



Beverly Hills City Council Liaison / Public Works Commission Committee will conduct a Special Meeting, at the following time and place, and will address the agenda listed below:

**CITY OF BEVERLY HILLS
455 N. Rexford Drive
Room 280A
Beverly Hills, CA 90210**

IN-PERSON / TELEPHONIC / VIDEO CONFERENCE MEETING

**Beverly Hills Liaison Committee Meeting
<https://beverlyhills-org.zoom.us/my/committee>**

Meeting ID: 516 191 2424

Passcode: 90210

You can also dial in by phone:

+1 669 900 9128 US

+1 833 548 0282 (Toll-Free)

One tap mobile:

+16699009128,,5161912424# US

+18335480282,,5161912424# US (Toll-Free)

**Wednesday, May 31, 2023
11:30 AM**

Please be advised that pre-entry metal detector screening requirements are now in place in City Hall. Members of the public are requested to plan visits accordingly.


In the interest of maintaining appropriate social distancing, members of the public can view this meeting through live webcast at www.beverlyhills.org/live and on BH Channel 10 or Channel 35 on Spectrum Cable, and can participate in the teleconference/video conference by using the link above. Written comments may be emailed to mayorandcitycouncil@beverlyhills.org and will also be taken during the meeting when the topic is being reviewed by the Beverly Hills City Council Liaison / Public Works Commission Committee. Beverly Hills Liaison meetings will be in-person at City Hall.

AGENDA

- 1) Public Comment
 - a. Members of the public will be given the opportunity to directly address the Committee on any item listed on the agenda.

- 2) Status Update for the Water and Wastewater Cost of Service Study

3) Adjournment



Huma Ahmed
City Clerk

Posted: May 26, 2023

**A DETAILED LIAISON AGENDA PACKET IS AVAILABLE FOR REVIEW AT
WWW.BEVERLYHILLS.ORG**



Pursuant to the Americans with Disabilities Act, the City of Beverly Hills will make reasonable efforts to accommodate persons with disabilities. If you require special assistance, please call (310) 285-1014 (voice) or (310) 285-6881 (TTY). Providing at least forty-eight (48) hours advance notice will help to ensure availability of services. City Hall, Room 280A is wheelchair accessible.



CITY OF BEVERLY HILLS
PUBLIC WORKS DEPARTMENT
MEMORANDUM

TO: Beverly Hills Public Works City Council Liaison Committee

FROM: Shana Epstein, Director of Public Works
Robert Welch, P.E. Utilities General Manager
Melissa Gomez, Senior Management Analyst

DATE: May 31, 2023

SUBJECT: Status Update for the Water and Wastewater Cost of Service Study

ATTACHMENTS:

1. 05/31/2023 Water and Wastewater Rates Presentation
2. 01/27/2023 Agenda Report- Status Update for the Water and Wastewater Cost of Service Study
3. Volumetric Wastewater Pricing: Frequently Asked Questions written by the Natural Resources Defense Council (NRDC)

RECOMMENDATION

Staff recommends that the City Council Public Works Liaison Committee review and provide direction on:

1. The proposed wastewater policy recommendations, which maintain the residential customer class (single-family and multi-family) and adds a quantity (volumetric) charge for the residential customer class;
2. The proposed sewer return factors based on a three-year average of the lowest month for each year;
3. The proposed change in the commercial wastewater customer classes to include a third class;
4. The proposed Water CIP Option 1;
5. The proposed fixed charge revenue ratio for water;
6. The proposed pass-through charges, outside city differential, water reliability charge, and water shortage revenue stabilization factors; and
7. Recommend that City Council begin the required Proposition 218 public notice process for rates based on the cost-of-service studies.

INTRODUCTION

On September 13, 2022, Public Works Liaison Committee (Committee), staff and consultants introduced the water and wastewater cost of service study.

On September 29, 2022, the Committee continued the rate discussion. Three Water Capital Improvement Plan (CIP) scenarios were presented. Vice Mayor Gold recommended that if CIP Option 2 was selected, that the entire City Council should weigh in on that decision, as it requires the most funding from customer rates. Shana Epstein, Director of Public Works, recommended that City Staff offer briefings on the topic to individual council members.

After further individual briefings, Staff returned to the Committee on January 27, 2023 with additional refinements to the cost-of-service study previously presented which included:

- Wastewater rates that combine single family and multi-family customers, providing uniform rates; and
- Water rates that focus on funding to complete CIP Option 1.

The agenda report for the January 27, 2023 Committee meeting is included as Attachment 2.

DISCUSSION

Water

Below is a brief review of the water cost of service study and policy decisions made so far:

- Additional revenue from rates is necessary during the next five-year period to cover costs and maintain the reserve fund balance at the City's policy (50% of Operations & Maintenance costs). Revenue requirement varies each year between \$33,795,120 to \$36,520,031.
- The Committee previously opted for CIP Option 1. The information presented at this meeting will focus on a spending plan that includes funding for the projects under CIP Option 1.
- This cost-of-service study determines if each of the customer classes' rates contributes revenue in proportion to their cost of service. The single-family/duplex customers cost share has declined relative to the increase in multi-family and commercial customers.
- The water cost of service rates sees an increase beginning January 1, 2025, as shown in the tables below.
- The proposed rates beginning 2025 reflect adjustments to single-family tier breakpoints caused by changing water use patterns since the 2018 study.

Table 1: Proposed Water Cost-of-Service Rates:
Fixed Service Charges and Fire Service Charges

Service Size	Current Charge	Proposed (All Customer Classes; Inside and Outside City)				
		1/1/2024	1/1/2025	1/1/2026	1/1/2027	1/1/2028
	<i>Annual Change</i>	<i>0.0%</i>	<i>varies</i>	<i>2.0%</i>	<i>2.0%</i>	<i>2.0%</i>
1"	\$53.51	\$53.51	\$58.64	\$59.81	\$61.01	\$62.23
1-1/2"	\$93.84	\$93.84	\$100.69	\$102.70	\$104.76	\$106.85
2"	\$142.24	\$142.24	\$151.15	\$154.18	\$157.26	\$160.40
3"	\$271.30	\$271.30	\$285.72	\$291.43	\$297.26	\$303.21
4"	\$416.50	\$416.50	\$437.11	\$445.85	\$454.77	\$463.86
6"	\$819.82	\$819.82	\$857.63	\$874.79	\$892.28	\$910.13
8"	\$1,311.71	\$1,311.71	\$1,362.26	\$1,389.51	\$1,417.30	\$1,445.64
10"	\$1,967.57	\$1,967.57	\$3,548.99	\$3,619.97	\$3,692.37	\$3,766.22
Fire Service Charges						
<= 2"	\$29.73	\$29.73	\$30.32	\$30.93	\$31.55	\$32.18
2 1/2"	\$44.32	\$44.32	\$45.21	\$46.11	\$47.03	\$47.97
3"	\$64.56	\$64.56	\$65.85	\$67.17	\$68.51	\$69.88
4"	\$124.69	\$124.69	\$127.18	\$129.73	\$132.32	\$134.97
6"	\$340.52	\$340.52	\$347.33	\$354.28	\$361.36	\$368.59
8"	\$712.74	\$712.74	\$726.99	\$741.53	\$756.37	\$771.49
10"	\$1,272.63	\$1,272.63	\$1,298.08	\$1,324.04	\$1,350.53	\$1,377.54
12"	\$1,654.42	\$1,654.42	\$1,687.51	\$1,721.26	\$1,755.68	\$1,790.80

*Inside and Outside City customers pay the same service charge and fire service charge.

Table 2: Proposed Water Cost-of-Service Rates:
Quantity Charges

Current Quantity Charge Rates			Recommended Quantity Charge Rates							
Tier Size	\$/HCF		Current	Proposed	New	Proposed				
			Tier Size	1/1/2024	Tier Size	1/1/2025	1/1/2026	1/1/2027	1/1/2028	
Inside City										
Single-Family/Duplex			Single-Family/Duplex							
Tier 1	0-26 HCF	\$3.54	Tier 1	0-26 HCF	\$3.54	0-32 HCF	\$3.75	\$3.83	\$3.91	\$3.98
Tier 2	27-48 HCF	\$6.91	Tier 2	27-48 HCF	\$6.91	33-48 HCF	\$6.36	\$6.49	\$6.62	\$6.75
Tier 3	49-86 HCF	\$10.17	Tier 3	49-86 HCF	\$10.17	49-83 HCF	\$10.52	\$10.73	\$10.95	\$11.17
Tier 4	86+ HCF	\$14.44	Tier 4	86+ HCF	\$14.44	84+ HCF	\$14.83	\$15.12	\$15.42	\$15.73
Multi-Family			Multi-Family							
Tier 1	0-8 HCF	\$4.52	Tier 1	0-8 HCF	\$4.52	0-8 HCF	\$5.06	\$5.16	\$5.27	\$5.37
Tier 2	9+ HCF	\$12.92	Tier 2	9+ HCF	\$12.92	9+ HCF	\$14.73	\$15.03	\$15.33	\$15.63
Commercial			Commercial							
		\$7.03			\$7.03		\$7.43	\$7.58	\$7.73	\$7.89
Water Reliability (all customers)		\$0.26			\$0.27		\$0.28	\$0.29	\$0.30	\$0.31
Outside City										
Single-Family/Duplex			Single-Family/Duplex							
Tier 1	0-26 HCF	\$4.41	Tier 1	0-26 HCF	\$4.41	0-32 HCF	\$4.43	\$4.52	\$4.61	\$4.70
Tier 2	27-48 HCF	\$7.78	Tier 2	27-48 HCF	\$7.78	33-48 HCF	\$7.03	\$7.18	\$7.32	\$7.47
Tier 3	49-86 HCF	\$11.03	Tier 3	49-86 HCF	\$11.03	49-83 HCF	\$11.20	\$11.42	\$11.65	\$11.88
Tier 4	86+ HCF	\$15.31	Tier 4	86+ HCF	\$15.31	84+ HCF	\$15.50	\$15.81	\$16.13	\$16.45
Multi-Family			Multi-Family							
Tier 1	0-8 HCF	\$5.39	Tier 1	0-8 HCF	\$5.39	0-8 HCF	\$5.74	\$5.85	\$5.97	\$6.09
Tier 2	9+ HCF	\$13.78	Tier 2	9+ HCF	\$13.78	9+ HCF	\$15.41	\$15.71	\$16.03	\$16.35
Commercial			Commercial							
		\$7.90			\$7.90		\$8.11	\$8.27	\$8.44	\$8.61
Water Reliability (all customers)		\$0.41			\$0.42		\$0.43	\$0.44	\$0.45	\$0.46

At the January 27, 2023, Committee meeting, Committee members expressed their concerns with the Single-Family/Duplex quantity charges as Tier 3 and Tier 4 rates initially decreased before increasing in the later years. Committee members' concerns included the perception of incentivizing higher water users to use more water when the City intends to promote water conservation. The tiers were readjusted after reassessing the capital improvement projects on how they serve average day service versus peak service, which shifted the cost between the tiers. Staff is presenting the revised quantity charges shown in Table 2.

The water cost of service study also reviewed and recommended the continued practice of the balance of fixed and quantity charge revenue, outside City rate differential, pass through rate adjustments, water reliability charge, and water shortage revenue stabilization factors as previously presented to the Committee.

Wastewater

Below is a brief review of the wastewater cost of service study and policy decisions made so far:

- No additional revenue from rates is necessary during the next five-year period to cover costs and maintain the reserve fund balance at the City's policy (50% of Operations & Maintenance costs). Revenue requirement varies each year between \$15,429,894 and \$16,127,678. Reserves will be drawn down to meet the needs of the Wastewater Enterprise without the need for revenue increases.
- Although no additional rate revenue is needed to fund wastewater operations, this cost-of-service study determines if each of the customer classes' rates contributes revenue in proportion to their cost of service. The commercial cost share has declined relative to the increase in residential customers.
- The current bi-monthly residential (single family and multi-family) rate per dwelling unit is \$87.38. The wastewater cost of service study analyzed the introduction of a flow-based quantity charge for residential customers changing the rate structure to include a fixed charge and a flow-based quantity charge, as shown in Table 3 below.
- Quantity charges would be based on estimated sewer flow by factoring down each customer's actual water use by a Sewer Return Factor, which reflects the fact that not all water use (e.g., irrigation) returns to the sewer system. Sewer Return Factors were derived based on a three-year average of the lowest month for each year.
- Rate adjustments will be phased in during a five-year period.
- The wastewater cost of service study analyzed the expansion of the commercial customer classes from two (i.e., domestic strength and excess strength) to three classes (i.e., low, medium, and high strength).

Table 3: Proposed Wastewater Cost-of-Service Rates (Presented 1/27/2023)

Proposed Rates	Current Rates	1/1/2024	1/1/2025	1/1/2026	1/1/2027	1/1/2028
Bi-Monthly Service Charge						
Single and Multi Family	\$87.38	\$77.92	\$68.46	\$59.00	\$49.54	\$40.08
Commercial Low	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Commercial Medium	n/a	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Commercial High	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Quantity Charge Rate per hcf						
Single and Multi Family	\$0.00	\$0.72	\$1.43	\$2.15	\$2.86	\$3.58
Commercial Low	\$4.74	\$5.03	\$4.66	\$4.30	\$3.94	\$3.58
Commercial Medium	n/a	\$7.36	\$6.81	\$6.29	\$5.76	\$5.24
Commercial High	\$7.08	\$7.83	\$7.61	\$7.39	\$7.17	\$6.95

Additionally, Staff was asked to provide examples of how introducing a flow-based quantity charge (volumetric rates) to the current wastewater fixed charge may help address water conservation. Attachment 3 titled Volumetric Wastewater Pricing: Frequently Asked Questions written by the Natural Resources Defense Council (NRDC), addresses possible questions arising from the introduction of a volumetric charge, including examples of how much water volumetric wastewater pricing may save across the state of California.

Furthermore, staff understands the Committee's apprehension in changing the current wastewater rate structure and would like to provide additional information on the sewer return factors being proposed. Sewer flows are not metered directly; therefore, water demand can be used as a basis for estimating sewer flows. There is adequate data to estimate the return to sewer factors by customer class.

Deriving return to sewer factors for each customer class (as is being proposed) will reflect the characteristics of each class with greater precision. For single-family residential customers, a higher percentage of their water demand is for irrigation, which does not return to the sewer. Multi-family customers typically have less landscape per dwelling unit and hence more of their water use returns to the sewer. The proposed return factors displayed in the table below have been estimated using the best available data and following industry practices. As part of ongoing implementation, it is recommended that they be regularly updated.

Table 4: Derivation of Return to Sewer Factors

Customer Class	Annual Flow [1] hcf a	Sewered Flow [2] hcf b	Return to Sewer c = b/a	Accounts Units d	Avg Flow per Unit hcf per year e = b/d
Single Family Residential					
Without Irrigation meter	2,017,021	1,049,980	52%	6,080	173
Multiple Family Residences	572,457	512,609	90%	10,117	51
Commercial/Industrial	734,172	610,599	83%	795	768
Municipal	43,051	21,441	50%	57	376

1. Average of CY 2017 & 2018 annual metered flow

2. Average of lowest three winter months

Note: does not apply to accounts with separate irrigation meters

Combined bill impacts for the various customer classes are included in the presentation as Attachment 1 and will be reviewed during the presentation.

Next Steps

If the Committee decides to move forward, staff will present the final recommendation and public notice to the full City Council at a City Council Study Session in the Summer. If Council wishes to move forward with the proposed rate adjustments, staff will distribute the public notice to customers and implement a community engagement plan. Following community engagement and in the absence of a majority protest, the revised Water and Wastewater Rates Ordinance will be introduced to City Council at a public hearing in the Fall. If the ordinance is adopted, the adjusted wastewater rates will take effect on January 1, 2024 and adjusted water rates will take effect on January 1, 2025. The only exception is for the Water Reliability Charge, as those charges would take effect on January 1, 2024. The Water Reliability Charge was introduced in the 2018 cost of service study and has been effective since. The 2018 study determined a one cent increase each year for 30 years, which we are recommending the continued practice without delaying an additional year.

