

DATE:	March 15th, 2024
то:	City of Foster City/Estero Municipal Improvement District
FROM:	Bartle Wells Associates
SUBJECT:	Wastewater Rate Study Update 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 Wastewater Enterprise and to project wastewater rate adjustments for the next five-year period. BWA last conducted a rate study update in 2023. No public hearing was held for wastewater, as the adopted maximum wastewater rate of 10% was determined to be adequate and, in fact, was able to be reduced to 3% and still maintain the necessary revenue requirement.

Current and projected wastewater service rates are in the middle-high range compared to other agencies on the Peninsula. However, because water rates are comparatively very low, combined water and wastewater service rates are in the middle-low range compared to other agencies on the Peninsula.

Wastewater Enterprise Summary

The District has entered into a Joint Powers Agreement with the City of San Mateo where the District receives treatment of its wastewater via the San Mateo Wastewater Treatment Plant (WWTP). The District is responsible for its share of operating and maintenance costs that San Mateo (as the lead agency and the contracting party) incurs treating the District's wastewater, as well as approximately 24% of the WWTP improvement costs incurred as part of the Clean Water Program (CWP), a 10-year comprehensive capital improvement project initiated in 2014. The Cities of San Mateo and the District are expanding the jointly owned WWTP at an estimated cost of \$670 MM with \$164.4 MM of that falling under Foster City's contributions. This is in addition to local capital projects for the District's own wastewater collection system. The wastewater enterprise revenue model is designed to fund collection system capital expenditures through annual transfers from the operating fund to the capital improvement fund.

In June 2020, to fund the anticipated costs of the WWTP CWP improvements, the District Board approved 5 years of wastewater rate increases: three 14.25% per year increases in FY 2021 through FY 2023, a 10% wastewater rate increase in FY 2024, and a 2% increase in FY 2025. BWA's 2023 analysis shows that the District had adequate financing capacity for projected debt issuances in the next several years and recommended spreading the remaining rate increases out over a longer period. Thus, the City Council reduced the 10% increase in FY 2024 to 3%. BWA recommends implementing the previously adopted 2% increase in FY 2025. BWA recommends conducting a 5-year rate study analysis in FY 2025, which would result in an adopted rate schedule for FY 2026 through FY 2031.

Detailed wastewater rate calculations are shown in APPENDIX B.

Rate Surveys

A survey of communities along the San Francisco Peninsula was conducted to compare the District's typical wastewater bills with neighboring communities. The results of the wastewater survey are summarized in APPENDIX A.

Including the recommended increase, the District's proposed monthly residential wastewater bill for FY 2025 is \$133.49. Since it is unknown what the comparator agencies are proposing for FY 2025, the District compared its FY 2024 monthly residential wastewater bills to the FY 2024 monthly residential wastewater bills for the neighboring agencies. The survey indicates that the District's current wastewater rates are above the average amongst its comparator agencies. The average monthly bill for the region is \$117.71 and the District's rate is \$130.87 per month, or about 11% more.

APPENDIX C shows how the combined water and wastewater bills compare to regional agencies based on FY 2024 rates. The average monthly combined water and wastewater bill for the region is \$225.98. The District's total combined water and wastewater bill is \$209.35 per month, or about 7.4% less than the regional average.

Wastewater Enterprise Fund

There are approximately 13,937 wastewater accounts serviced by the District. The majority of accounts are residential with the remainder consisting of commercial and institutional accounts as shown in Table 1.

Table 1

Foster City / Estero Municipal Improvement District Wastewater Service Accounts

Data as of:	02/01/24
-------------	----------

Customer Class	Number of Accounts
Residential	
Single Family	4,536
Townhouse/Duplex	2,283
Apartment/Condominium (Pools w/ Restrooms)	<u>6,866</u>
Residential Total	13,685
<u>Commercial</u>	
Restaurants	43
Commercial/Hotels/Offices/Industrial/Laundromats	<u>173</u>
Commercial Total	216
Institutional	
Institutional/Schools	<u>36</u>
Insitutional Total	36
Total	13,937

Source: Cognos Sewer Customer Count Report

The District has approximately \$27,456,097 in its wastewater maintenance and operations reserve fund as shown in Table 2. The District's minimum operating reserve target is 25% of operating and maintenance expenses (est. to be about \$2.7 million).

