000	17,760,000
Revenues Less O&M Expenditures	1,322,581	12,270,995	11,908,500	11,983,500	10,944,000	9,116,000	8,979,000	8,800,000	8,607,000	8,396,000	8,247,000
Revenues Less Total Expenditures	542,581	645,995	1,274,500	(235,500)	(876,000)	4,513,000	762,000	(2,000)	(625,000)	726,000	(426,000)
Ending Fund Balance	2,181,186	2,827,195	4,101,700	3,866,200	2,990,200	7,503,200	8,265,200	8,263,200	7,638,200	8,364,200	7,938,200
Revenue Test: Annual Revenues > O&M Expenses											
Annual revs less O&M expenses	1,322,581	12,270,995	11,908,500	11,983,500	10,944,000	9,116,000	8,979,000	8,800,000	8,607,000	8,396,000	8,247,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	2,181,186	2,827,195	4,101,700	3,866,200	2,990,200	7,503,200	8,265,200	8,263,200	7,638,200	8,364,200	7,938,200
25% operating expenses	1,640,000	1,770,000	1,840,000	1,880,000	1,940,000	1,990,000	2,040,000	2,100,000	2,160,000	2,220,000	2,270,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Foster City/EMID Estimates
 [2] Calculated as 1% of the Beginning Fund Balance of the Wastewater Revenue Fund
 [3] Calculated as 1% of the Beginning Fund Balance of the Wastewater Capital Improvement Project Fund
 [4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX J2
 City of Foster City / Estero Municipal Improvement District
 Wastewater Enterprise Cash Flow Projection: SRF and Bond Financing

	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Rate Adjustment		9.00%	9.00%	9.00%	9.00%	9.00%	5.10%	5.00%	5.00%	5.00%	5.00%
Monthly Service Charge for Single Family	\$47.00	\$51.23	\$55.84	\$60.87	\$66.34	\$72.32	\$76.00	\$79.80	\$83.79	\$87.98	\$92.38
Beginning Fund Balance	\$1,638,605	\$2,181,200	\$3,336,200	\$3,840,900	\$4,252,800	\$4,522,200	\$4,304,000	\$4,442,900	\$4,557,100	\$5,207,600	\$4,759,600
Revenues											
Service Charges	6,820,000	7,521,000	8,293,000	9,143,000	10,078,000	11,108,000	11,702,000	12,316,000	12,963,000	13,644,000	14,360,000
Connection Fees [1]	796,000	418,000	87,500	87,500	0	0	0	0	0	0	0
Interest Earnings - Operating Reserves [2]	32,000	22,000	33,000	38,000	43,000	45,000	43,000	44,000	46,000	52,000	48,000
Interest Earnings - Capital Improvement Funds [3]	228,000	63,000	68,000	76,000	79,000	79,000	79,000	79,000	79,000	79,000	79,000
Other Revenue	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Operating Revenue	7,877,000	8,025,000	8,482,500	9,345,500	10,201,000	11,233,000	11,825,000	12,440,000	13,089,000	13,776,000	14,488,000
Interfund Loan	4,056,000	0	0	0	0	0	0	0	0	0	0
SRF Loans [4]	0	0	0	2,721,000	3,143,000	2,777,000	4,381,000	4,959,000	5,861,000	6,685,000	7,553,000
Bond Issues (see Table 17)	0	11,830,000	10,748,000	9,509,000	8,632,000	1,143,000	3,340,000	3,348,000	3,435,000	0	0
	4,056,000	11,830,000	10,748,000	12,230,000	11,775,000	3,920,000	7,721,000	8,307,000	9,296,000	6,685,000	7,553,000
Total Revenue	11,933,000	19,855,000	19,230,500	21,575,500	21,976,000	15,153,000	19,546,000	20,747,000	22,385,000	20,461,000	22,041,000
Expenses											
Employee Services	1,601,200	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,968,000	2,025,000	2,086,000	2,149,000	2,213,000
EMID Share WWTP O&M	1,800,000	1,961,000	2,131,000	2,201,000	2,309,000	2,374,000	2,475,000	2,576,000	2,682,000	2,793,000	2,866,000
EMID Share WWTP Capital Improvements	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Internal Services (from City)	537,084	590,369	605,000	620,000	636,000	652,000	668,000	685,000	702,000	720,000	738,000