Meeting/Action	Date
Presentation to City Council (with Prop 218 notice)	Summer 2023
Public Notice Distributed	Summer 2023
Presentation/Discussion at the Public Works Commission	Summer 2023
Community Outreach <ul style="list-style-type: none"> • Town Hall Meetings • Commission Meeting Presentations • Community Presentations • Presentation to the Chamber of Commerce • Article on the Backbone Newsletter • Newspaper Ads Social Media Posts	Summer/Fall 2023
Public Hearing (1 st Reading)	Fall 2023
Public Hearing (2 nd Reading)	Fall 2023
Rates Effective	January 1, 2024 (Wastewater Rates and Water Reliability Charge) / January 1, 2025 (Water Rates)



Water & Wastewater Rates

Public Works Commission Committee
Liaison Meeting
May 31, 2023

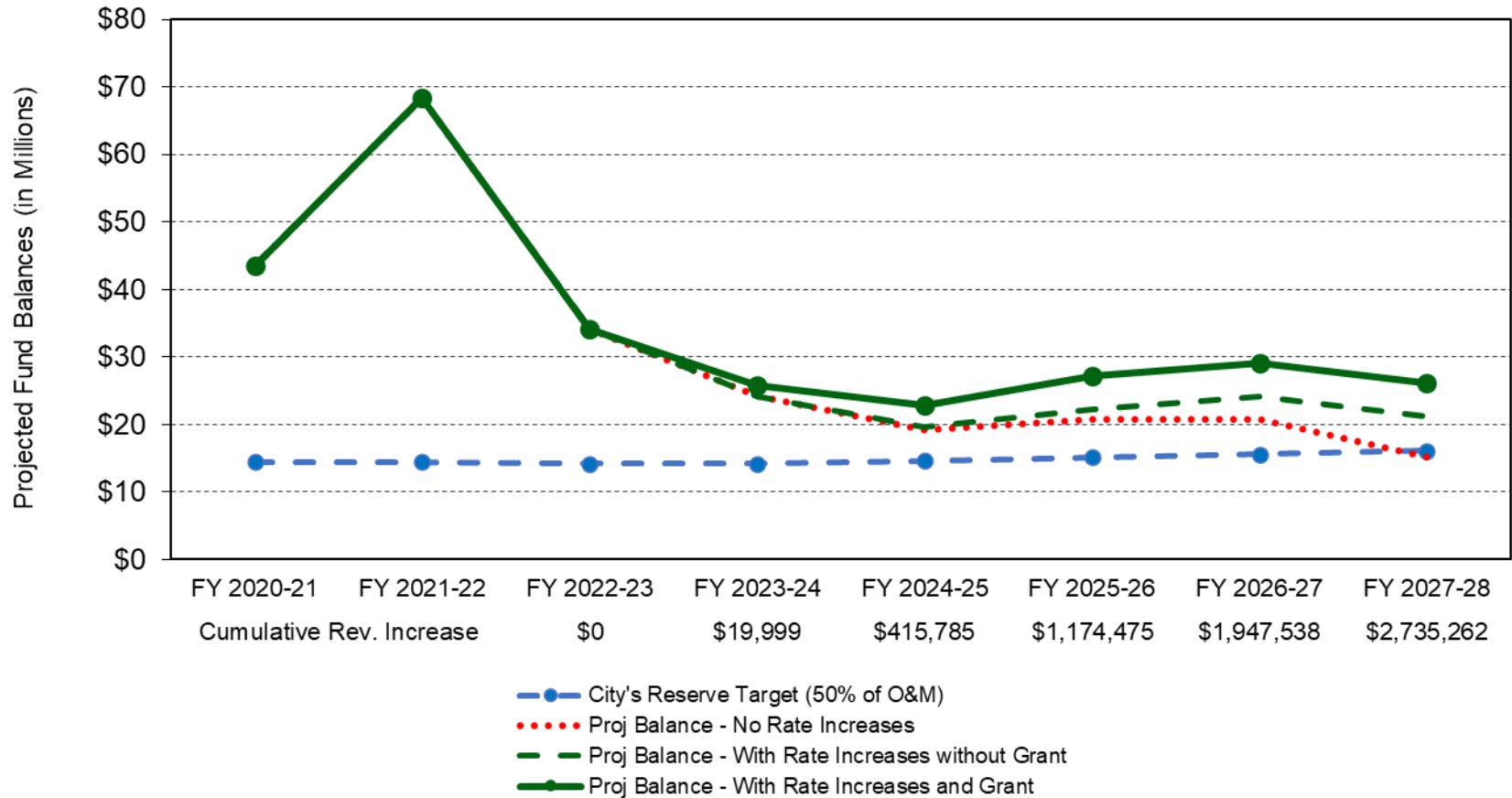


WATER RATE STUDY



Water Fund Balance Projection

Ending Reserve Fund Reserve Balance
Water Enterprise (Funds 800, 801, 802)





Water Tier Adjustments

- Proposed rates beginning 2025 reflect adjustments to single-family tier breakpoints caused by changing water use patterns since 2018 study.

Water Rate Tiers	Current Tier Size	Proposed Tier Size	Explanation
Tier 1	0-26 HCF	0-32 HCF	Winter water use increased.
Tier 2	27-48 HCF	33-48 HCF	Average water use held, but lower variance in winter water use and average use to reduce tier size. Decreased peak day use leads to sustained average water use.
Tier 3	49-86 HCF	49-83 HCF	Peak day water use declined.
Tier 4	86+ HCF	84 HCF+	Maximum water use declined. Reduction shows results of City's conservation efforts.



Proposed 2024-2028 Water COS Rates

Current Quantity Charge Rates			Recommended Quantity Charge Rates								
Tier Size	\$/HCF		Current	Proposed	New	Proposed					
			Tier Size	1/1/2024	Tier Size	1/1/2025	1/1/2026	1/1/2027	1/1/2028		
Inside City											
Single-Family/Duplex			Single-Family/Duplex								
Tier 1	0-26 HCF	\$3.54	Tier 1	0-26 HCF	\$3.54	0-32 HCF	\$3.75	\$3.83	\$3.91	\$3.98	
Tier 2	27-48 HCF	\$6.91	Tier 2	27-48 HCF	\$6.91	33-48 HCF	\$6.36	\$6.49	\$6.62	\$6.75	
Tier 3	49-86 HCF	\$10.17	Tier 3	49-86 HCF	\$10.17	49-83 HCF	\$10.52	\$10.73	\$10.95	\$11.17	
Tier 4	86+ HCF	\$14.44	Tier 4	86+ HCF	\$14.44	84+ HCF	\$14.83	\$15.12	\$15.42	\$15.73	
Multi-Family			Multi-Family								
Tier 1	0-8 HCF	\$4.52	Tier 1	0-8 HCF	\$4.52	0-8 HCF	\$5.06	\$5.16	\$5.27	\$5.37	
Tier 2	9+ HCF	\$12.92	Tier 2	9+ HCF	\$12.92	9+ HCF	\$14.73	\$15.03	\$15.33	\$15.63	
Commercial			Commercial		\$7.03		\$7.43	\$7.58	\$7.73	\$7.89	
Water Reliability (all customers)					\$0.26		\$0.27	\$0.28	\$0.29	\$0.30	\$0.31
Outside City											
Single-Family/Duplex			Single-Family/Duplex								
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Multi-Family			Multi-Family								
Tier 1	0-8 HCF	\$5.39	Tier 1	0-8 HCF	\$5.39	0-8 HCF	\$5.74	\$5.85	\$5.97	\$6.09	
Tier 2	9+ HCF	\$13.78	Tier 2	9+ HCF	\$13.78	9+ HCF	\$15.41	\$15.71	\$16.03	\$16.35	
Commercial			Commercial		\$7.90		\$8.11	\$8.27	\$8.44	\$8.61	
Water Reliability (all customers)					\$0.41		\$0.42	\$0.43	\$0.44	\$0.45	\$0.46



Proposed 2024-2028 Water COS Rates

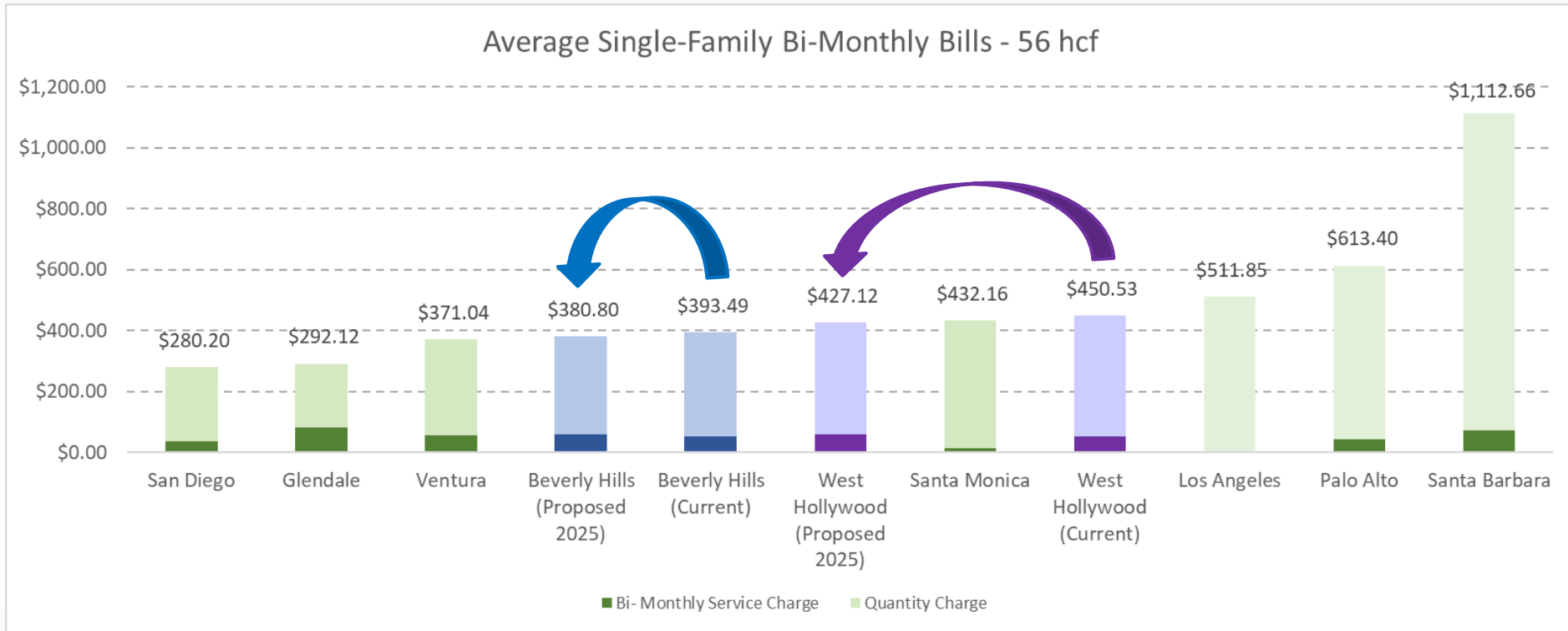
Service Size	Current Charge	Proposed (All Customer Classes; Inside and Outside City)				
		1/1/2024	1/1/2025	1/1/2026	1/1/2027	1/1/2028
	<i>Annual Change</i>	<i>0.0%</i>	<i>varies</i>	<i>2.0%</i>	<i>2.0%</i>	<i>2.0%</i>
1"	\$53.51	\$53.51	\$58.64	\$59.81	\$61.01	\$62.23
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12"	\$1,654.42	\$1,654.42	\$1,687.51	\$1,721.26	\$1,755.68	\$1,790.80

Inside and Outside City customers pay the same service charge and fire service charge.



Comparison With Other Agencies – Single Family

2025 Rates – First year of increase



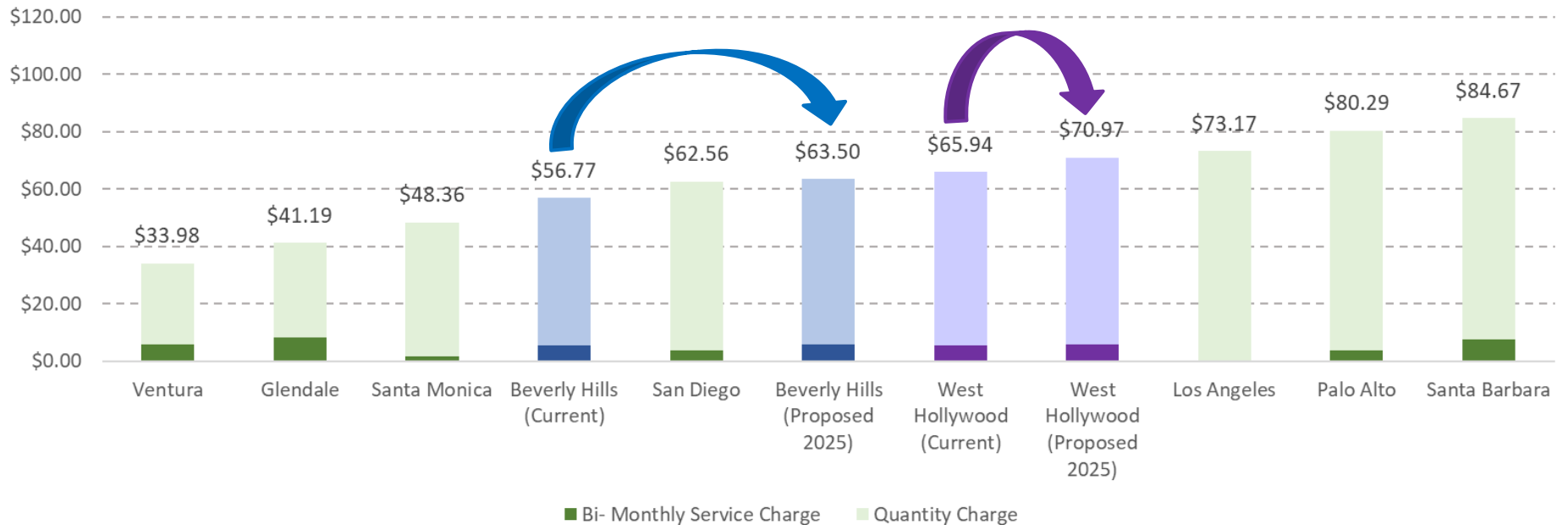
Beverly Hills and West Hollywood bills include Water Reliability Charge.



Comparison With Other Agencies – Multi Family

2025 Rates – First year of increase

Average Multi-Family Bi-Monthly Bills - 9 hcf per dwelling unit



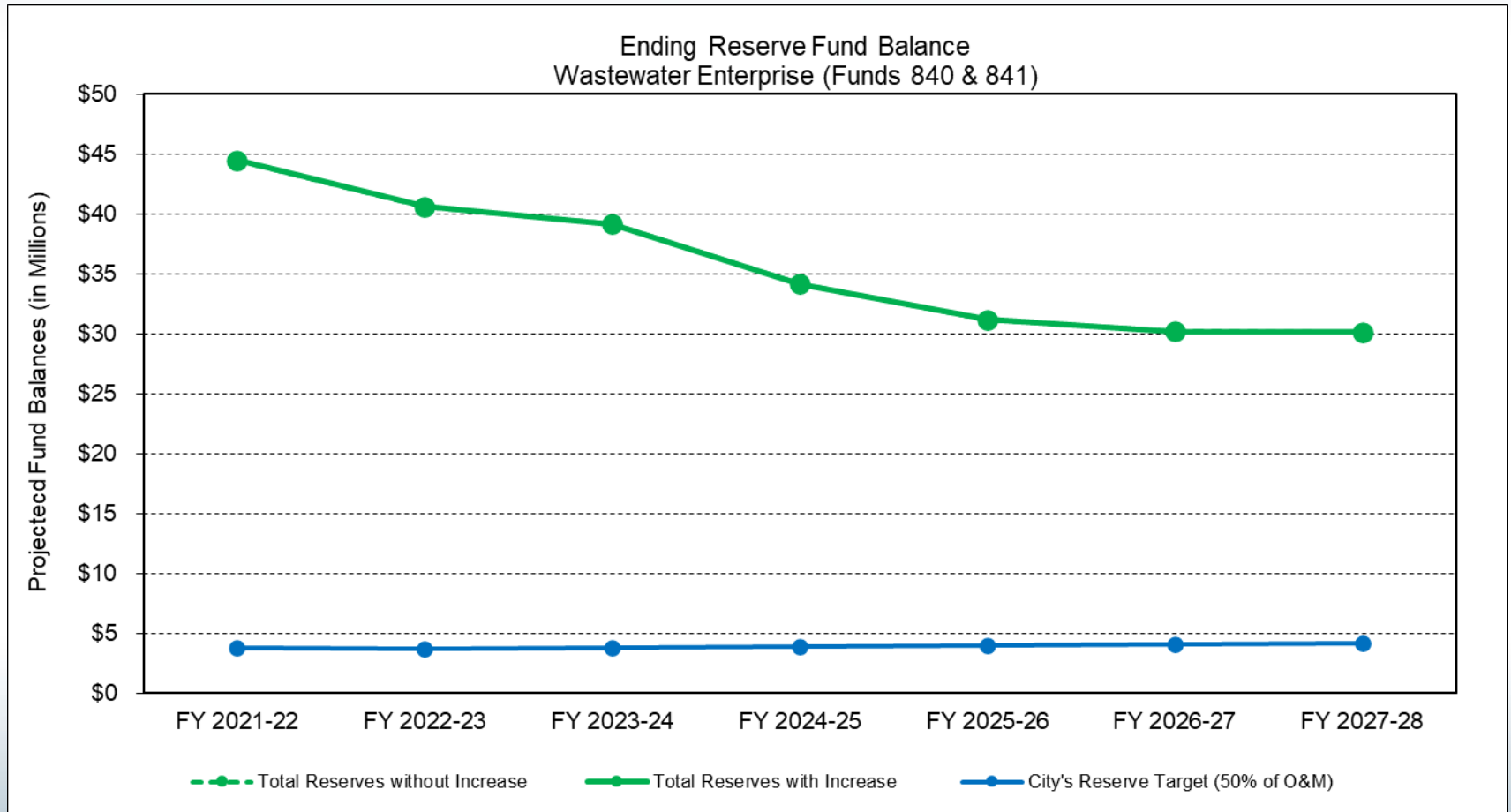
Beverly Hills and West Hollywood bills include Water Reliability Charge.