Table 2 Foster City / Estero Municipal Improvement District Wastewater Operating Fund Reserves

July 1, 2023
Balance
<u>\$27,456,097</u>
\$27,456,097

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 Staff

Table 3 summarizes the current wastewater service rates.

Table 3
Foster City / Estero Municipal Improvement District
Current Wastewater Rates

	Current
Fiscal Year Ending June 30	2024
Residential (flat monthly rate)	
Single Family	\$130.87
Townhouse/Duplex	109.93
Apartment/Condominium (Pools w/ Restrooms)	109.93
Commercial (rate per ccf of water use)	
Restaurants	23.78
Commercial/Hotels/Offices/Industrial/Laundromats	8.36
Institutional (rate per ccf of water use)	
Institutional/Schools	5.50

Table 4 summarizes the operating expenditures of the enterprise. Projected operating expenditures are anticipated to increase over the next five years by about 33%.

Table 4

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

Expenditures	Revised Budget		Annual %				
	<u>FY2024</u>	FY2025	FY2026	FY2027	<u>FY2028</u>	<u>FY2029</u>	Increase [1]
Employee Services	\$2,886,634	\$3,039,154	\$3,160,720	\$3,287,149	\$3,418,635	\$3,555,380	4.0%
Internal Services (from City)	1,318,932	1,557,041	1,595,967	1,635,866	1,676,763	1,718,682	2.5%
Internal Services -ERF	342,955	462,234	473,790	485,635	497,776	510,220	2.5%
Services & Supplies	733,550	901,950	924,499	947,611	971,301	995,584	2.5%
EMID Share WWTP O&M	3,700,000	3,700,000	4,000,000	4,200,000	5,200,000	5,300,000	N/A
Reallocation [2]	<u>955,715</u>	<u>1,051,791</u>	<u>1,078,086</u>	<u>1,105,038</u>	<u>1,132,664</u>	<u>1,160,981</u>	2.5%
TOTAL O&M Expenditures	\$9,937,786	\$10,712,170	\$11,233,062	\$11,661,299	\$12,897,139	\$13,240,847	
		7.8%	4.9%	3.8%	10.6%	2.7%	

[1] Based on historical results

[2] Costs allocated to the Wastewater Enterprise from other departments based on the City's cost allocation study.

Wastewater Financial Projections

Wastewater projections are shown in APPENDIX B.

Table 5 shows debt service estimates for the District's share of WWTP costs. Annual debt service for the total debt issuances is estimated to amount to approximately \$6 MM by FY 2026.

Table 5 City of Foster City / Estero Municipal Improvement District Debt Service

Debt Service	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	FYE 2029	FYE 2030	FYE 2031	FYE 2032	FYE 2033
WIFIA Loan	\$0	\$730,453	\$2,652,882	\$2,652,882	\$2,652,882	\$2,652,882	\$2,652,882	\$2,652,882	\$2,652,882	\$2,652,882
2019 Bonds	2,085,000	2,084,250	2,086,875	2,087,750	2,086,875	2,084,250	2,084,750	2,088,125	2,084,375	2,083,500
2023 SRF Loan/Bonds	<u>0</u>	<u>134,332</u>	<u>1,259,604</u>	<u>1,259,573</u>	<u>1,259,540</u>	<u>1,259,508</u>	<u>1,259,475</u>	<u>1,259,443</u>	<u>1,259,410</u>	<u>1,259,376</u>
Total Debt Service	\$2,085,000	\$2,949,035	\$5,999,361	\$6,000,205	\$5,999,297	\$5,996,640	\$5,997,107	\$6,000,450	\$5,996,666	\$5,995,758

Wastewater Cost of Service Analysis

BWA performed a Wastewater Cost of Service Analysis to determine equitable cost allocation to the various user classes. BWA recommends continuing the practice of 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 6.