Internal Services -ERF	276,319	360,436	369,000	378,000	387,000	397,000	407,000	417,000	427,000	438,000	449,000
Services & Supplies	619,850	729,200	747,000	766,000	785,000	805,000	825,000	846,000	867,000	889,000	911,000
Reallocation	719,986	738,000	756,000	775,000	794,000	814,000	834,000	855,000	876,000	898,000	920,000
Operating Expenditures	6,554,419	7,075,005	7,355,000	7,539,000	7,764,000	7,951,000	8,175,000	8,404,000	8,640,000	8,887,000	9,087,000
Operating Net Revenue	1,322,581	949,995	1,127,500	1,806,500	2,437,000	3,282,000	3,650,000	4,036,000	4,449,000	4,889,000	5,401,000
Transfer to SRF Reserve Fund	0	0	0	0	125,000	141,000	125,000	198,000	221,000	263,000	300,000
Capital Improvements Transfer [5]	780,000	4,836,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000
EMID Share WWTP Expansion	4,056,000	6,789,000	9,854,000	11,439,000	11,040,000	3,823,000	7,437,000	8,022,000	8,452,000	6,890,000	7,893,000
	4,836,000	11,625,000	10,634,000	12,219,000	11,945,000	4,744,000	8,342,000	9,000,000	9,453,000	7,933,000	8,973,000
Annual Debt Service											
Bond Issues	0	0	736,800	1,405,600	1,997,600	2,551,200	2,624,100	2,837,800	3,052,500	3,279,000	3,279,000
SRF Loans [4]	0	0	0	0	0	125,000	266,000	391,000	589,000	810,000	1,073,000
	0	0	736,800	1,405,600	1,997,600	2,676,200	2,890,100	3,228,800	3,641,500	4,089,000	4,352,000
Debt Coverage	0	0	1.53	1.29	1.22	1.23	1.26	1.25	1.22	1.20	1.24
Total Expenditures	11,390,419	18,700,005	18,725,800	21,163,600	21,706,600	15,371,200	19,407,100	20,632,800	21,734,500	20,909,000	22,412,000
Revenues Less O&M Expenditures	5,378,581	12,779,995	11,875,500	14,036,500	14,212,000	7,202,000	11,371,000	12,343,000	13,745,000	11,574,000	12,954,000
Revenues Less Total Expenditures	542,581	1,154,995	504,700	411,900	289,400	(218,200)	138,900	114,200	650,500	(448,000)	(371,000)
SRF Reserve Fund	0	0	0	0	125,000	266,000	391,000	589,000	810,000	1,073,000	1,373,000
General Fund	2,181,186	3,336,195	3,840,900	4,252,800	4,522,200	4,304,000	4,442,900	4,557,100	5,207,600	4,759,600	4,388,600
Ending Fund Balance	2,181,186	3,336,195	3,840,900	4,252,800	4,647,200	4,570,000	4,833,900	5,146,100	6,017,600	5,832,600	5,761,600
Revenue Test: Annual Revenues > O&M Expenses											
Annual revs less O&M expenses	1,322,581	949,995	1,127,500	1,806,500	2,437,000	3,282,000	3,650,000	4,036,000	4,449,000	4,889,000	5,401,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	2,181,186	3,336,195	3,840,900	4,252,800	4,647,200	4,570,000	4,833,900	5,146,100	6,017,600	5,832,600	5,761,600
25% operating expenses	1,640,000	1,770,000	1,840,000	1,880,000	1,940,000	1,990,000	2,040,000	2,100,000	2,160,000	2,220,000	2,270,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Foster City/EMID Estimates
 [2] Calculated as 1% of the Beginning Fund Balance of the Wastewater Revenue Fund
 [3] Calculated as 1% of the Beginning Fund Balance of the Wastewater Capital Improvement Project Fund
 [4] SRF Loans are based on a 30-year term with a 2% interest rate
 [5] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

APPENDIX J3
 City of Foster City / Estero Municipal Improvement District
 Wastewater Enterprise Cash Flow Projection: Bond Financing

	Budget	Five Year Projection					Extended Year Projection				
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assumptions:											