WASTEWATER RATE STUDY



Wastewater Fund Balance





Derivation of Return to Sewer Factors

Customer Class	Annual Flow [1] hcf	Sewered Flow [2] hcf	Return to Sewer	Accounts Units	Avg Flow per Unit hcf per year
	a	b	c = b/a	d	e = b/d
Single Family Residential					
Without Irrigation meter	2,017,021	1,049,980	52%	6,080	173
Multiple Family Residences	572,457	512,609	90%	10,117	51
Commercial/Industrial	734,172	610,599	83%	795	768
Municipal	43,051	21,441	50%	57	376

1. Average of CY 2017 & 2018 annual metered flow

2. Average of lowest three winter months

Note: does not apply to accounts with separate irrigation meters



SFR Irrigation Customer Analysis

- 96 SFR customers with separate irrigation meters
 - Irrigation use considerably higher than non-irrigation metered customers, as indoor use very similar to non-irrigation metered customer’s **total** use
 - Irrigation metered customers use 2.4x as much water
 - 44% of their water is indoor use – compared to calculated return to sewer factor for all customers of 52%
- Three-year average of actual indoor and outdoor water use

Residential Customers	Average Monthly Water Use (HCF)			3-Year Avg	
	2017	2018	2019		
Without Separate Irrigation Meter	28.49	28.72	25.68	27.63	
With Separate Irrigation Meter					% of Total
Indoor Meter	31.48	30.43	26.04	29.31	44%
Irrigation Meter	37.99	39.28	36.35	37.87	56%
Total	69.48	69.71	62.39	67.18	100%
With versus Without (avg. water use)	2.44x	2.43x	2.43x		



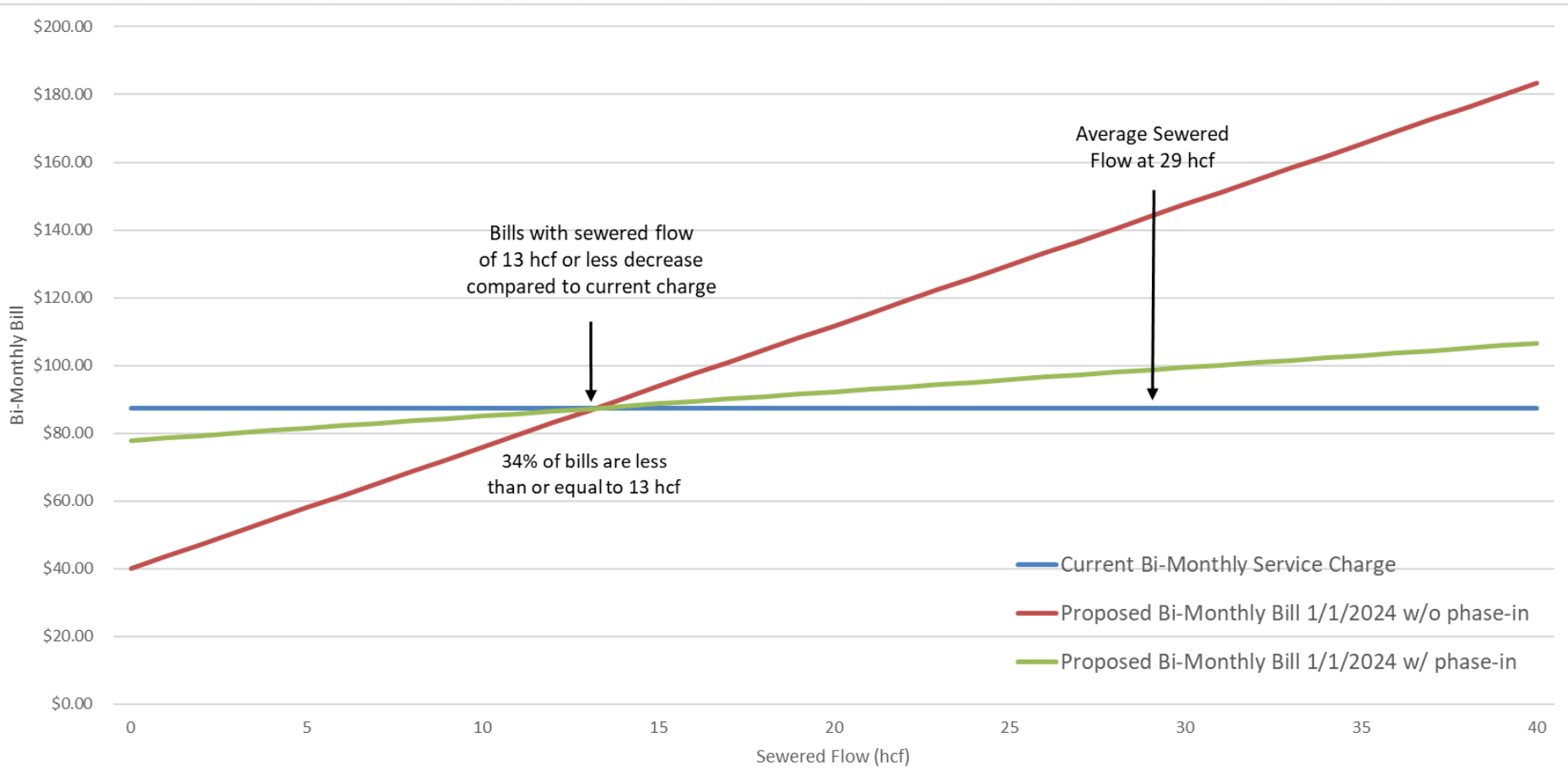
Proposed Wastewater Cost-of-Service Rates

Customer Class	Current Bi-Monthly	Cost of Service
Single and Multi Family		
Service Charge per dwelling unit	\$87.38	\$40.08
Quantity Charge	n/a	\$3.58
Commercial/Municipal		
Service Charge per account	\$34.20	\$40.08
Quantity Charges (option 1 - existing classes)		
Domestic Strength	\$4.74	\$3.58
Excess Strength	\$7.08	\$6.95
Quantity Charges (option 2 - proposed classes)		
Low Strength	n/a	\$3.58
Med Strength	n/a	\$5.24
High Strength	n/a	\$6.95

- Single and Multi Family bi-monthly fixed service charges decrease with the introduction of a flow-based quantity charge
- Quantity charges based on estimated sewer flow
 - Metered water use factored down to eliminate flow that is not sewer such as irrigation
 - Return to sewer factors calculated for each customer class

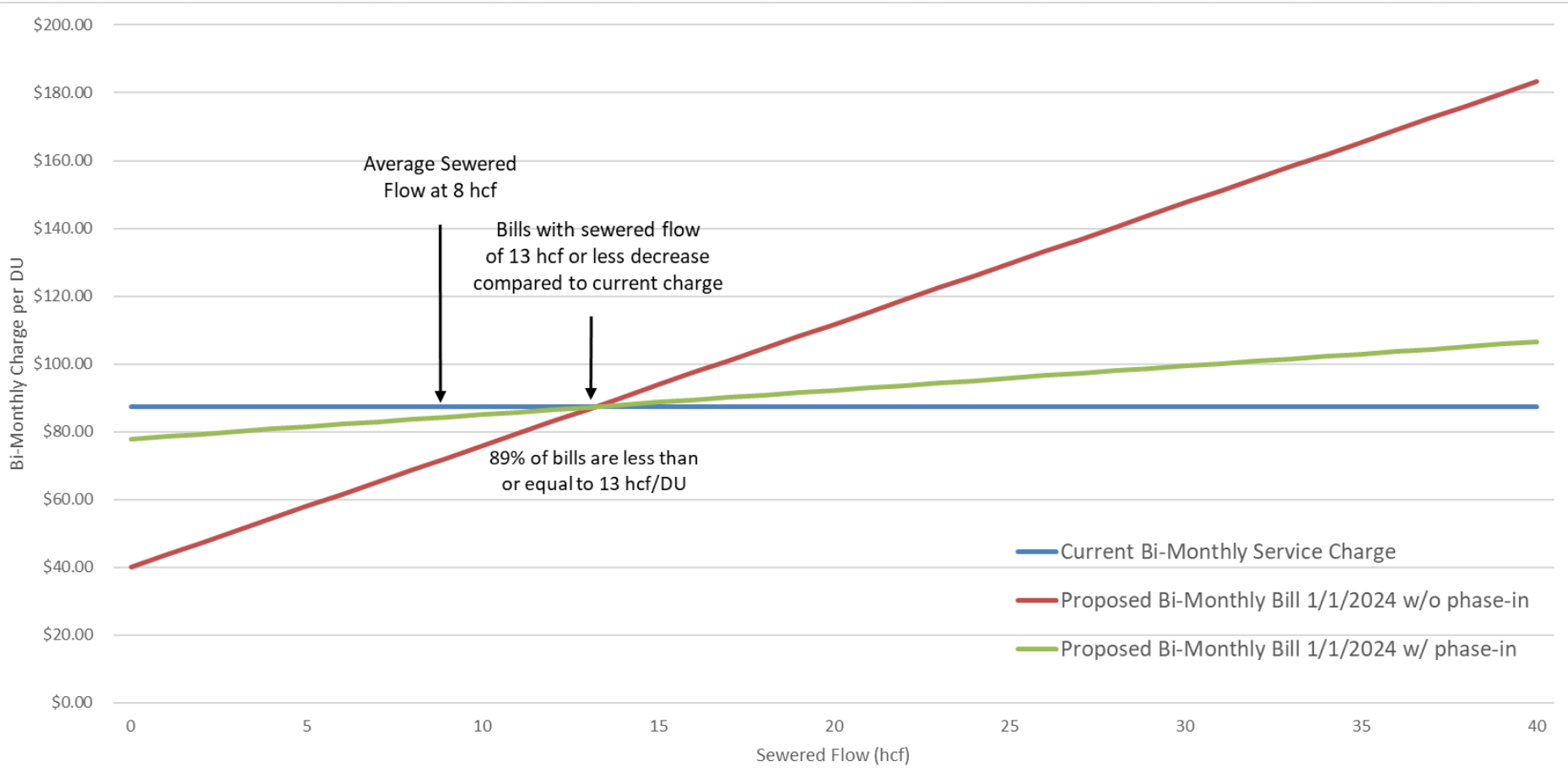


SFR Bills with Phase-In: 2024





MFR per DU with Phase-In: 2024





Wastewater Phase-In Rates

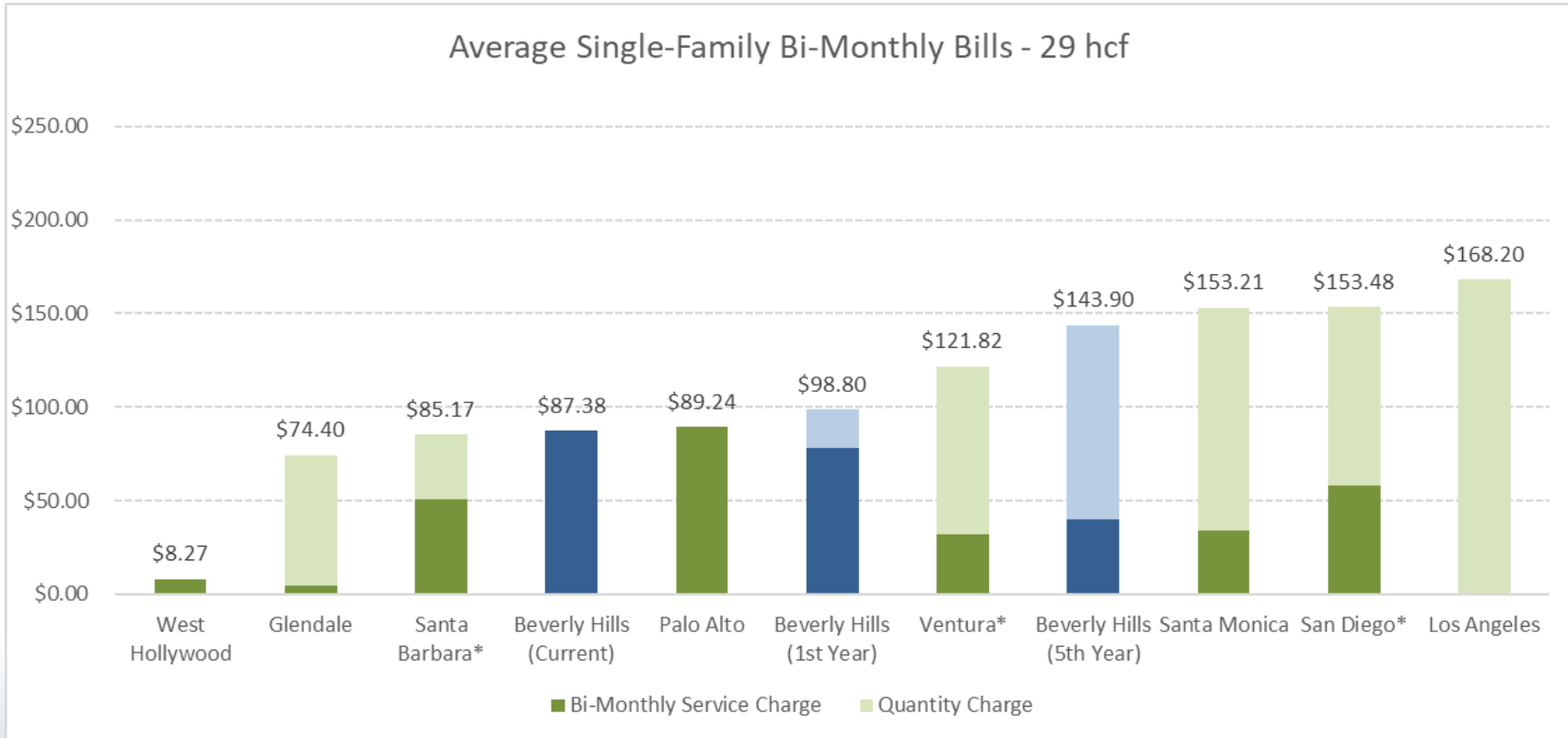
Phase-in applies to all three customer classes

Proposed Rates	Current Rates	1/1/2024	1/1/2025	1/1/2026	1/1/2027	1/1/2028
Bi-Monthly Service Charge						
Single and Multi Family	\$87.38	\$77.92	\$68.46	\$59.00	\$49.54	\$40.08
Commercial Low	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Commercial Medium	n/a	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Commercial High	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Quantity Charge Rate per hcf						
Single and Multi Family	\$0.00	\$0.72	\$1.43	\$2.15	\$2.86	\$3.58
Commercial Low	\$4.74	\$5.03	\$4.66	\$4.30	\$3.94	\$3.58
Commercial Medium	n/a	\$7.36	\$6.81	\$6.29	\$5.76	\$5.24
Commercial High	\$7.08	\$7.83	\$7.61	\$7.39	\$7.17	\$6.95



Comparison With Other Agencies – Single Family

Average Single-Family Bi-Monthly Bills - 29 hcf

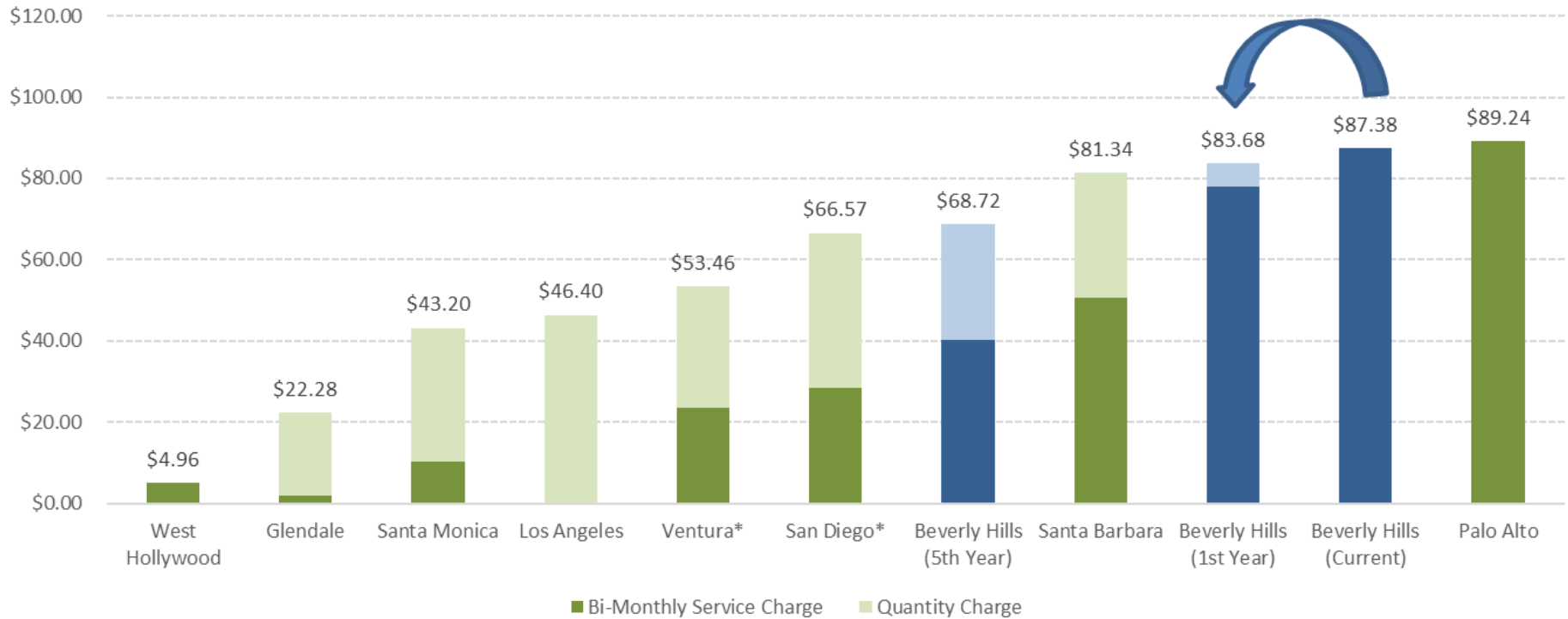


*Caps water consumption for wastewater billing purposes



Comparison With Other Agencies – Multi Family

Average Multi-Family Bi-Monthly Bills - 8 hcf per dwelling unit



*Caps water consumption for wastewater billing purposes



Combined Bill Impact – Single Family

Water bills assuming no increase until 2025

Wastewater bills based on revised phased-in rates

	Current		Proposed				
			<u>1/1/2024</u>	<u>1/1/2025</u>	<u>1/1/2026</u>	<u>1/1/2027</u>	<u>1/1/2028</u>
Assumptions							
Meter Size	1" meter	1" meter					
Water Consumption	56	56					
Return to Sewer Factor	n/a	52%					
Sewered Flow	n/a	29					
Water							
Fixed Service Charge	\$53.51	\$53.51	\$58.64	\$59.81	\$61.01	\$61.01	
Quantity Charge	\$325.42	\$325.42	\$306.48	\$312.61	\$318.87	\$318.64	
Water Reliability Charge	\$14.56	\$15.12	\$15.68	\$16.80	\$16.80	\$17.36	
Total	\$393.49	\$394.05	\$380.80	\$389.22	\$396.67	\$397.01	
Increase/(Decrease)		\$0.56	(\$13.25)	\$8.42	\$7.45	\$0.34	
Wastewater							
Service Charge	\$87.38	\$77.92	\$68.46	\$59.00	\$49.54	\$40.08	
Quantity Charge	\$0.00	\$20.88	\$41.47	\$62.35	\$82.94	\$103.82	
Total	\$87.38	\$98.80	\$109.93	\$121.35	\$132.48	\$143.90	
Increase/(Decrease)		\$11.42	\$11.13	\$11.42	\$11.13	\$11.42	
Total Bi-monthly Bill	\$480.87	\$492.85	\$490.73	\$510.57	\$529.15	\$540.91	
Increase/(Decrease)		\$11.98	(\$2.12)	\$19.84	\$18.58	\$11.76	