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 6

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
	Parking Garages
	Warehouses
Medium/Commercial/	Residential - All
Domestic Strength	Appliance Repair
	Beauty Shops (hair cutting w/additional treatments)
	Dry Cleaners
	Nail Salons
	Pet Groomers
	Commercial Laundromats
	Commercial Laundromats Bars & Taverns

Tasting Rooms Hospitals - General, Convalescent & Veterinarian Hotels, Motels, B&Bs, and Vacation Rentals Offices - Business and Professional Offices - Medical/Dental Pools with Restrooms (Clubhouse) Theaters 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 7 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 7 City of Foster City/Estero Municipal Improvement District Assumed Wastewater Strength Factors

Strength Class	LOW	LOW-MEDIUM	MEDIUM	HIGH
Examples:	Institutional	Townhouse, Duplex,	Residential	Restaurant
	Bank	Apartment, Condo	Offices	Bakery
Flow (gpd)	200	168	200	200
BOD ¹ (mg/l)	135	240	240	1000
TSS ² (mg/l)	100	240	240	800
Strength Factor	0.66	0.84	1.00	2.85

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

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

1 "BOD" stands for Biochemical Oxygen Demand

2 "TSS" stands for Total Suspended Solids

Table 8 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). The flow estimate is based on the State Water Resources Control Board Revenue Program Guidelines Table G-1, which estimates flow in gallons per day per person for residential dwelling units to be up to 75 gallons.

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 flow. As a check, the mass balance in Table 8 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 2.6 million gallons per day (mgd) and the measured flow at 2.4 mgd.

Table 8City of Foster City/Estero Municipal Improvement DistrictSummary of Wastewater Users by Customer Class

Customer Class	EDUs ¹		ADWF Flow (gal/day)		BOD ³ (mg/l)	TSS ⁴ (mg/l)	Calculated Current Rate
Residential							
Single Family Residential	4,536		200	907,200	240	240	130.87
Townhouse/Duplex	2,283		168	383,544	240	240	109.93
Apartment/Condos	6,866		168	1,153,488	240	240	109.93
Subtotal				2,444,232			
		Use		Estimated			Calculated
	Accounts	(gal/day)	Flow Factor	ADWF Flow	BOD ³	TSS⁴	Current
Commercial				(gal/day)	(mg/l)	(mg/l)	Rate
Low Strength	36	40,776	65%	26,504	135	100	5.50
Medium/Domestic Strength	173	212,049	52%	110,178	240	240	8.36
High Strength	43	53,890	70%	37,723	1000	800	23.78
Subtotal		306,715		174,406			
Totals				2,618,638			

1 "EDU" stands for Equivalent Dwelling Unit

2 "ADWF" stands for Average Dry Weather Flow

3 "BOD" stands for Biochemical Oxygen Demand

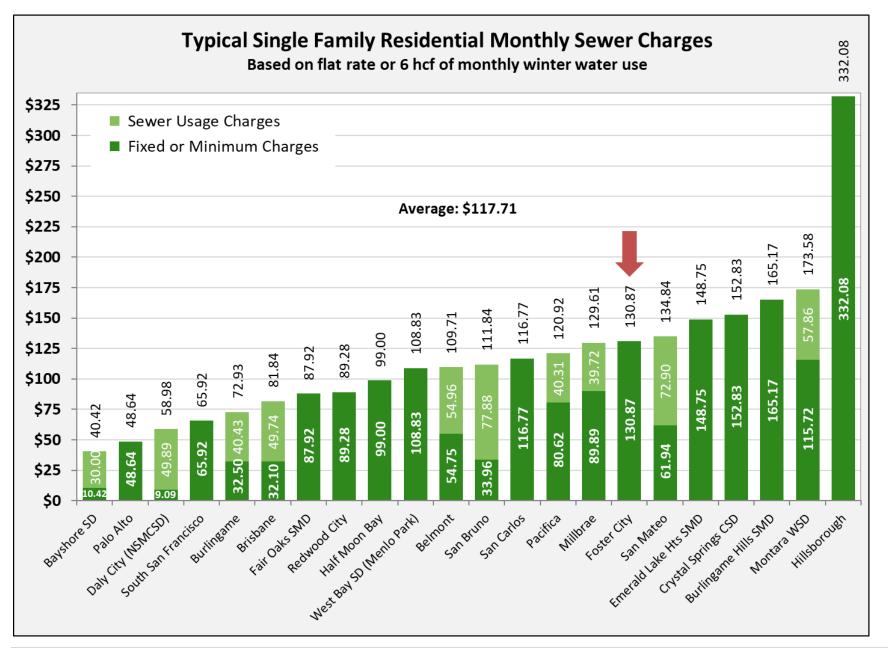
4 "TSS" stands for Total Suspended Solids