Interest Earnings Rate		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Revenue Increase from Growth		1.28%	1.26%	1.25%	1.23%	1.22%	0.25%	0.25%	0.25%	0.25%	0.25%
Rate Adjustment		9.50%	9.50%	9.50%	9.50%	9.50%	6.50%	6.50%	6.00%	6.00%	6.00%
Monthly Service Charge for Single Family	\$47.00	\$51.47	\$56.35	\$61.71	\$67.57	\$73.99	\$78.80	\$83.92	\$88.96	\$94.29	\$99.95
Beginning Fund Balance	\$1,638,605	\$2,181,200	\$3,370,200	\$3,950,900	\$4,737,800	\$5,426,000	\$5,591,000	\$6,369,100	\$7,277,100	\$8,264,700	\$9,117,600
Revenues											
Service Charges	6,820,000	7,555,000	8,368,000	9,268,000	10,262,000	11,362,000	12,129,000	12,948,000	13,757,000	14,617,000	15,531,000
Connection Fees [1]	796,000	418,000	87,500	87,500	0	0	0	0	0	0	0
Interest Earnings - Operating Reserves [2]	32,000	22,000	34,000	40,000	47,000	54,000	56,000	64,000	73,000	83,000	91,000
Interest Earnings - Capital Improvement Funds [3]	228,000	63,000	68,000	76,000	79,000	79,000	79,000	79,000	79,000	79,000	79,000
Other Revenue	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Operating Revenue	7,877,000	8,059,000	8,558,500	9,472,500	10,389,000	11,496,000	12,265,000	13,092,000	13,910,000	14,780,000	15,702,000
Interfund Loan	4,056,000	0	0	0	0	0	0	0	0	0	0
Bond Issue (see Table 18)	0	11,830,000	10,748,000	12,478,000	12,086,000	4,179,000	8,129,000	8,767,000	9,256,000	7,546,000	8,644,000
	4,056,000	11,830,000	10,748,000	12,478,000	12,086,000	4,179,000	8,129,000	8,767,000	9,256,000	7,546,000	8,644,000
Total Revenue	11,933,000	19,889,000	19,306,500	21,950,500	22,455,000	15,675,000	20,394,000	21,859,000	23,166,000	22,326,000	24,346,000
Expenses											
Employee Services	1,601,200	1,696,000	1,747,000	1,799,000	1,853,000	1,909,000	1,966,000	2,025,000	2,086,000	2,149,000	2,213,000
EMID Share WWTP O&M	1,800,000	1,961,000	2,131,000	2,201,000	2,309,000	2,374,000	2,475,000	2,576,000	2,682,000	2,783,000	2,856,000
EMID Share WWTP Capital Improvements	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Internal Services (from City)	537,084	590,369	605,000	620,000	636,000	652,000	668,000	685,000	702,000	720,000	738,000
Internal Services -ERF	276,319	360,436	369,000	378,000	387,000	397,000	407,000	417,000	427,000	438,000	449,000
Services & Supplies	619,850	729,200	747,000	766,000	785,000	805,000	825,000	846,000	867,000	889,000	911,000
Reallocation	719,966	738,000	756,000	775,000	794,000	814,000	834,000	855,000	876,000	898,000	920,000
Operating Expenditures	6,554,419	7,075,005	7,355,000	7,539,000	7,764,000	7,951,000	8,175,000	8,404,000	8,640,000	8,887,000	9,087,000
Operating Net Revenue	1,322,581	983,995	1,203,500	1,933,500	2,625,000	3,545,000	4,090,000	4,688,000	5,270,000	5,893,000	6,615,000
Capital Improvements Transfer [4]	780,000	4,836,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000	780,000
EMID Share WWTP Expansion	4,056,000	6,789,000	9,854,000	11,439,000	11,040,000	3,823,000	7,437,000	8,022,000	8,452,000	6,890,000	7,893,000
	4,836,000	11,625,000	10,634,000	12,219,000	11,820,000	4,603,000	8,217,000	8,802,000	9,232,000	7,670,000	8,673,000
Annual Debt Service			736,800	1,405,600	2,182,800	2,956,000	3,223,900	3,745,000	4,306,400	4,916,100	5,413,500
Debt Coverage	0	0	1.63	1.38	1.20	1.20	1.27	1.25	1.22	1.20	1.22
Total Expenditures	11,390,419	18,700,005	18,725,800	21,163,600	21,766,800	15,510,000	19,615,900	20,951,000	22,178,400	21,473,100	23,173,500