Combined Bill Impact – Multi Family

Water bills assuming no increase until 2025

Wastewater bills based on revised phased-in rates

	Current	Proposed				
		<u>1/1/2024</u>	<u>1/1/2025</u>	<u>1/1/2026</u>	<u>1/1/2027</u>	<u>1/1/2028</u>
Assumptions						
Meter Size	1.5" meter	1.5" meter				
Water Consumption per unit	9.3	9.3				
Return to Sewer Factor	n/a	90.0%				
Sewered Flow	n/a	8.4				
Dwelling Units	10	10				
Water						
Fixed Service Charge	\$93.84	\$93.84	\$100.69	\$102.70	\$104.76	\$106.85
Quantity Charge	\$529.56	\$529.56	\$596.47	\$608.40	\$620.57	\$632.98
Water Reliability Charge	\$24.18	\$25.11	\$26.97	\$26.04	\$27.90	\$28.83
Total	\$647.58	\$648.51	\$724.13	\$737.14	\$753.23	\$768.66
Increase/(Decrease)		\$0.93	\$75.62	\$13.01	\$16.08	\$15.44
Wastewater						
Service Charge	\$873.80	\$779.20	\$684.60	\$590.00	\$495.40	\$400.80
Quantity Charge	\$0.00	\$60.26	\$119.69	\$179.96	\$239.38	\$299.65
Total	\$873.80	\$839.46	\$804.29	\$769.96	\$734.78	\$700.45
Increase/(Decrease)		(\$34.34)	(\$35.17)	(\$34.34)	(\$35.17)	(\$34.34)
Total Bi-monthly Bill	\$1,521.38	\$1,487.97	\$1,528.42	\$1,507.10	\$1,488.01	\$1,469.11
Increase/(Decrease)		(\$33.41)	\$40.45	(\$21.32)	(\$19.09)	(\$18.90)



Combined Bill Impact – Commercial

Water bills assuming no increase until 2025

Wastewater bills based on revised phased-in rates

	Current		Proposed			
		<u>1/1/2024</u>	<u>1/1/2025</u>	<u>1/1/2026</u>	<u>1/1/2027</u>	<u>1/1/2028</u>
Assumptions						
Meter Size	1" meter	1" meter				
Water Consumption per unit	113	113				
Return to Sewer Factor	n/a	83.0%				
Sewered Flow	113	94				
Commercial Strength	Domestic	Low				
Water						
Fixed Service Charge	\$53.51	\$53.51	\$58.64	\$59.81	\$61.01	\$62.23
Quantity Charge	\$794.39	\$794.39	\$840.06	\$856.86	\$874.00	\$891.48
Water Reliability Charge	\$29.38	\$30.51	\$31.64	\$33.90	\$33.90	\$35.03
Total	\$877.28	\$878.41	\$930.34	\$950.57	\$968.91	\$988.74
Increase/(Decrease)		\$1.13	\$51.93	\$20.23	\$18.33	\$19.83
Wastewater						
Service Charge	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Quantity Charge	\$535.62	\$472.82	\$438.04	\$404.20	\$370.36	\$336.52
Total	\$569.82	\$508.20	\$474.59	\$441.93	\$409.27	\$376.60
Increase/(Decrease)		(\$61.62)	(\$33.61)	(\$32.66)	(\$32.66)	(\$32.67)
Total Bi-monthly Bill	\$1,447.10	\$1,386.61	\$1,404.93	\$1,392.50	\$1,378.18	\$1,365.34
Increase/(Decrease)		(\$60.49)	\$18.32	(\$12.43)	(\$14.33)	(\$12.84)



Direction from Committee

Staff recommends that the City Council Public Works Liaison Committee review and provide direction on:

1. The proposed wastewater policy recommendations, which maintain the residential customer class (single-family and multi-family) and adds a quantity (volumetric) charge for the residential customer class;
2. The proposed sewer return factors based on a three-year average of the lowest month for each year;
3. The proposed change in the commercial wastewater customer classes to include a third class;
4. The proposed Water CIP Option 1;
5. The proposed fixed charge revenue ratio for water;
6. The proposed pass-through charges, outside city differential, water reliability charge, and water shortage revenue stabilization factors; and,
7. Recommend that City Council begin the required Proposition 218 public notice process for rates based on the cost-of-service studies.



END OF PRESENTATION



CITY OF BEVERLY HILLS
PUBLIC WORKS DEPARTMENT
MEMORANDUM

TO: Beverly Hills Public Works City Council Liaison Committee

FROM: Shana Epstein, Director of Public Works
Robert Welch, P.E. Utilities General Manager
Melissa Gomez, Senior Management Analyst

DATE: January 27, 2023

SUBJECT: Status Update for the Water and Wastewater Cost of Service Study

ATTACHMENTS:

1. 1/27/23 Water and Wastewater Rates Presentation
2. 9/13/22 Agenda Report- Status Update for the Water and Wastewater Cost of Service Study
3. 9/29/22 Agenda Report- Status Update for the Water and Wastewater Cost of Service Study
4. Water and Wastewater Customer Bill Impacts

RECOMMENDATION

Staff recommends that the City Council Public Works Liaison Committee receive and provide direction on:

1. The proposed policy recommendations, which maintain the residential customer class (single-family and multi-family) and adds a quantity (volumetric) charge for the residential customer class;
2. The proposed sewer return factors based on a three-year average of the lowest month for each year;
3. The proposed change in the commercial wastewater customer classes to include a third class;
4. The proposed Water CIP Option 1;
5. The proposed fixed charge revenue ratio for water;
6. The proposed pass-through charges, outside city differential, water reliability charge, and water shortage revenue stabilization factors; and
7. Recommend that City Council begin the required Proposition 218 public notice process for rates based on the cost of service studies.

INTRODUCTION

At the September 13, 2022 Public Works Liaison Committee (Committee), staff and consultants introduced the water and wastewater cost of service study to the Committee. The September 13, 2022 agenda report is included as Attachment 2.

On September 29, 2022, the Committee continued the rate discussion. Vice Mayor Gold recommended that if CIP Option 2 was selected, that the entire City Council should weigh in on that decision, as it requires the most funding from customer rates. Shana Epstein, Director of

Public Works, recommended that the staff offer briefings on the topic to individual council members. The September 29, 2022 agenda report is included as Attachment 3.

After further individual briefings, staff is returning to the Committee with further refinements to the cost of service study previously presented.

DISCUSSION

Wastewater

In the cost of service study that was previously presented to the Committee, single-family and multi-family wastewater customers were separate customer classes and had different services charges (as shown in Table 1). The information presented today includes new proposed wastewater rates, which combine single family and multi-family customers providing uniform rates in order to maintain the current residential customer rate structure (as shown in Table 2).

Table 1- Previous Proposed Wastewater Cost-of-Service Rates (Presented 9/13/2022)

Customer Class	Current Bi-Monthly	Cost of Service
Single Family		
Service Charge per dwelling unit	\$87.38	\$58.16
Quantity Charge	n/a	\$3.58
Multi Family		
Service Charge per dwelling unit	\$87.38	\$27.51
Quantity Charge	n/a	\$3.58
Commercial/Municipal		
Service Charge per account	\$34.20	\$58.16
Quantity Charges (option 1 - existing classes)		
Domestic Strength	\$4.74	\$3.58
Excess Strength	\$7.08	\$6.95
Quantity Charges (option 2 - proposed classes)		
Low Strength	n/a	\$3.58
Med Strength	n/a	\$5.24
High Strength	n/a	\$6.95

Table 2- Revised Wastewater Cost-of-Service Rates (Presented 1/27/2023)

Customer Class	Current Bi-Monthly	Cost of Service
Single and Multi Family		
Service Charge per dwelling unit	\$87.38	\$40.08
Quantity Charge	n/a	\$3.58
Commercial/Municipal		
Service Charge per account	\$34.20	\$40.08
Quantity Charges (option 1 - existing classes)		
Domestic Strength	\$4.74	\$3.58
Excess Strength	\$7.08	\$6.95
Quantity Charges (option 2 - proposed classes)		
Low Strength	n/a	\$3.58
Med Strength	n/a	\$5.24
High Strength	n/a	\$6.95

Water

After further feedback received, the information being presented today focuses on CIP Option 1, as that CIP budget has already been approved by City Council during the last budget cycle. At this time, the City is sensitive to raising rates as the community is facing historic inflation while still recovering from the pandemic.

As previously shown, staff presented three CIP scenarios, which fund various projects and require different spending (as shown in Table 4 below).

Table 4- Water CIP Options

Water Capital Project Schedule Options	Option 1	Option 2	Option 3
1 Cabrillo Reservoir Project ¹	\$4,180,937	\$21,270,460	\$4,180,937
2 Reservoir Repl. & Pump Station Rehab Project ¹	\$2,969,633	\$2,969,633	\$9,508,941
3 All Other Capital Projects ¹	\$45,274,713	\$45,274,713	\$45,274,713
4 Total 5-Year CIP Spending¹	\$52,425,283	\$69,514,806	\$58,964,591

In this report, staff will focus on presenting rates for CIP option 1, which provides the least fiscal impact to the community from the three CIP options being brought forward. Table 5 and 6 below show the proposed 2023 water cost of service rates under CIP Option 1.

Table 5- Proposed 2023 Water COS Fixed Service Charges – CIP Option 1

Service Size	Current Charge	COS Charges
Fixed Service Charges		
1"	\$53.51	\$56.38
1-1/2"	\$93.84	\$97.56
2"	\$142.24	\$146.99
3"	\$271.30	\$278.78
4"	\$416.50	\$427.05
6"	\$819.82	\$838.92
8"	\$1,311.71	\$1,333.16
10"	\$1,967.57	\$3,474.86
Fire Service Charges		
<= 2"	\$29.73	\$30.32
2 1/2"	\$44.32	\$45.21
3"	\$64.56	\$65.85
4"	\$124.69	\$127.18
6"	\$340.52	\$347.33
8"	\$712.74	\$726.99
10"	\$1,272.63	\$1,298.08
12"	\$1,654.42	\$1,687.51

Table 6- Proposed 2023 Water COS Quantity Charges – CIP Option 1

Current Quantity Charge Rates			COS Quantity Charge Rates	
Tier Size		\$/HCF	Tier Size	\$/HCF
Inside City				
Single-Family/Duplex				
Tier 1	0-26 HCF	\$3.54	0-32 HCF	\$4.17
Tier 2	27-48 HCF	\$6.91	33-48 HCF	\$6.98
Tier 3	49-86 HCF	\$10.17	49-83 HCF	\$9.72
Tier 4	86+ HCF	\$14.44	84+ HCF	\$12.15
Multi-Family				
Tier 1	0-8 HCF	\$4.52	0-8 HCF	\$5.62
Tier 2	9+ HCF	\$12.92	9+ HCF	\$14.55
Commercial		\$7.03	\$7.70	
Water Reliability (all customers)		\$0.26	\$0.27	
Outside City				
Single-Family/Duplex				
Tier 1	0-26 HCF	\$4.41	0-32 HCF	\$4.83
Tier 2	27-48 HCF	\$7.78	33-48 HCF	\$7.64
Tier 3	49-86 HCF	\$11.03	49-83 HCF	\$10.39
Tier 4	86+ HCF	\$15.31	84+ HCF	\$12.81
Multi-Family				
Tier 1	0-8 HCF	\$5.39	0-8 HCF	\$6.29
Tier 2	9+ HCF	\$13.78	9+ HCF	\$15.21
Commercial		\$7.90	\$8.36	
Water Reliability (all customers)		\$0.41	\$0.42	

It is important to note that the water and wastewater cost of service study is setting rates for a five year period. Combined bill impacts for the various customer classes are included in Attachment 4 and will be reviewed during the presentation. Additional information is included in the Water and Wastewater Rates Presentation included as Attachment 1.

Next Steps

If the Liaison decides to move forward, staff will present the final recommendation and public notice to the full City Council at the February 21, 2023 City Council Study Session. If Council wishes to move forward with the proposed rate restructuring, staff will distribute the public notice to customers and implement the proposed community engagement plan detailed below. Following community engagement and in the absence of a majority protest, the revised Water and Wastewater Rates Ordinance will be introduced to City Council at a public hearing in May 2023. If the ordinance is adopted, the adjusted rates will take effect July 1, 2023.

Meeting/Action	Date
Presentation to City Council (with Prop 218 notice)	February 21, 2023
Public Notice Distributed	March 2023
Presentation/Discussion at the Public Works Commission	April 13, 2023
Community Outreach <ul style="list-style-type: none"> • Town Hall Meetings • Commission Meeting Presentations • Community Presentations • Presentation to the Chamber of Commerce • Article on the Backbone Newsletter • Newspaper Ads • Social Media Posts 	March-April 2023
Public Hearing (1 st Reading)	May 2023
Public Hearing (2 nd Reading)	May 2023
Rates Effective	July 1, 2023

Attachment 1



Water & Wastewater Rates

Public Works Commission
Meeting

January 27, 2023



Presentation Outline

- Wastewater Enterprise
 - Five-year financial projection and cost-of-service analysis
 - Confirm key policies
 - New flow-based single and multi family quantity rate
 - Expand commercial classes from two to three classes
 - Phase in single family rate adjustments

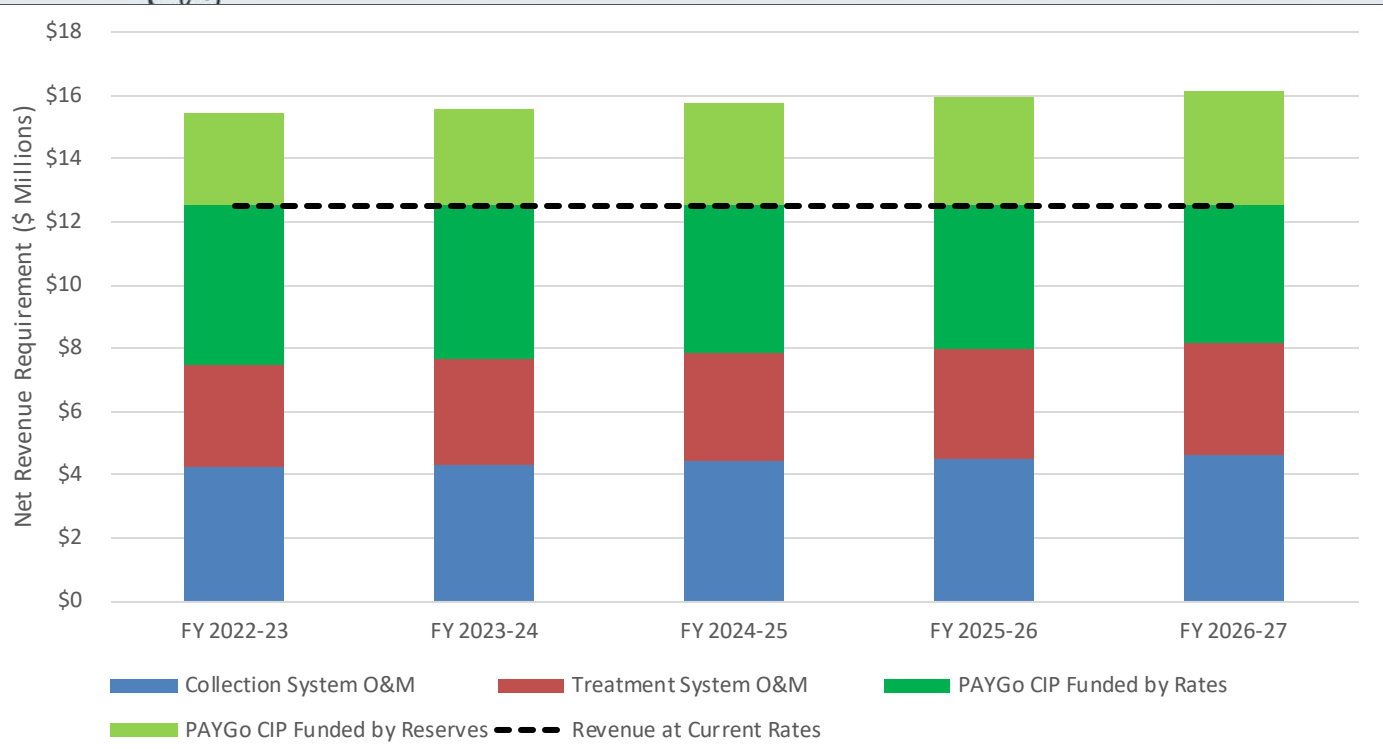
- Water Enterprise
 - Five-year financial projections
 - Confirm key policies
 - Capital spending alternatives
 - Balance of revenue from fixed and quantity charges
 - Outside City rate differential
 - Pass-through adjustments
 - Water reliability charge
 - Water shortage revenue stabilization factors