Low Income Discount

Currently Foster City has approximately 25 customers enrolled in the Water/Wastewater Rate Assistance Program (WWRAP), which was implemented in 2020. Customers meeting the eligibility and qualification requirements below are granted a discount of up to \$15 per month each on their qualifying Wastewater accounts, not to exceed a \$30 per month discount per customer. To be eligible for the WWRAP, customers must show that they qualify for the PG&E CARE Program or other public assistance program or submit proof of income eligibility.

The estimated maximum potential cost of a \$15/month discount for 25 wastewater customers amounts to \$4,500 per year. Since the low income discount revenue sources cannot be funded with rates, rates are unaffected by the decision on the terms of the program and hence are not required to be included in a Proposition 218 notification.

The District funds the current low income discount through non-rate sources of revenue such as fines and penalties, cell tower lease and general fund revenue to maintain compliance with California Proposition 218. The discount is recommended to be provided as funds are available. Late penalties collected year to date for wastewater in FY 2024 amounted to \$31,500, exceeding the cost of the program.



APPENDIX B

Table 9 City of Foster City / Estero Municipal Improvement District Wastewater Enterprise Cash Flow Projection

		Five Year Projection						Evton	ded Year Proje	ction	
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Assumptions:	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Interest Earnings Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Revenue Increase from Growth	2.00 %	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%
Rate Adjustment		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Monthly Service Charge for Single Family	\$130.87	\$133.49	\$136.16	\$138.88	\$141.66	\$144.49	\$147.38	\$150.33	\$153.34	\$156.41	\$159.54
Beginning O&M Fund Balance	\$27,456,097	\$25,321,200	\$25,901,000	\$23,425,600	\$25,488,100	\$26,884,700	\$28,508,200	\$30,264,400	\$32,258,000	\$34,405,300	\$36,711,500
					,	, .,,		, . ,			,
Operating Revenues				00.004.000					05 070 000	05 000 000	
Service Charges	20,792,268	21,284,000	21,788,000	22,304,000	22,832,000	23,372,000	23,925,000	24,491,000	25,070,000	25,663,000	26,270,000
Connection Fees [1]	45,500	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Interest Earnings [2]	549,122	506,000	518,000	469,000	510,000	538,000	570,000	605,000	645,000	688,000	734,000
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	21,387,890	21,841,000	22,357,000	22,824,000	23,393,000	23,961,000	24,546,000	25,147,000	25,766,000	26,402,000	27,055,000
Total Revenue	21,387,890	21,841,000	22,357,000	22,824,000	23,393,000	23,961,000	24,546,000	25,147,000	25,766,000	26,402,000	27,055,000
Operating Expenses											
Employee Services	2,886,634	3,039,154	3,160,720	3,287,149	3,418,635	3,555,380	3,697,595	3,845,499	3,999,319	4,159,292	4,325,664