Revenues Less O&M Expenditures	5,378,581	12,813,995	11,951,500	14,411,500	14,691,000	7,724,000	12,219,000	13,455,000	14,526,000	13,439,000	15,259,000
Revenues Less Total Expenditures	542,581	1,188,995	580,700	786,900	688,200	165,000	778,100	908,000	987,600	852,900	1,172,500
Ending Fund Balance	2,181,186	3,370,195	3,950,900	4,737,800	5,426,000	5,591,000	6,369,100	7,277,100	8,264,700	9,117,600	10,290,100
Revenue Test: Annual Revenues > O&M Expenses											
Annual revs less O&M expenses	5,378,581	12,813,995	11,951,500	14,411,500	14,691,000	7,724,000	12,219,000	13,455,000	14,526,000	13,439,000	15,259,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Fund Reserve Test: Minimum Fund Balance > 25% O&M Expenses											
Year-end fund balance	2,181,186	3,370,195	3,950,900	4,737,800	5,426,000	5,591,000	6,369,100	7,277,100	8,264,700	9,117,600	10,290,100
25% operating expenses	1,640,000	1,770,000	1,840,000	1,880,000	1,940,000	1,990,000	2,040,000	2,100,000	2,160,000	2,220,000	2,270,000
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

[1] Growth projections based on CDD estimates
 [2] Calculated as 1% of the Beginning Fund Balance of the Wastewater Revenue Fund
 [3] Calculated as 1% of the Beginning Fund Balance of the Wastewater Capital Improvement Project Fund
 [4] Capital Improvements are funded through the Long-Term Capital Improvement Project Fund

Appendix K

City Project Number	Master Plan Project ID	Project Type	Project Title / Description	Notes	Foster City/EMID Allocation (Future \$)	Projected CIP Costs (Future \$), Years 1-5					Projected CIP Costs (Future \$), Years 6-10					
						0 2014/15	1 2015/16	2 2016/17	3 2017/18	4 2018/19	5 2019/20	6 2020/21	7 2021/22	8 2022/23	9 2023/24	10 2024/25
WASTEWATER TREATMENT PLANT IMPROVEMENTS																
461005	CY-02	Admin	New Administration Building Project		8,329,347	0	0	0	0	563,054	666,348	2,498,804	2,498,804	2,082,337	0	0
NEW	0	Periodic	Asset Management/Condition Assessment	4% Cost Esc	137,446	25,000	0	0	0	0	30,416	0	0	0	0	37,006
0	0	Periodic	Integrated Master Plan Update - Every 5 years or so	4% Cost Esc	224,892	0	0	0	0	0	60,833	0	0	0	0	74,012
469974	IMM-03-A	Immediate	Disinfection: Immediate Projects: Chlorination/Dechlorination		658,500	72,500	586,000	0	0	0	0	0	0	0	0	0
469948	IMM-07-B	Immediate	SCADA: Immediate Projects: Phase 2		1,200,000	603,699	596,301	0	0	0	0	0	0	0	0	0
NEW	IMM-01-B	Immediate	Primary System: Immediate Projects-PC4		302,571	302,571	0	0	0	0	0	0	0	0	0	0
469973	IMM-02-B	Immediate	Secondary System: Immed. Projects: SCs 1-4 & RAS Pump Valves		1,690,000	560,000	500,000	560,000	50,000	0	0	0	0	0	0	0
469939	S-C-2 and IMM-C	Immediate	Solids Bldg: Immed Projects: Hopper/Building Encl. & Cake Pump		838,219	146,000	693,219	0	0	0	0	0	0	0	0	0
469975	IMM-05-D	Immediate	Solids: Immediate Projects: GT 1&2		1,046,000	293,750	702,250	50,000	0	0	0	0	0	0	0	0
469978	IMM-05-G	Immediate	Solids Bldg: Immediate Projects: Centrifuge Hoist Project		240,000	54,500	185,500	0	0	0	0	0	0	0	0	0
469979	IMM-06	Immediate	Electrical: Immediate Projects		110,000	35,000	25,000	25,000	25,000	0	0	0	0	0	0	0
469960	WW-01	Wet Weather	Primary Clarifier Replacement Project		11,962,177	837,352	956,974	3,588,653	3,588,653	2,990,544	0	0	0	0	0	0
469961	WW-02	Wet Weather	New Headworks Facility Project		12,589,261	881,248	1,007,141	3,776,778	3,776,778	3,147,315	0	0	0	0	0	0