WASTEWATER RATE STUDY



Wastewater Revenue Requirements

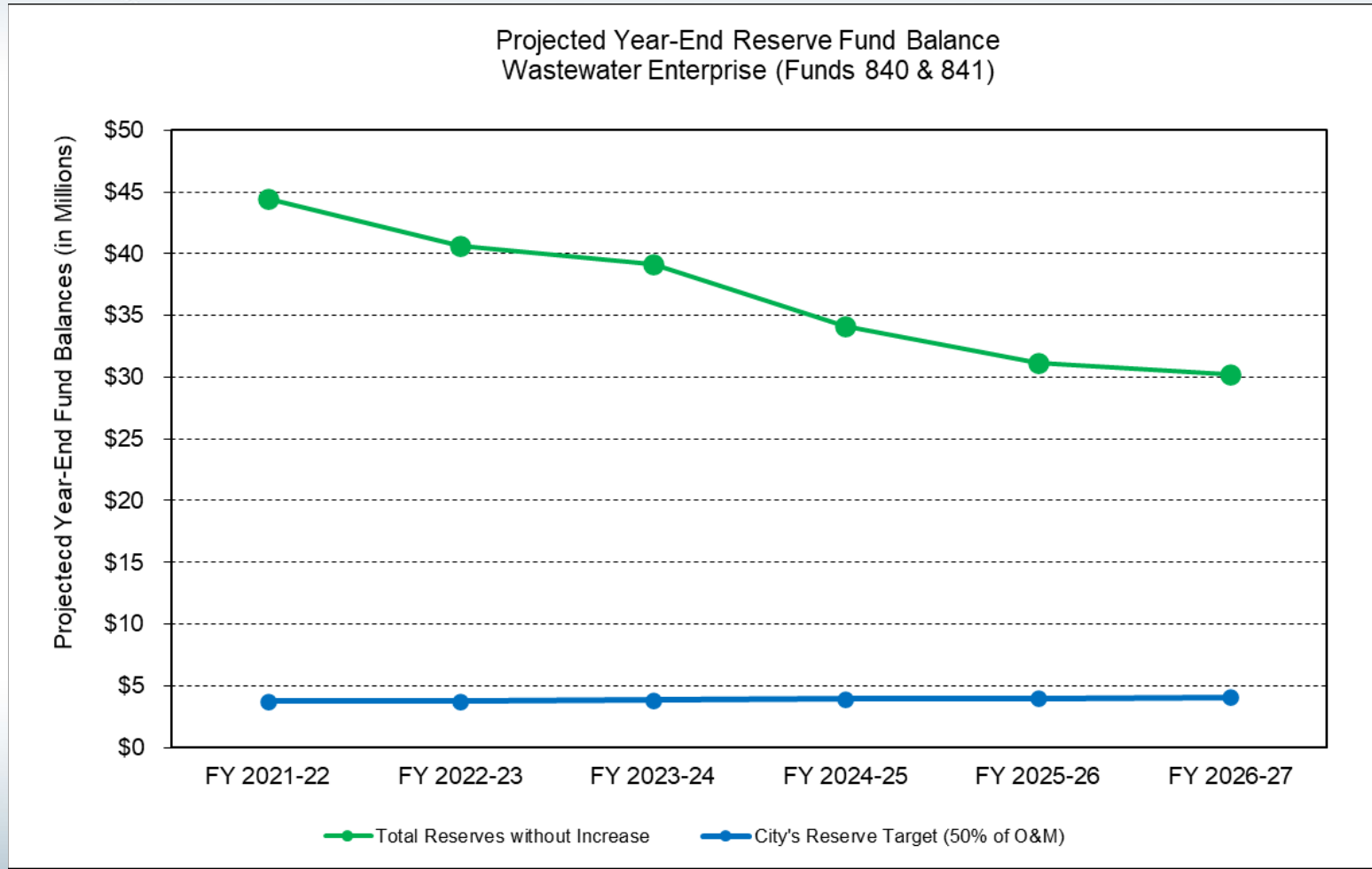


Reserves will be drawn down to meet needs without the need for revenue increases

	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Collection System O&M	\$4,238,395	\$4,315,594	\$4,434,281	\$4,527,779	\$4,635,228
Treatment System O&M	\$3,234,500	\$3,331,535	\$3,398,166	\$3,466,129	\$3,535,452
PAYGo CIP Funded by Rates	\$5,036,134	\$4,861,901	\$4,676,583	\$4,515,121	\$4,338,349
PAYGo CIP Funded by Reserves	\$2,920,865	\$3,095,098	\$3,280,416	\$3,441,878	\$3,618,649
Total Revenue Requirement	\$15,429,894	\$15,604,127	\$15,789,445	\$15,950,907	\$16,127,678



Wastewater Fund Balance





Wastewater Cost of Service Allocations

	Current Revenue	Cost-of-Service	Difference
	a	b	c = b - a
Single and Multi Family	\$8,491,763	\$9,490,807	\$999,043
Commercial Domestic Strength	\$2,739,728	\$1,909,644	(\$830,085)
Commercial Excess Strength	\$1,277,538	\$1,108,579	(\$168,959)
Total	\$12,509,029	\$12,509,029	\$0

- Costs shift toward Residential class
- Commercial share of costs has declined relative to the increase in Residential



Derivation of Return to Sewer Factors

Customer Class	Annual Flow [1] hcf	Sewered Flow [2] hcf	Return to Sewer	Accounts Units	Avg Flow per Unit hcf per year
	a	b	c = b/a	d	e = b/d
Single Family Residential					
Without Irrigation meter	2,017,021	1,049,980	52%	6,080	173
Multiple Family Residences	572,457	512,609	90%	10,117	51
Commercial/Industrial	734,172	610,599	83%	795	768
Municipal	43,051	21,441	50%	57	376

- 1. Average of CY 2017 & 2018 annual metered flow
 - 2. Average of lowest three winter months
- Note: does not apply to accounts with separate irrigation meters



Examples of Rate Structure Approaches

Agency	Sewered Flow Factor [a]	Flow Factor Winter Period	Billed Flow	Single Family Cap
I. ONGOING WATER USE WITH NO FLOW FACTOR ADJUSTMENT				
East Bay MUD (7/1/2021)	100%	None	Ongoing	9 HCF
City of Pasadena (5/1/2021)	100%	None	Ongoing	43 HCF/mo
City of Santa Rosa (7/1/2021)	100%	None	Ongoing	5-mo winter average
City of Ventura (7/1/2021)	100%	None	Ongoing	12 HCF/mo [a]
City of Santa Barbara (7/1/2022)	100%	None	Ongoing	10 HCF/mo
II. ONGOING WATER USE WITH FLOW FACTOR ADJUSTMENT				
City of San Francisco (7/1/2021)	90%	Not specified	Ongoing	None
City of Santa Monica (7/1/2021)	85%	Lowest 4 consecutive months [c]	Ongoing	None
City of Los Angeles (7/1/2020)	76% [b]	5-month winter average (Nov - Mar)	Ongoing	None
City of Beverly Hills (proposed)	52% [d]	Lowest winter month	Ongoing	None
III. FIXED CHARGE PER BILL BASED ON EACH CUSTOMER'S WINTER FLOW				
City of San Diego (1/1/2022)	95%	5-month winter period	2 winter bills [e]	20 HCF/mo
City of Glendale (7/1/2021)	100%	None	Feb or Mar [e]	None
IV. EQUAL FIXED CHARGE PER BILLING PERIOD FOR ALL ACCOUNTS				
City of Beverly Hills (current)	None	None	N/A	None
City of West Hollywood	None	None	N/A	None
City of Palo Alto	None	None	N/A	None
City of Mountain View	None	None	N/A	None

This table applies to Single Family Residential rates.

[a] Sewered Flow Factor as a percent of ongoing metered water use.

[b] Los Angeles - 93% factor for commercial; recalculated annually.

[c] Santa Monica: Multi-family discharge factor increases from 90% to 99% depending the number of units.

[d] Beverly Hills: average of three years.

[e] San Diego and Glendale: Flow is used to bill customers for the next year (no variation from bill to bill) updated annually.



Commercial Customer Classes

- Current two class structure
 - Domestic charge
 - Excess strength surcharge added to domestic charge primarily for businesses that prepare and serve food
- Proposed three class structure
 - Low strength (0 to 250 ppm BOD/TSS)*
 - Single family, multi family, retail
 - Medium strength (251 to 600 ppm BOD/TSS)*
 - Hotels with dining, mixed use commercial
 - High strength (over 600 ppm BOD/TSS)*
 - Restaurants

*Strength concentrations based on State *Revenue Program Guidelines*.



Commercial Wastewater Strengths Categories

Low	Medium	High
<ul style="list-style-type: none"> • Banks & Financial Institutions • Barber Shops / Hair Salons (Hair Cutting Only) • Halls & Lodges • Libraries • Offices (Business and Professional) • Post Offices/Government • Retail Stores • Schools 	<ul style="list-style-type: none"> • Appliance Repair • Barber Shops/Hair Salons (Haircutting w/Add'l Treatments) • Bars & Taverns (w/o Dining) • Car Rental/Car Service • Car Washes • Commercial Laundromats • Dry Cleaners • Gym or Health Club • Hotels, Motels, or Bed & Breakfast • Medical Offices/Hospitals • Mini Mart with Gas Pumps (w/o Dish Washer or Garbage Disposal) • Nail Salons • Pet Groomers • Pools with Restrooms (Clubhouse) • Service Stations, Garages, Auto Repair Shops • Spa • Tasting Rooms • Theaters 	<ul style="list-style-type: none"> • Bakeries Butcher Shops • Bars & Taverns (w/ Dining) • Catering • Coffee Shops • Eatery • Grocery Stores or Markets • Ice Cream Parlors • Juice Bars • Mini Marts (w/ Dish Washer or Garbage Disposal) • Restaurants



Proposed Wastewater Cost-of-Service Rates

Customer Class	Current Bi-Monthly	Cost of Service
Single and Multi Family		
Service Charge per dwelling unit	\$87.38	\$40.08
Quantity Charge	n/a	\$3.58
Commercial/Municipal		
Service Charge per account	\$34.20	\$40.08
Quantity Charges (option 1 - existing classes)		
Domestic Strength	\$4.74	\$3.58
Excess Strength	\$7.08	\$6.95
Quantity Charges (option 2 - proposed classes)		
Low Strength	n/a	\$3.58
Med Strength	n/a	\$5.24
High Strength	n/a	\$6.95

- Single and Multi Family bi-monthly fixed service charges decrease with the introduction of a flow-based quantity charge
- Quantity charges based on estimated sewer flow
 - Metered water use factored down to eliminate flow that is not sewer such as irrigation
 - Return to sewer factors calculated for each customer class



Derivation of Unit Costs

Functional Costs [1]	Service Charge Component		Quantity Charge Component			Total
	Accounts/ Dwellings	Capacity	Flow	BOD	TSS	
Treatment Plant	\$0	\$0	\$1,099,730	\$1,067,385	\$1,067,385	\$3,234,500
Collection System O&M	\$0	\$0	\$2,061,730	\$114,541	\$114,541	\$2,290,811
Collection System Capital	\$0	\$3,210,901	\$3,210,901	\$802,725	\$802,725	\$8,027,253
Other Expenses	\$1,877,330	\$0	\$0	\$0	\$0	\$1,877,330
Transfers To/(From) Reserves	(\$355,377)	(\$607,821)	(\$1,206,282)	(\$375,693)	(\$375,693)	(\$2,920,865)
	\$1,521,953	\$2,603,080	\$5,166,079	\$1,608,958	\$1,608,958	\$12,509,029
	÷	÷	÷	÷	÷	
Units of Service [2]	17,152	17,152	2,194,630	3,709,818	3,193,090	
	accts/DUs	accts/DUs	hcf	lbs	lbs	
Unit Costs	\$88.73	\$151.77	\$2.35	\$0.43	\$0.50	
	\$/acct or DU	\$/acct or DU	\$/hcf	\$/lb	\$/lb	
Bi-Monthly Unit Costs	\$14.79	\$25.29				
	\$/acct or DU	\$/acct or DU				
Portion of Rate Revenue	33%		67%			100%

- “Other Expenses” includes allocations of City-wide internal services
- “Transfers to/(from) Reserves” allocated using a composite percent of all expense allocations
- Service charge = \$14.79 + 25.29 = \$40.08 per bi-month per account of dwelling unit



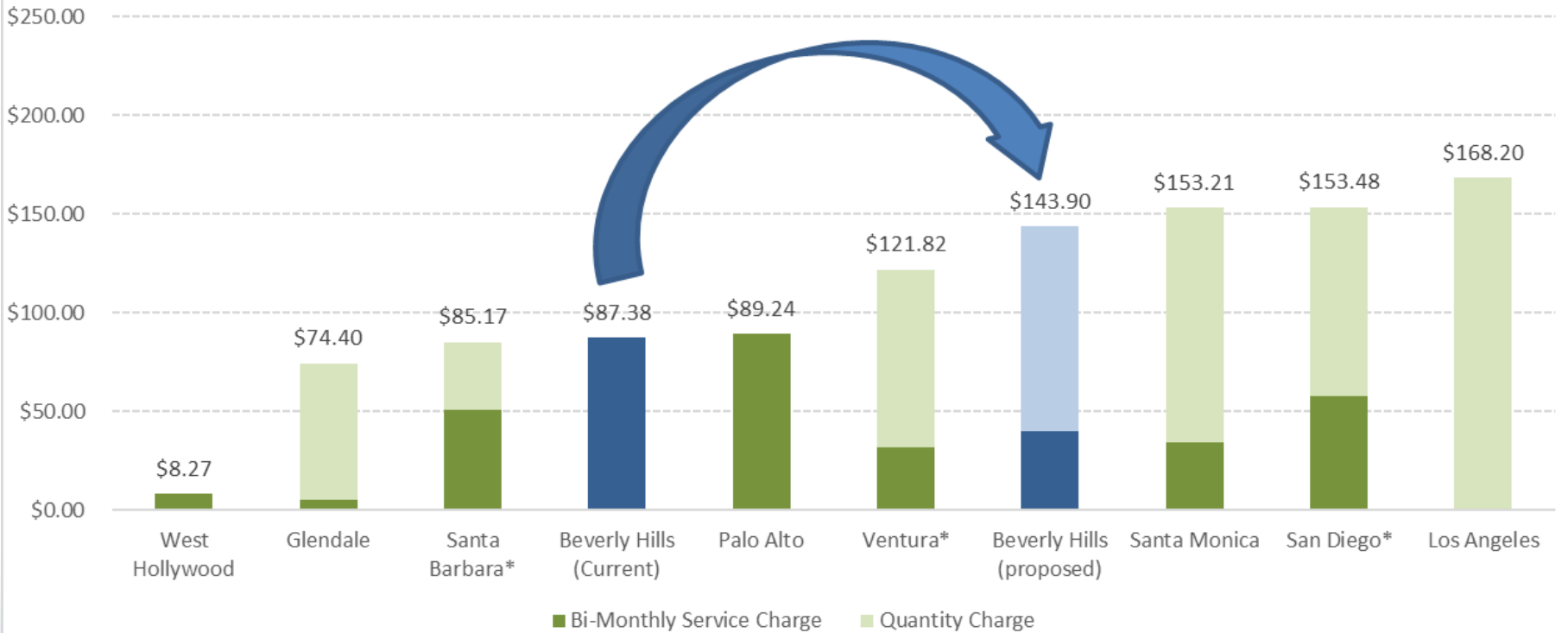
Average Bi-Monthly Bill Comparison

Average Bi-Monthly Bill by Class				
	Single Family	Multi Family	Commercial Domestic/Low	Commercial Excess/High
Sample Bills at Current Rates				
Bi-Monthly Service Charge	\$87.38	\$87.38	\$34.20	\$34.20
Quantity Charge per hcf				
Metered water use			112	304
Rate per hcf			\$4.74	\$7.08
Total Quantity Charge	n/a	n/a	\$530.88	\$2,152.32
Current Bi-Monthly Bill	\$87.38	\$87.38	\$565.08	\$2,186.52
Sample Bills at Proposed Rates				
Bi-Monthly Service Charge	\$40.08	\$40.08	\$40.08	\$40.08
Quantity Charge per hcf				
Metered water use	56	9	112	304
Return to sewer factor	52%	90%	83%	83%
Sewered flow	29	8	93	252
Rate per hcf	\$3.58	\$3.58	\$3.58	\$6.95
Total Quantity Charge	\$103.82	\$28.65	\$333.02	\$1,751.06
Proposed Bi-Monthly Bill	\$143.90	\$68.73	\$373.11	\$1,791.15
Difference				
Dollar Difference	\$56.52	(\$18.65)	(\$191.97)	(\$395.37)