Internal Services (from City)	1,318,932	1,557,041	1,595,967	1,635,866	1,676,763	1,718,682	1,761,649	1,805,690	1,850,832	1,897,103	1,944,531
Internal Services -ERF	342,955	462,234	473,790	485,635	497,776	510,220	522,976	536,050	549,451	563,187	577,267
Services & Supplies	733,550	901,950	924,499	947,611	971,301	995,584	1,020,474	1,045,986	1,072,136	1,098,939	1,126,412
EMID Share WWTP O&M	3,700,000	3,700,000	4,000,000	4,200,000	5,200,000	5,300,000	5,500,000	5,600,000	5,800,000	6,000,000	6,000,000
Reallocation	<u>955.715</u>	<u>1.051.791</u>	1.078.086	1.105.038	1.132.664	<u>1.160.981</u>	<u>1.190.006</u>	1.219.756	1.250.250	1.281.506	<u>1.313.544</u>
Operating Expenses	9,937,786	10,712,170	11,233,062	11,661,299	12,897,139	13,240,847	13,692,700	14,052,981	14,521,988	15,000,027	15,287,418
Operating Net Revenue	11,450,104	11,128,830	11,123,938	11,162,701	10,495,861	10,720,153	10,853,300	11,094,019	11,244,012	11,401,973	11,767,582
Capital Expenses											
Transfer Out - District CIP	<u>11,500,000</u>	7,600,000	7,600,000	3,100,000	3,100,000	<u>3,100,000</u>	3,100,000	<u>3,100,000</u>	3,100,000	<u>3,100,000</u>	<u>3,100,000</u>
Capital Expenses	11,500,000	7,600,000	7,600,000	3,100,000	3,100,000	3,100,000	3,100,000	3,100,000	3,100,000	3,100,000	3,100,000
Annual Debt Service	2,085,000	2,949,035	5,999,361	<u>6,000,205</u>	5,999,297	5,996,640	5,997,107	6,000,450	5,996,666	<u>5,995,758</u>	5,997,475
Debt Service	2,085,000	2,949,035	5,999,361	6,000,205	5,999,297	5,996,640	5,997,107	6,000,450	5,996,666	5,995,758	5,997,475
Debt Coverage [3]	5.49	3.77	1.85	1.86	1.75	1.79	1.81	1.85	1.88	1.90	1.96
Total Expenditures	23,522,786	21,261,205	24,832,423	20,761,504	21,996,436	22,337,487	22,789,807	23,153,431	23,618,654	24,095,785	24,384,893
Revenues Less Total Expenditures	(2,134,896)	579,795	(2,475,423)	2,062,496	1,396,564	1,623,513	1,756,193	1,993,569	2,147,346	2,306,215	2,670,107
Ending O&M Fund	25,321,201	25,900,995	23,425,577	25,488,096	26,884,664	28,508,213	30,264,393	32,257,969	34,405,346	36,711,515	39,381,607
Cash Fund Reserve Test: Minimum Fund											
Balance > 25% O&M Expenses											
Year-end O&M Fund	25,321,201	25,900,995	23,425,577	25,488,096	26,884,664	28,508,213	30,264,393	32,257,969	34,405,346	36,711,515	39,381,607
25% Operating Expenses	2,484,447	2,678,043	2,808,266	2,915,325	3,224,285	3,310,212	3,423,175	3,513,245	3,630,497	3,750,007	3,821,855
# of Days O&M in Reserves	930	883	761	798	761	786	807	838	865	893	940
Pass/fail	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
F 455/1411	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

Growth projections for planning purposes
Projected interest calculated as 2% of the Beginning Fund Balance of the Wastewater O&M Fund.
Minimum requirement debt service covereage requirement = 1.25x

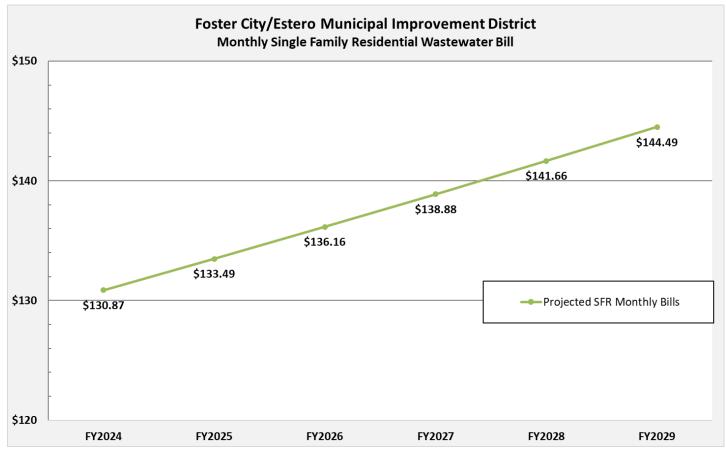
Table 10City of Foster City / Estero Municipal Improvement DistrictProjected Wastewater Rate Impacts