469976	IMM-05-E	Immediate	Solids Bldg: Immediate Projects: Boiler Replacement		195,000	20,000	175,000	0	0	0	0	0	0	0	0	0
469962	RR-02	R&R	Short-term MCC Replacement Project		250,000	250,000	0	0	0	0	0	0	0	0	0	0
469967	0	0	Digester Gas to Compressed Natural Gas		0	0	0	0	0	0	0	0	0	0	0	0
469958	REG-01	Regulatory	Secondary Treatment Capacity Project	SRF	4,939,811	0	345,773	395,169	2,222,825	1,975,844	0	0	0	0	0	0
469963	RR-03	R&R	Tank Drain Pump Replacement Project	SRF	37,794	0	0	37,794	0	0	0	0	0	0	0	0
469959	REG-02	Regulatory	On-Site Stormwater Improvements Project	SRF	1,436,629	0	0	0	143,603	71,601	1,220,624	0	0	0	0	0
469965	WW-03	Wet Weather	New Flow Equalization Storage Project	SRF	10,037,341	(750,000)	0	0	0	685,364	868,967	3,258,702	3,258,702	2,715,585	0	0
NEW	RR-07	R&R	Aeration Blower Replacement Project	SRF	2,278,309	0	0	0	0	0	325,473	325,473	325,473	325,473	325,473	325,473
0	RR-08	R&R	New Standby Generator Project	SRF	1,838,643	0	0	0	0	0	0	183,864	91,932	91,932	1,470,914	0
0	RR-09	R&R	Sodium Hypochlorite Replacement Project	SRF	278,262	0	0	0	0	0	0	41,739	236,523	0	0	0
0	RR-10	R&R	Effluent Pump Station 2 Pump Replacement Project	SRF	510,383	0	0	0	0	0	0	170,126	170,126	170,126	170,126	0
0	RR-11	R&R	Electrical Equipment Replacement Project	SRF	426,196	0	0	0	0	0	0	63,929	362,267	0	0	0
0	RR-12	R&R	Digester Equipment Replacement Project	SRF	1,658,062	0	0	0	0	0	0	165,806	82,903	1,409,352	0	0
0	REG-03	Regulatory	Total Nitrogen Removal Project	SRF	17,359,484	0	0	0	0	0	0	0	1,215,164	1,368,759	5,207,845	0
0	RR-13	R&R	New Site Waste Pump Station Project	SRF	886,488	0	0	0	0	0	0	0	132,973	753,515	0	0
0	RR-14	R&R	Digester Heating Equipment Replacement Project	SRF	307,316	0	0	0	0	0	0	0	0	0	46,097	261,219
0	RR-15	R&R	Secondary Clarifier 5 Drive Unit Replacement Project	SRF	480,974	0	0	0	0	0	0	0	0	0	69,146	391,828
0	RR-16	R&R	DAFT Replacement Project	SRF	1,100,874	0	0	0	0	0	0	0	0	110,067	55,044	0
0	RR-17	R&R	Digester Feed Pump and Blower Replacement Project	SRF	698,404	0	0	0	0	0	0	0	0	0	69,840	34,920
0	0	0	Recycled Water Project	SRF	4,165,132	0	0	0	0	0	0	0	0	0	0	291,559
0	RR-19	R&R	Recycled Water Pump Replacement Project	SRF	167,834	0	0	0	0	0	0	0	0	0	0	0
0	RR-20	R&R	Thickening Equipment Replacement Project	SRF	283,885	0	0	0	0	0	0	0	0	0	0	0
0	RR-21	R&R	Dewatering Equipment Replacement Project	SRF	2,726,002	0	0	0	0	0	0	0	0	0	0	0
0	RR-22	R&R	WAS Pump Replacement Project	SRF	450,061	0	0	0	0	0	0	0	0	0	0	0
0	RR-23	R&R	Surge Tank Replacement Project	SRF	123,623	0	0	0	0	0	0	0	0	0	0	0
0	RR-24	R&R	Electrical Equipment Replacement Project	SRF	1,653,681	0	0	0	0	0	0	0	0	0	0	0
0	REG-04	Regulatory	Phosphorus Removal Project	SRF	2,995,607	0	0	0	0	0	0	0	0	0	0	0
469949	0	0	WWTP Annual Major Components	4% Cost Esc	3,722,260	125,000	130,000	135,200	140,606	146,232	152,082	158,165	164,462	171,071	177,914	185,031
469938	0	0	Integrated Master Plan		50,000	50,000	0	0	0	0	0	0	0	0	0	0
SUBTOTAL WWTP					100,566,668	3,526,620	5,903,158	8,568,594	9,947,467	9,600,156	3,324,763	6,466,748	6,975,789	7,349,833	5,991,226	6,863,936
PROGRAM MANAGEMENT (15% of Expenditures)					15,085,000	528,993	885,474	1,285,289	1,492,120	1,440,023	498,714	970,012	1,046,368	1,102,475	898,684	1,029,590
GRAND TOTAL					115,651,668	4,055,613	6,788,632	9,853,884	11,439,587	11,040,179	3,823,477	7,436,760	8,022,157	8,452,308	6,889,910	7,893,527

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