Comparison With Other Agencies – Single Family

Average Single-Family Bi-Monthly Bills - 29 hcf

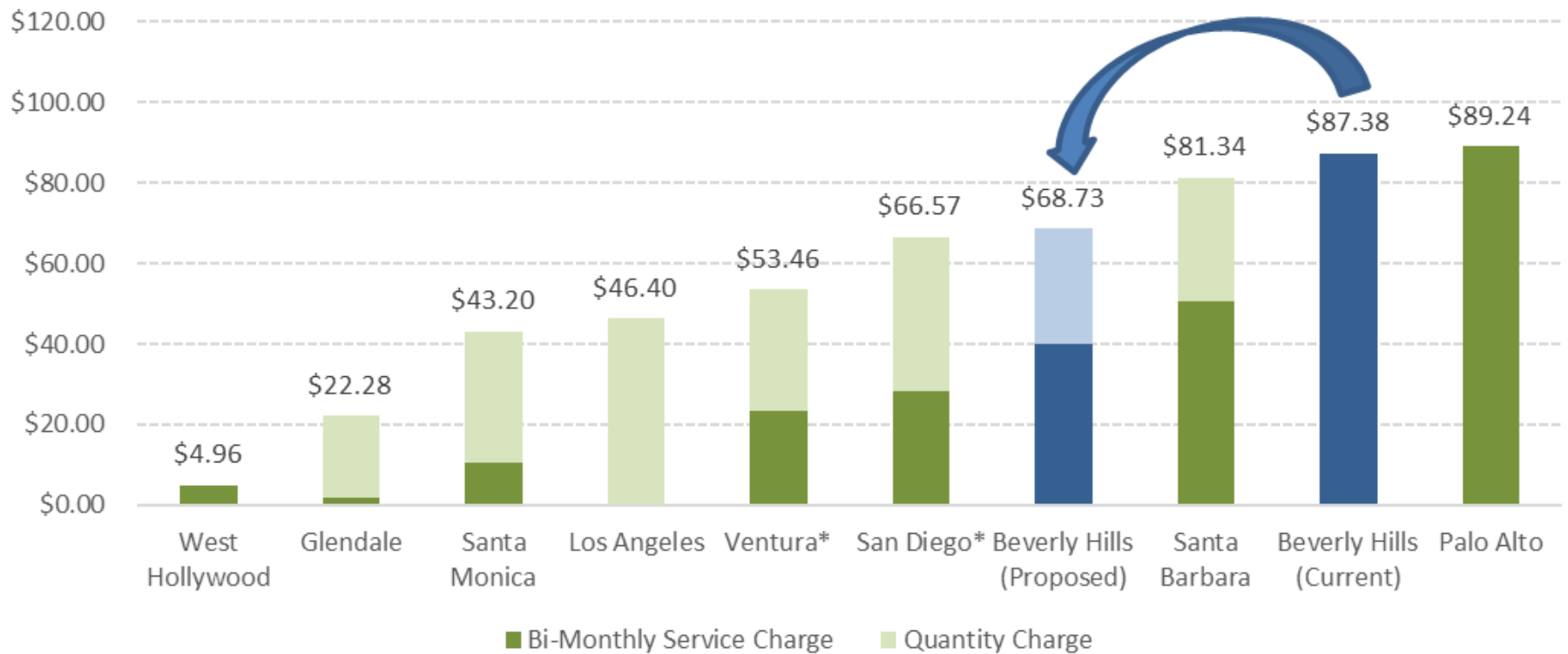


*Caps water consumption for wastewater billing purposes



Comparison With Other Agencies – Multi Family

Average Multi-Family Bi-Monthly Bills - 8 hcf per dwelling unit



*Caps water consumption for wastewater billing purposes



Wastewater Phase-In Rates

Phase-in applies to all three customer classes

Two
Commercial
classes

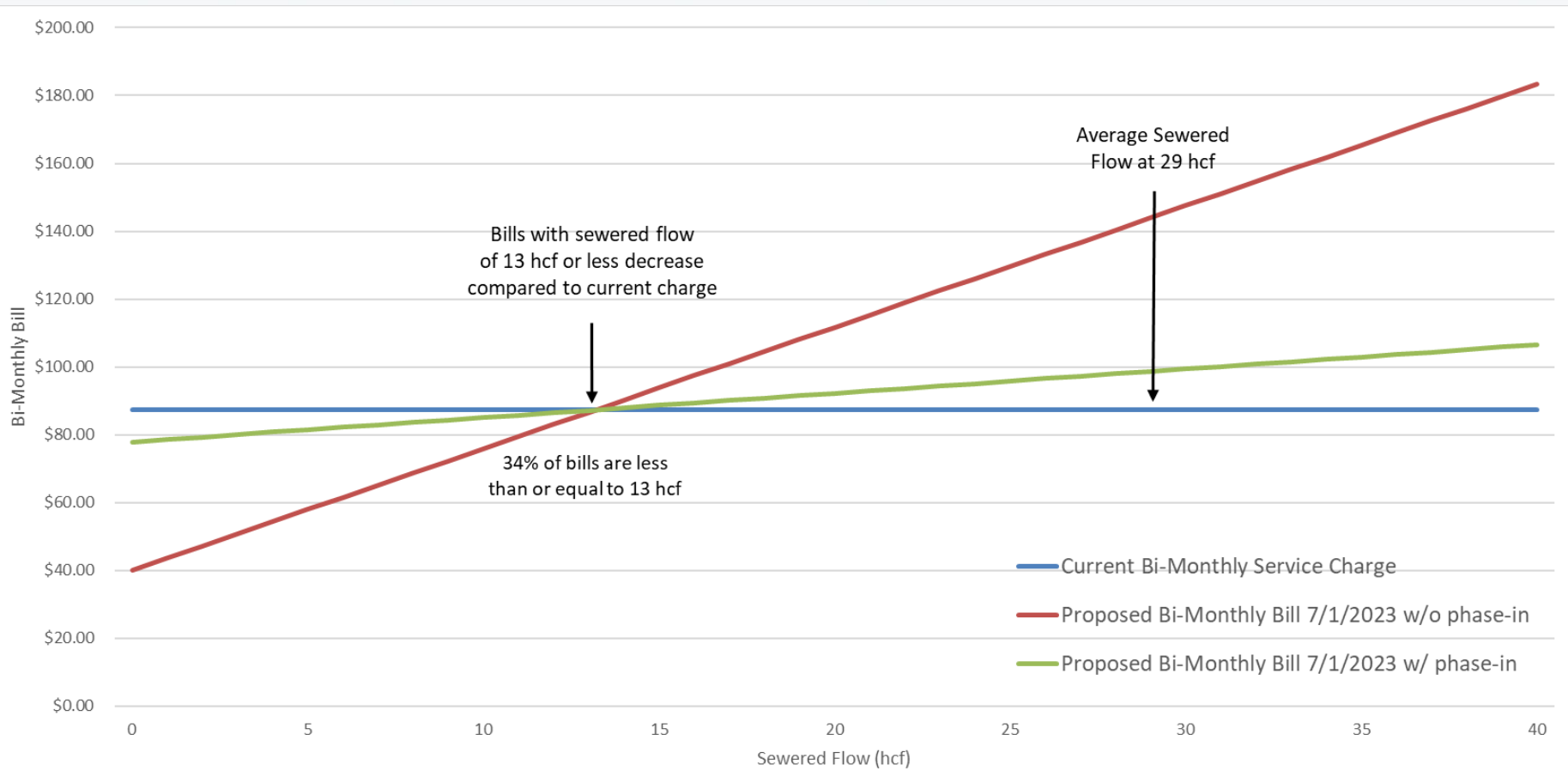
Proposed Rates	Current Rates	7/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Bi-Monthly Service Charge						
Single and Multi Family	\$87.38	\$77.92	\$68.46	\$59.00	\$49.54	\$40.08
Commercial Low	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Commercial High	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Quantity Charge Rate per hcf						
Single and Multi Family	\$0.00	\$0.72	\$1.43	\$2.15	\$2.86	\$3.58
Commercial Low	\$4.74	\$5.03	\$4.66	\$4.30	\$3.94	\$3.58
Commercial High	\$7.08	\$7.83	\$7.61	\$7.39	\$7.17	\$6.95

Three
Commercial
classes

Proposed Rates	Current Rates	7/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Bi-Monthly Service Charge						
Single and Multi Family	\$87.38	\$77.92	\$68.46	\$59.00	\$49.54	\$40.08
Commercial Low	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Commercial Medium	n/a	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Commercial High	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Quantity Charge Rate per hcf						
Single and Multi Family	\$0.00	\$0.72	\$1.43	\$2.15	\$2.86	\$3.58
Commercial Low	\$4.74	\$5.03	\$4.66	\$4.30	\$3.94	\$3.58
Commercial Medium	n/a	\$7.36	\$6.81	\$6.29	\$5.76	\$5.24
Commercial High	\$7.08	\$7.83	\$7.61	\$7.39	\$7.17	\$6.95

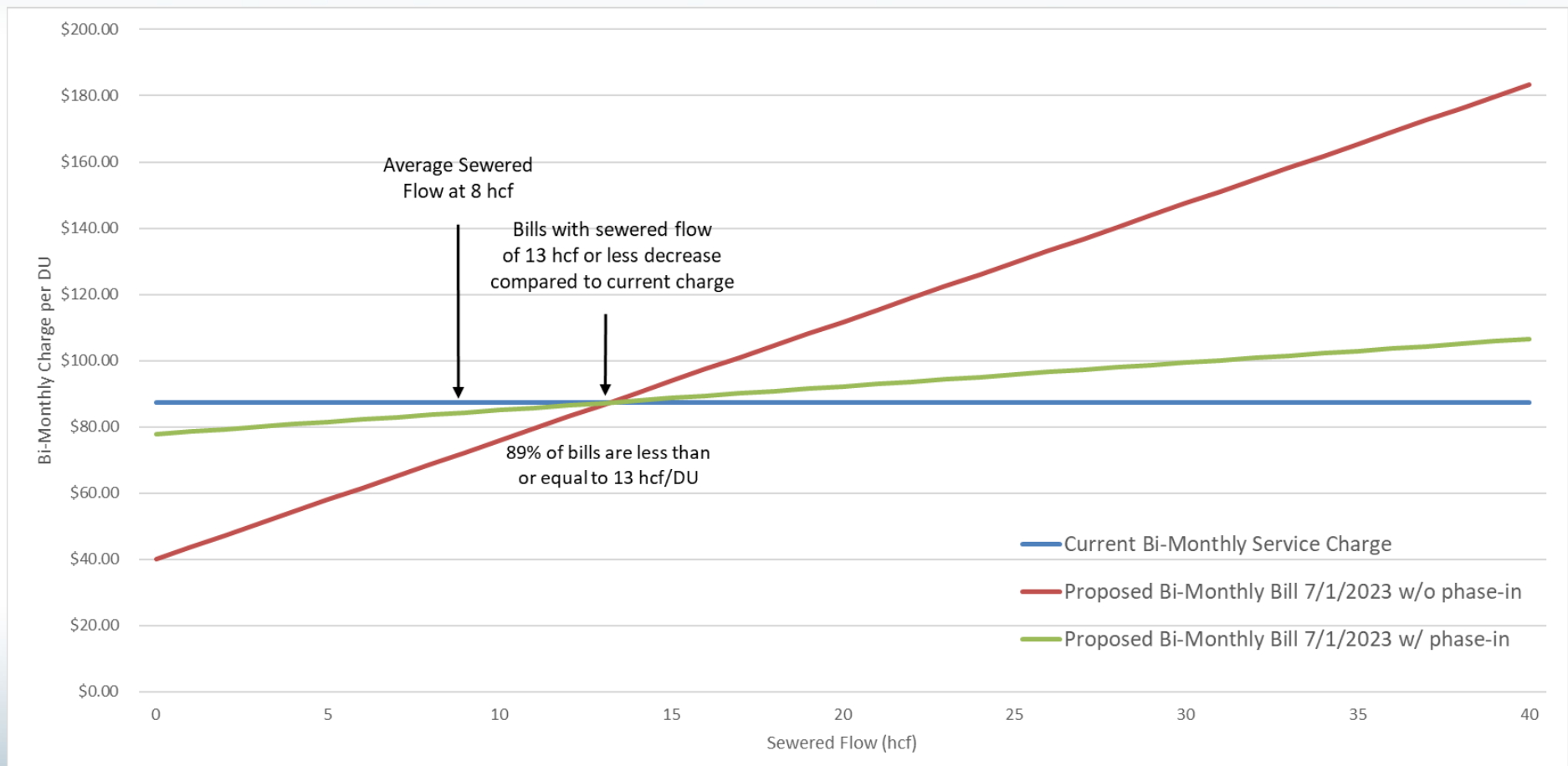


SFR Bills with Phase-In: 2023





MFR per DU with Phase-In: 2023





WATER RATE STUDY



Cost per Gallon

BH Tap Water	Avg. Bottled Water	Whole Milk (CA)	Gasoline (regular) (Southern California)
\$0.01/g	\$1.17/g ^A	\$4.44/g ^B	\$4.51 ^C

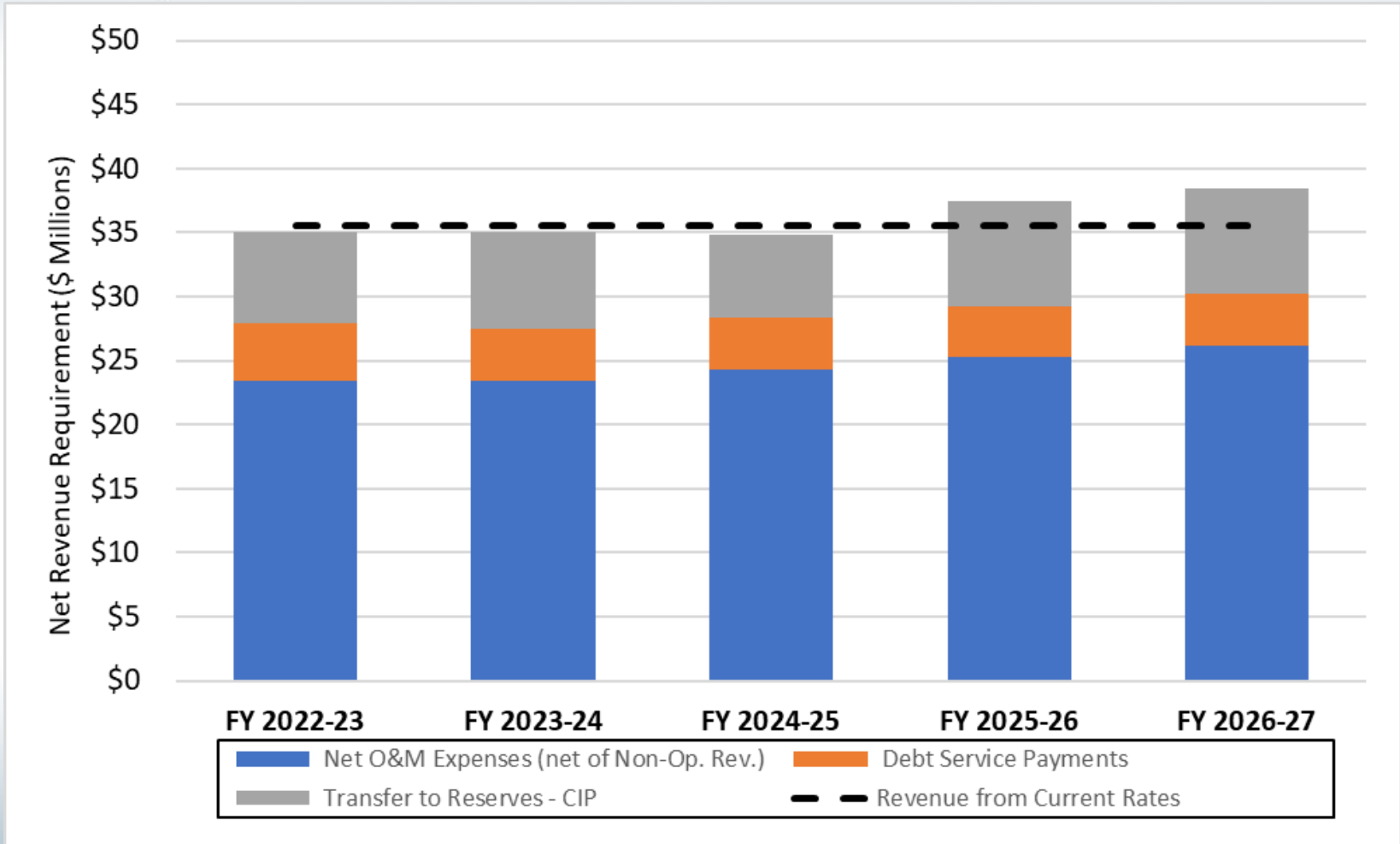
^A Per International Bottled Water Association-2020