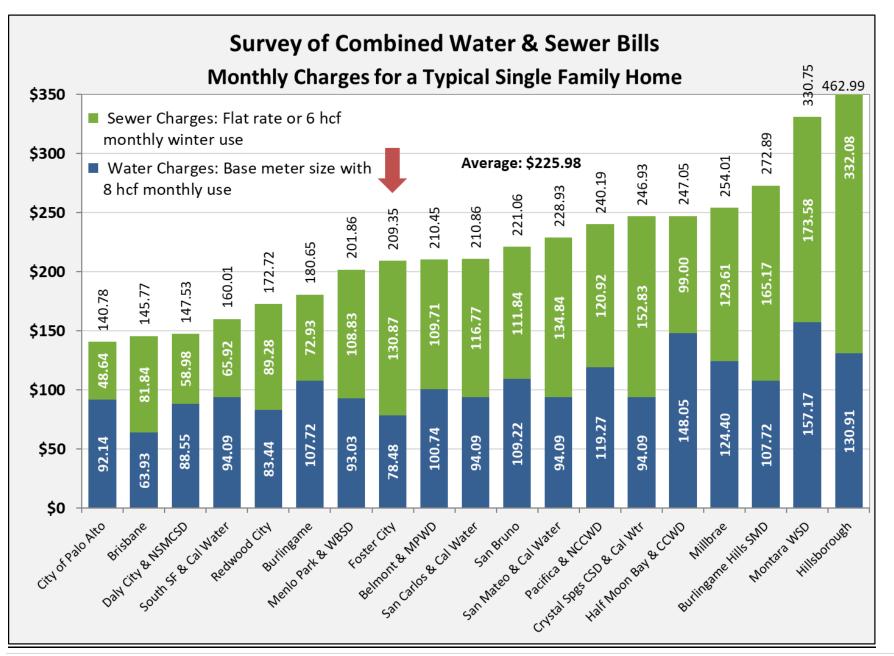
Projected Rates	Current	Projected - Fiscal Year Ending June 30				
	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029
% Rate Increase		2.00%	2.00%	2.00%	2.00%	2.00%
Residential (flat monthly rate)						
Single Family	\$130.87	\$133.49	\$136.16	\$138.88	\$141.66	\$144.49
Increase (Decrease)		2.62	2.67	2.72	2.78	2.83
Townhouse/Duplex	\$109.93	\$112.13	\$114.37	\$116.66	\$118.99	\$121.37
Increase (Decrease)	·	2.20	2.24	2.29	2.33	2.38
Apartment/Condominium (Pools w/ Restrooms)	\$109.93	\$112.13	\$114.37	\$116.66	\$118.99	\$121.37
Increase (Decrease)		2.20	2.24	2.29	2.33	2.38
Commercial (rate per ccf of water use)						
High Strength	\$23.78	\$24.26	\$24.75	\$25.25	\$25.76	\$26.28
Increase (Decrease) per ccf		0.48	0.49	0.50	0.51	0.52
Medium/Domestic Strength	\$8.36	\$8.53	\$8.70	\$8.87	\$9.05	\$9.23
Increase (Decrease) per ccf		0.17	0.17	0.17	0.18	0.18
Low Strength	\$5.50	\$5.61	\$5.72	\$5.83	\$5.95	\$6.07
Increase (Decrease) per ccf		0.11	0.11	0.11	0.12	0.12

Table 11City of Foster City / Estero Municipal Improvement DistrictProjected Wastewater Rate Impacts

Rate Change Scenarios	Current	Projected - Fiscal Year Ending June 30					
	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>	<u>FY2029</u>	
<u>% Rate Increase</u>							
Single Family Residential Flat Monthly Flat	\$130.87	\$133.49	\$136.16	\$138.88	\$141.66	\$144.49	
\$ Increase (Decrease)		2.62	2.67	2.72	2.78	2.83	
% Increase (Decrease)		2.00%	2.00%	2.00%	2.00%	2.00%	

<u>CHART C</u>





18 | Page