^B U.S Department of Agriculture-Average through December 2022

^C AAA Gas Prices as of January 20, 2023

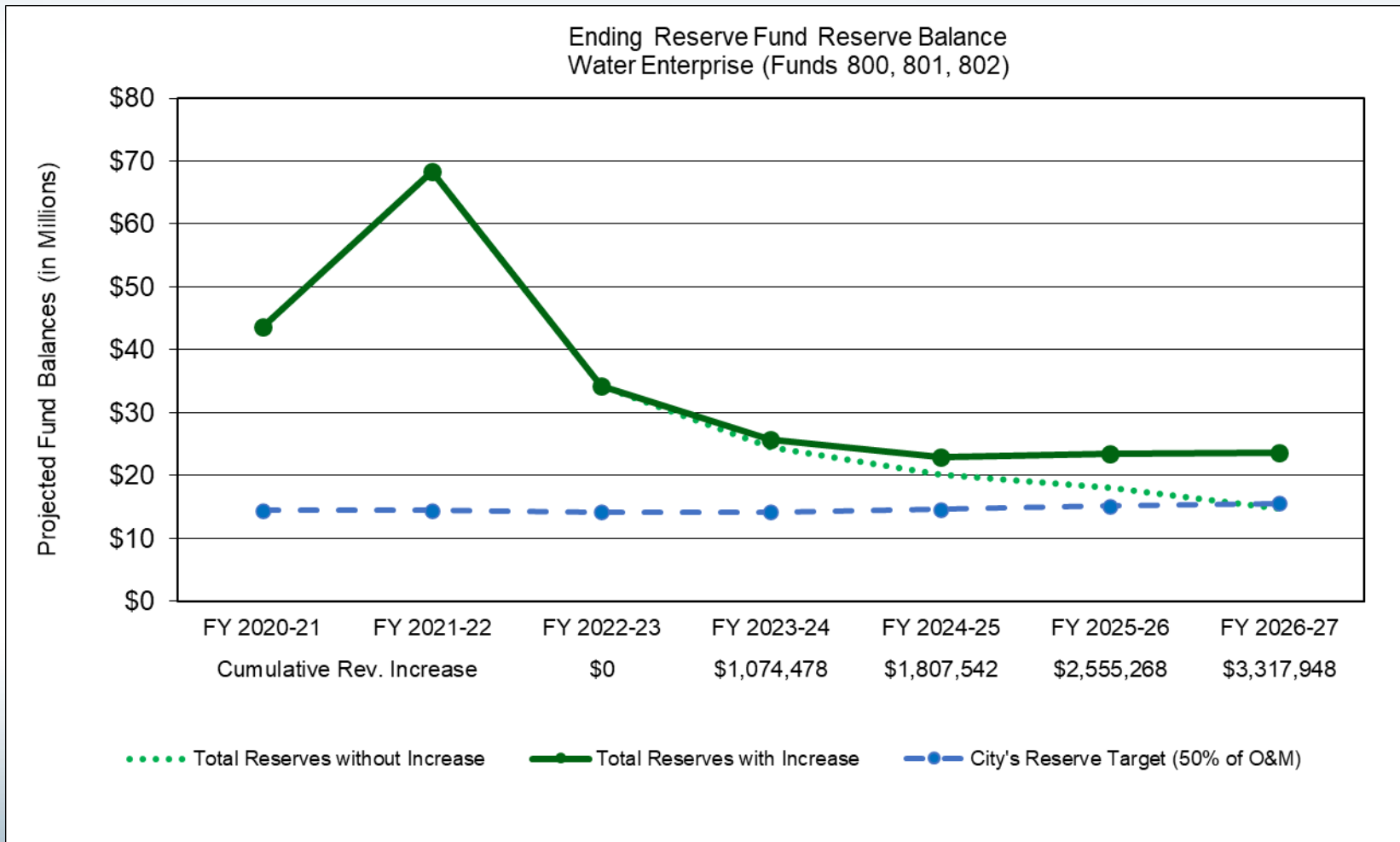


Water Revenue Requirement – CIP Option 1





Water Fund Balance – CIP Option 1





Cabrillo CIP Options

Options	Project	Preliminary Cost Estimate	Increase in Emergency Storage*	
1	Cabrillo Forebay	\$14.2M	0.3MG	<1%
2	Cabrillo Reservoir	\$32M	4.3MG	10%
3	Cabrillo Forebay and Reservoir 4C	\$24.7M	1.3MG	3%

*Existing Total Storage 43.5MG

- Option 1
 - Added resilience to existing LADWP interconnect and the Montecielo pump station
 - New pump station for the hillside, new transmission line and backup power
- Option 2
 - Same as Option 1 w/ 4.3MG of Storage
- Option 3
 - Same as Option 1 w/ 1MG of Storage



Capital Projects

1. Reservoir Management Systems (RMS)
 - Design underway 2022
 - Design Completion – Summer 2023
 - Construction Completion – Summer 2024
 - Increasing emergency storage by 25% (8.5MG).
2. LCW-1 Well (Former Coffee Bean and Tea Leaf)
 - Construction Complete December 2022
 - Permit amendment anticipated
3. La Cienega Park Wells
 - Design underway for two wells at Park
4. New Well La Brea Subarea Well Development
5. Water Treatment Plant Expansion



Water CIP – Option 1 (Base)

Capital Improvement Projects	Fund	Budgeted	Projected					5-Year
		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	SUBTOTAL
1 Street And Sidewalk Improvements	800	\$1,581,237	\$275,000	\$400,000	\$400,000	\$400,000	\$400,000	\$1,875,000
2 Well Rehab And Groundwater Development	800 - 802	\$830,758	\$500,000	\$750,000	\$775,000	\$775,000	\$875,000	\$3,675,000
3 Water Conservation Program	800	\$946,811	\$10,000	\$10,000	\$10,500	\$0	\$10,500	\$41,000
4 Water Main And Hydrant Replacement	800	\$10,742,382	\$3,000,000	\$3,000,000	\$3,500,000	\$3,500,000	\$4,000,000	\$17,000,000
5 Water Master Plan	800	\$258,321	\$0	\$0	\$0	\$1,000,000	\$0	\$1,000,000
6 Coldwater Canyon Reservoir	800	\$103,687	\$0	\$0	\$0	\$0	\$0	\$0
7 Land Acquisition	800	\$24,000	\$0	\$0	\$0	\$0	\$0	\$0
8 Water Meter Replacement	800	\$584,696	\$3,232,605	\$3,232,605	\$3,232,605	\$500,000	\$500,000	\$10,697,815
9 Water Treatment Replacement And Repair	800	\$783,240	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
10 Reservoir Replacement & Pump Station Rehab	800	\$3,637,469	\$675,000	\$675,000	\$695,250	\$700,000	\$700,000	\$3,445,250
11 Public Works Asset Management System	800	\$47,254	\$0	\$12,500	\$10,000	\$10,000	\$10,000	\$42,500
12 System-Wide Water Capacity Upgrades	801	\$3,450,000	\$1,750,000	\$1,750,000	\$750,000	\$500,000	\$500,000	\$5,250,000
13 La Brea Basin Well Development (WEP)	800, 802	\$35,068,686	\$0	\$0	\$0	\$6,500,000	\$5,000,000	\$11,500,000
14 Cabrillo Reservoir Project	800	\$2,274,319	\$2,000,000	\$2,000,000	\$1,000,000	\$0	\$0	\$5,000,000
15 Subtotal		\$60,332,859	\$11,692,605	\$12,080,105	\$10,623,355	\$14,135,000	\$12,245,500	\$60,776,565
16 Construction Cost Index		1.000	1.025	1.050	1.076	1.103	1.130	
17 % of Adjusted CIP Expenditures		80%	80%	80%	80%	80%	80%	80%
18 Modeled Inflated Total CIP Expenditures		\$48,266,287	\$9,585,945	\$10,149,112	\$9,146,452	\$12,471,551	\$11,072,223	\$52,425,283
19						5-year average CIP		\$10,485,057

Individual projects shown at 100% of projected costs; Rates include spending 80% of capital budget annually (completion factor)



Water CIP Options

Water Capital Project Schedule Options		Option 1	Option 2	Option 3
1	Cabrillo Reservoir Project	\$4,180,937	\$21,270,460	\$4,180,937
2	Reservoir Repl. & Pump Station Rehab Project	\$2,969,633	\$2,969,633	\$9,508,941
3	All Other Capital Projects	\$45,274,713	\$45,274,713	\$45,274,713
4	Total 5-Year CIP Spending	\$52,425,283	\$69,514,806	\$58,964,591



Water Cost of Service Allocations

	Current		Difference
	Revenue	Cost-of-Service ¹	
Single-family/Duplex	\$17,070,869	\$15,969,980	(\$1,100,889)
Multi-Family Residential	\$5,413,607	\$6,359,477	\$945,870
Commercial & Municipal	\$7,189,296	\$7,824,407	\$635,110
Fixed Service Charges	\$5,904,963	\$6,136,447	\$231,484
Total	\$35,578,735	\$36,290,310	\$711,575

¹Includes \$711,575 increase to revenues from current rates



Proposed 2023 Water COS Rates – CIP Option 1

Service Size	Current Charge	COS Charges
Fixed Service Charges		
1"	\$53.51	\$56.38
1-1/2"	\$93.84	\$97.56
2"	\$142.24	\$146.99
3"	\$271.30	\$278.78
4"	\$416.50	\$427.05
6"	\$819.82	\$838.92
8"	\$1,311.71	\$1,333.16
10"	\$1,967.57	\$3,474.86
Fire Service Charges		
<= 2"	\$29.73	\$30.32
2 1/2"	\$44.32	\$45.21
3"	\$64.56	\$65.85
4"	\$124.69	\$127.18
6"	\$340.52	\$347.33
8"	\$712.74	\$726.99
10"	\$1,272.63	\$1,298.08
12"	\$1,654.42	\$1,687.51

Inside and Outside City customers pay the same service charge and fire service charge.

Current Quantity Charge Rates		COS Quantity Charge Rates		
Tier Size	\$/HCF	Tier Size	\$/HCF	
Inside City				
Single-Family/Duplex				
Tier 1	0-26 HCF	\$3.54	0-32 HCF	\$4.17
Tier 2	27-48 HCF	\$6.91	33-48 HCF	\$6.98
Tier 3	49-86 HCF	\$10.17	49-83 HCF	\$9.72
Tier 4	86+ HCF	\$14.44	84+ HCF	\$12.15
Multi-Family				
Tier 1	0-8 HCF	\$4.52	0-8 HCF	\$5.62
Tier 2	9+ HCF	\$12.92	9+ HCF	\$14.55
Commercial		\$7.03	\$7.70	
Water Reliability (all customers)		\$0.26	\$0.27	
Outside City				
Single-Family/Duplex				
Tier 1	0-26 HCF	\$4.41	0-32 HCF	\$4.83
Tier 2	27-48 HCF	\$7.78	33-48 HCF	\$7.64
Tier 3	49-86 HCF	\$11.03	49-83 HCF	\$10.39
Tier 4	86+ HCF	\$15.31	84+ HCF	\$12.81
Multi-Family				
Tier 1	0-8 HCF	\$5.39	0-8 HCF	\$6.29
Tier 2	9+ HCF	\$13.78	9+ HCF	\$15.21
Commercial		\$7.90	\$8.36	
Water Reliability (all customers)		\$0.41	\$0.42	



Bill Comparison – Inside City

Beverly Hills - Single-Family/Duplex Bill Comparison							
HCF	Bill @ Current Rates	<u>2023</u>			<u>2027</u>		
		Bill @ Proposed Rates Option 1	Bill @ Proposed Rates Option 2	Bill @ Proposed Rates Option 3	Bill @ Proposed Rates Option 1	Bill @ Proposed Rates Option 2	Bill @ Proposed Rates Option 3
0	\$53.51	\$56.38	\$51.79	\$54.35	\$61.02	\$59.99	\$59.41
10	\$88.91	\$100.78	\$95.79	\$98.35	\$109.32	\$110.93	\$109.32
20	\$124.31	\$145.18	\$139.79	\$142.35	\$157.62	\$161.86	\$157.62
30	\$173.19	\$189.58	\$183.79	\$186.35	\$205.92	\$212.80	\$205.92
40	\$242.29	\$256.46	\$250.35	\$252.75	\$278.54	\$289.87	\$278.70
50	\$317.91	\$334.44	\$328.85	\$330.53	\$363.16	\$380.77	\$363.32
60	\$419.61	\$434.34	\$432.55	\$431.43	\$471.46	\$500.85	\$473.72
70	\$521.31	\$534.24	\$536.25	\$532.33	\$579.76	\$620.94	\$584.12
80	\$623.01	\$634.14	\$639.95	\$633.23	\$688.06	\$741.03	\$694.52
90	\$741.79	\$751.05	\$777.04	\$757.23	\$814.77	\$899.79	\$830.19
100	\$886.19	\$875.25	\$928.44	\$891.13	\$949.37	\$1,075.13	\$976.69



Average bill is 56 HCF.



Bill Comparison – Outside City

West Hollywood - Single-Family/Duplex Bill Comparison							
HCF	Bill @ Current Rates	2023			2027		
		Bill @ Proposed Rates Option 1	Bill @ Proposed Rates Option 2	Bill @ Proposed Rates Option 3	Bill @ Proposed Rates Option 1	Bill @ Proposed Rates Option 2	Bill @ Proposed Rates Option 3
0	\$53.51	\$56.38	\$51.79	\$54.35	\$61.02	\$59.99	\$59.41
10	\$101.71	\$108.88	\$103.99	\$106.55	\$117.92	\$120.19	\$116.41
20	\$149.91	\$161.38	\$156.19	\$158.75	\$174.82	\$180.38	\$173.41
30	\$211.59	\$213.88	\$208.39	\$210.95	\$231.72	\$240.58	\$230.41
40	\$293.49	\$288.86	\$283.07	\$285.55	\$312.94	\$326.82	\$311.89
50	\$381.89	\$380.46	\$375.97	\$377.27	\$406.18	\$434.16	\$405.81
60	\$496.29	\$488.56	\$487.77	\$486.27	\$523.18	\$563.39	\$525.01
70	\$610.69	\$596.66	\$599.57	\$595.27	\$640.18	\$692.62	\$644.21
80	\$725.09	\$704.76	\$711.37	\$704.27	\$757.18	\$821.85	\$763.41
90	\$856.61	\$829.80	\$856.56	\$836.37	\$892.59	\$989.76	\$907.88
100	\$1,013.81	\$962.10	\$1,016.06	\$978.37	\$1,035.89	\$1,174.24	\$1,063.18

Average bill is 48 HCF.



Combined Bill Impact – Single Family

Water bills based on CIP Option 1

	Current		Proposed			
		<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Assumptions						
Meter Size	1" meter	1" meter				
Water Consumption	56	56				
Return to Sewer Factor	n/a	52%				
Sewered Flow	n/a	29				
Water						
Fixed Service Charge	\$53.51	\$56.38	\$57.50	\$58.65	\$59.83	\$61.02
Quantity Charge	\$325.42	\$322.88	\$329.60	\$336.00	\$342.88	\$349.76
Water Reliability Charge	\$14.56	\$15.12	\$15.68	\$16.24	\$16.80	\$17.36
Total	\$393.49	\$394.38	\$402.78	\$410.89	\$419.51	\$428.14
Increase/(Decrease)		\$0.89	\$8.41	\$8.11	\$8.61	\$8.64
Wastewater						
Service Charge	\$87.38	\$77.92	\$68.46	\$59.00	\$49.54	\$40.08
Quantity Charge	\$0.00	\$20.88	\$41.47	\$62.35	\$82.94	\$103.82
Total	\$87.38	\$98.80	\$109.93	\$121.35	\$132.48	\$143.90
Increase/(Decrease)		\$11.42	\$11.13	\$11.42	\$11.13	\$11.42
Total Bi-monthly Bill	\$480.87	\$493.18	\$512.71	\$532.24	\$551.99	\$572.04
Increase/(Decrease)		\$12.31	\$19.54	\$19.53	\$19.74	\$20.06



Combined Bill Impact – Multi Family

Water bills based on CIP Option 1

Wastewater bills based on revised phased-in rates

		Current		Proposed			
			2023	2024	2025	2026	2027
Assumptions							
Meter Size		1.5" meter	1.5" meter				
Water Consumption per unit		9.3	9.3				
Return to Sewer Factor		n/a	90.0%				
Sewered Flow		n/a	8.4				
Dwelling Units		10	10				
Water							
Fixed Service Charge		\$93.84	\$97.56	\$99.51	\$101.50	\$103.53	\$105.60
Quantity Charge		\$529.56	\$595.10	\$607.60	\$619.40	\$632.00	\$644.70
Water Reliability Charge		\$24.18	\$25.11	\$26.04	\$26.97	\$27.90	\$28.83
Total		\$647.58	\$717.77	\$733.15	\$747.87	\$763.43	\$779.13
Increase/(Decrease)			\$70.19	\$15.38	\$14.72	\$15.56	\$15.70
Wastewater							
Service Charge		\$873.80	\$779.20	\$684.60	\$590.00	\$495.40	\$400.80
Quantity Charge		\$0.00	\$60.26	\$119.69	\$179.96	\$239.38	\$299.65
Total		\$873.80	\$839.46	\$804.29	\$769.96	\$734.78	\$700.45
Increase/(Decrease)			(\$34.34)	(\$35.17)	(\$34.34)	(\$35.17)	(\$34.34)
Total Bi-monthly Bill		\$1,521.38	\$1,557.24	\$1,537.44	\$1,517.83	\$1,498.22	\$1,479.58
Increase/(Decrease)			\$35.86	(\$19.79)	(\$19.62)	(\$19.61)	(\$18.64)



Combined Bill Impact – Commercial

Water bills based on CIP Option 1

Wastewater bills based on revised phased-in rates

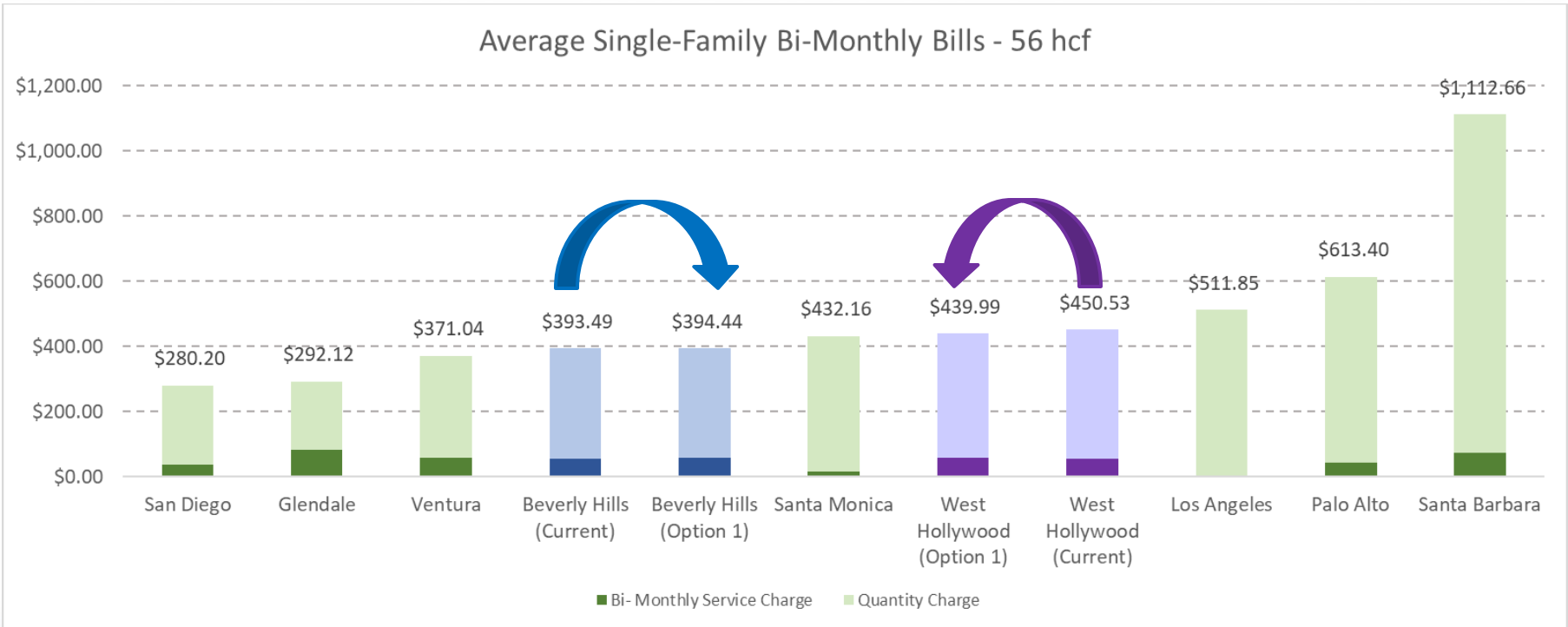
	Current		Proposed			
		<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Assumptions						
Meter Size	1" meter	1" meter				
Water Consumption per unit	113	113				
Return to Sewer Factor	n/a	83.0%	Municipal return to sewer factor = 50.0%			
Sewered Flow	113	94				
Commercial Strength	Domestic	Low				
Water						
Fixed Service Charge	\$53.51	\$56.38	\$57.50	\$58.65	\$59.83	\$61.02
Quantity Charge	\$794.39	\$870.33	\$888.18	\$905.13	\$923.21	\$942.42
Water Reliability Charge	\$29.38	\$30.51	\$31.64	\$32.77	\$33.90	\$35.03
Total	\$877.28	\$957.22	\$977.32	\$996.55	\$1,016.94	\$1,038.47
Increase/(Decrease)		\$79.94	\$20.10	\$19.23	\$20.38	\$21.54
Wastewater						
Service Charge	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Quantity Charge	\$535.62	\$472.82	\$438.04	\$404.20	\$370.36	\$336.52
Total	\$569.82	\$508.20	\$474.59	\$441.93	\$409.27	\$376.60
Increase/(Decrease)		(\$61.62)	(\$33.61)	(\$32.66)	(\$32.66)	(\$32.67)
Total Bi-monthly Bill	\$1,447.10	\$1,465.42	\$1,451.91	\$1,438.48	\$1,426.21	\$1,415.07
Increase/(Decrease)		\$18.32	(\$13.51)	(\$13.43)	(\$12.28)	(\$11.13)



Comparison With Other Agencies – Single Family

2023 Rates

Average Single-Family Bi-Monthly Bills - 56 hcf



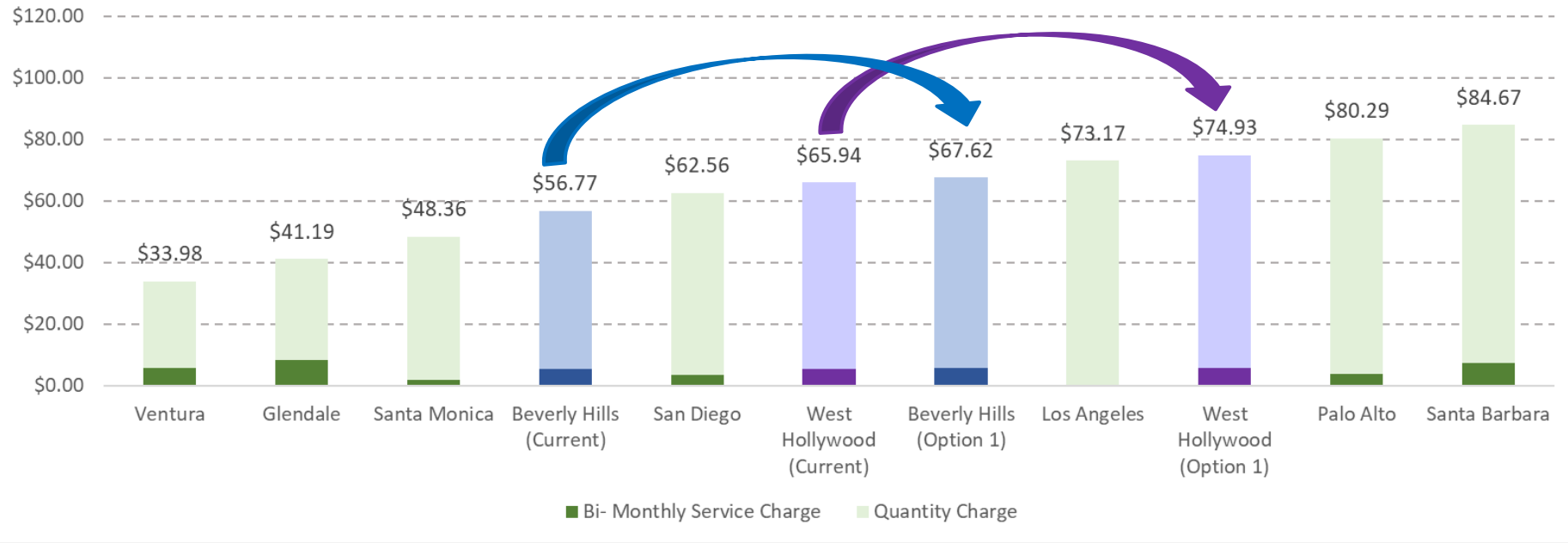
Beverly Hills and West Hollywood bills include Water Reliability Charge.



Comparison With Other Agencies – Multi Family

2023 Rates

Average Multi-Family Bi-Monthly Bills - 9 hcf per dwelling unit



Beverly Hills and West Hollywood bills include Water Reliability Charge.



Balance of Fixed and Quantity Charge Revenue

- Current practice
 - Fixed charges for water and fire service revenue are based on COS analysis
 - Generates approximately 17% of rate revenue
 - Fixed costs are about 68% of revenue requirement
 - Difference between fixed revenue and fixed costs is balanced by other revenue stabilization measures
 - Pass-thru adjustments and revenue stabilization factors
- Recommendation – continue practice



Outside City Rate Differential

- Current practice
 - Inside City (Beverly Hills) customers pay less than Outside City (West Hollywood) customers
 - Reflects the costs incurred by the Water Enterprise that have been paid by Beverly Hills' General Fund (e.g., street maintenance & repairs, use of City facilities, public safety)
 - Outside City customers do not have a similar contribution to reduce their rates
- Recommendation – continue practice
 - Apply updated analysis of rate differential
 - Outside City quantity charge rates will be \$0.66 more per hcf than Inside City rates in 2023 and will increase according to recommended rate increase schedule



Pass-Through Rate Adjustments

- Current practice
 - Option to adjust quantity charges to cover the cost of unforeseen increases in the cost of purchased water from Metropolitan Water District
 - Does not require Proposition 218 notification; customers receive notice of adjustment on bills
 - Common industry practice
- Recommendation – continue practice



Water Reliability Charge

- Current practice
 - An additional uniform rate per HCF paid by all customers
 - Generates revenue to cover the cost of developing water supplies that reduce the City's dependence on MWD
- Recommendation – continue practice
 - Rate per HCF continues to increase \$0.01 per HCF per year
 - Continue to monitor revenues and expenses for future rate adjustments, if necessary



Water Shortage Revenue Stabilization Factors

- Current practice
 - Option to adjust quantity charges to offset revenue shortfalls caused by conservation during water shortages
 - Factors are tailored to each class' ability to conserve within each required Stage's overall reduction goal
 - Does not require Proposition 218 notification; customers receive notice of adjustment on bills
- Recommendation – continue practice
 - Apply updated analysis of revenue stabilization factors



Updated Water Shortage Revenue Stabilization Factors

Water Shortage Reductions by Customer Class					
Class	Stage A Up to (5% Reduction)	Stage B Up to (10% Reduction)	Stage C Up to (20% Reduction)	Stage D Up to (30% Reduction)	Stage E Up to (50% Reduction)
Single Family	6%	12%	25%	37%	57%
Multi-Family	3%	6%	11%	17%	37%
Commercial	4%	8%	16%	24%	44%

Revenue Stabilization Factors by Customer Class					
Class	Stage A Up to (5% Reduction)	Stage B Up to (10% Reduction)	Stage C Up to (20% Reduction)	Stage D Up to (30% Reduction)	Stage E Up to (50% Reduction)
Single Family	1.043	1.093	1.217	1.390	1.878
Multi-Family	1.019	1.040	1.085	1.137	1.388
Commercial	1.027	1.057	1.124	1.206	1.511



Updated Water Shortage Revenue Stabilization Factors

Revenue Stabilization Factors by Customer Class										
Class	Stage A Up to (5% Reduction)		Stage B Up to (10% Reduction)		Stage C Up to (20% Reduction)		Stage D Up to (30% Reduction)		Stage E Up to (50% Reduction)	
	Current	Proposed	Current	Proposed	Current	Proposed	Current	Proposed	Current	Proposed
Single Family	1.039	1.043	1.081	1.093	1.187	1.217	1.333	1.390	1.824	1.878
Multi-Family	1.016	1.019	1.033	1.040	1.069	1.085	1.110	1.137	1.262	1.388
Commercial	1.023	1.027	1.048	1.057	1.103	1.124	1.170	1.206	1.388	1.511

Proposed Factors simplify structure, removing the Irrigation class.



END OF PRESENTATION

Attachment 2



CITY OF BEVERLY HILLS
PUBLIC WORKS DEPARTMENT
MEMORANDUM

TO: Vice Mayor Julian A. Gold, M.D. and
Councilmember Sharona Nazarian PsyD

FROM: Shana Epstein, Director of Public Works
Robert Welch, P.E. Utilities General Manager
Melissa Gomez, Senior Management Analyst

DATE: September 13, 2022

SUBJECT: Status Update for the Water and Wastewater Cost of Service Study

ATTACHMENTS: 1. State Commercial User Strength Characteristics Table
2. Example Commercial Sewer Strength Classifications

RECOMMENDATION

Staff recommends that the City Council Public Works Liaison Committee receive and provide direction on:

1. The proposed policy recommendations, which separate the residential wastewater customers (single-family and multi-family) and add a quantity (volumetric) charge for the single-family and multi-family classes;
2. The proposed sewer return factors based on a three-year average of the lowest month for each year;
3. The proposed change in the commercial wastewater customer classes to include a third class;
4. The proposed water CIP scenario 2 (full scale Cabrillo Reservoir project) recommend by the Public Works Commission;
5. The proposed fixed charge revenue ratio for water;
6. The proposed pass-through charges, outside city differential, water reliability charge, and water shortage revenue stabilization factors; and
7. Recommend that City Council begin the required Proposition 218 public notice process for rates based on the cost of service studies.

BACKGROUND

The City's Water and Wastewater Utilities provide services to residential and commercial customers. In return, the City collects a charge for the service. Establishing cost-based rates, fees, and charges is essential in a well-managed and operated utility. Cost-based rates provide sufficient funding to allow communities such as Beverly Hills to build, operate, maintain, and reinvest in the water and wastewater systems that provide the community with safe and reliable drinking water, fire protection, and wastewater service. Rates are reviewed periodically to ensure revenue requirements are being met. The City is responsible for setting rates in compliance with California law requiring that fees and charges for water and wastewater services do not exceed the proportional cost of service.

On December 19, 2017, the Beverly Hills City Council adopted a five-year water rate adjustment through January 1, 2022. The ordinance adopted by City Council also allowed pass-through of Metropolitan Water District (MWD) rate increases with notice. On February 5, 2019, the Beverly Hills City Council approved restructured water rate adjustments based on a cost-of-service study conducted by HF&H Consultants, LLC (HF&H). The restructured rate adjustments accounted for changes to the existing consumption and fixed service charges, implemented a water reliability charge, and adopted water shortage revenue stabilization factors. As for wastewater, present rates have not been updated since FY 2009-10. Although at the time, staff recommended automatic consumer price index (CPI) rate increases for future years, the CPI rate increase was never included in the adopted rates. HF&H evaluated the current rates in 2017 and found that revenue was sufficient to continue the enterprise's strong financial position through FY 2021-22, without any need for a rate increase.

DISCUSSION

The City is responsible for setting rates in compliance with California law. In November 1996, voters passed Proposition 218, which enacted Article XIII D of the California Constitution, requiring that fees and charges for water and wastewater services not exceed the proportional cost of service. A local government, such as the City of Beverly Hills, which provides water and wastewater services, may also adopt a schedule of fees or charges authorizing automatic adjustments that pass through increases in wholesale charges for water, sewage treatment, or wastewater treatment or adjustments for inflation. State law requires that a local government comply with certain procedures before imposing or increasing property-related fees or charges. Those procedures include:

- Identify the parcels upon which a fee or charge is proposed for imposition;
- Calculate the amount of the fee proposed to be imposed on each parcel;
- Provide written notice by mail to the record owner of each identified parcel;
- Conduct a public hearing on the proposed fee not less than 45 days after the mailing;
- Consider all protests against the proposed fee or charge submitted before the closing of the public hearing;
- If written protests against the fee are presented by a majority of owners of the identified parcels, the fee cannot be imposed; and
- The proposed rates need a 2/3 majority vote or greater from City Council to pass.

In 2021, the City contracted with HF&H to conduct a cost-of-service study for the water and wastewater enterprises. Similar to past rate cycles, staff met with the Public Works Commission (Commission) Water and Wastewater Rates Ad-Hoc Committee (Ad-Hoc) made up of Vice Chair Wendy Nystrom and Commissioner Joshua Greer on May 23, 2022 and July 12, 2022 seeking input on assumptions and policies affecting the City's water and wastewater rates. Staff also presented to the entire Commission on June 9, 2022, July 21, 2022, August 11, 2022, August 31, 2022, and September 8, 2022 seeking feedback. During the meetings, the Commissioners provided input on assumptions that drive the cost-of-service studies. Areas of discussion for the wastewater enterprise included financial projection assumptions, wastewater capital projects, cost and revenue projections, projected fund balance, and most importantly restructuring wastewater rates and possible alternatives. Areas of discussion for the water enterprise included financial projection assumptions, water purchases, water capital projects, including three options to fund the Cabrillo reservoir project, revenue requirements for each capital improvement projects option, and lastly, service charge policies. Because of the direction received from the Commission, staff would like to present the findings to the Public Works Liaison for further direction.

Wastewater

The wastewater cost of service study concluded the following:

1. Revenue requirement projections

- No additional revenue from rates is necessary during the next five-year period.

2. Cost-of-service analysis

- Based on the cost-of-service analysis, single-family customers are contributing less than their share of the cost of service, and all other customer classes are contributing more.
- The shift in cost from multi-family to single-family is the result of the current cost of service analysis, which takes into account the difference in flow between multi-family and single-family customers.
- Irrigation is the principal non-sewered water use so water meter readings during the winter season provide the most accurate proxy for sewer residential water use. The winter season flow is used to allocate costs to each customer class and would be used in the calculation of customers' bills if a flow-based component is introduced for residential customers.
- Installing a wastewater meter is not practical. Wastewater flows for residential customers, in particular, cannot be metered accurately because the flow is typically not pressurized and contains solids and other organic and inorganic constituents that will quickly clog meters.

3. Rate structure design

- Introduce a flow-based quantity charge for residential customers. Currently, low and high single-family and multi-family water users pay the same fixed rate.
- Many neighboring jurisdictions charge a fixed charge and flow-based quantity charge to their residential customers (e.g., Glendale, San Diego, Santa Monica, and Ventura).
- Expand the number of commercial customer classes from two (i.e., domestic strength and excess strength) to three (i.e., low, medium, and high strength).

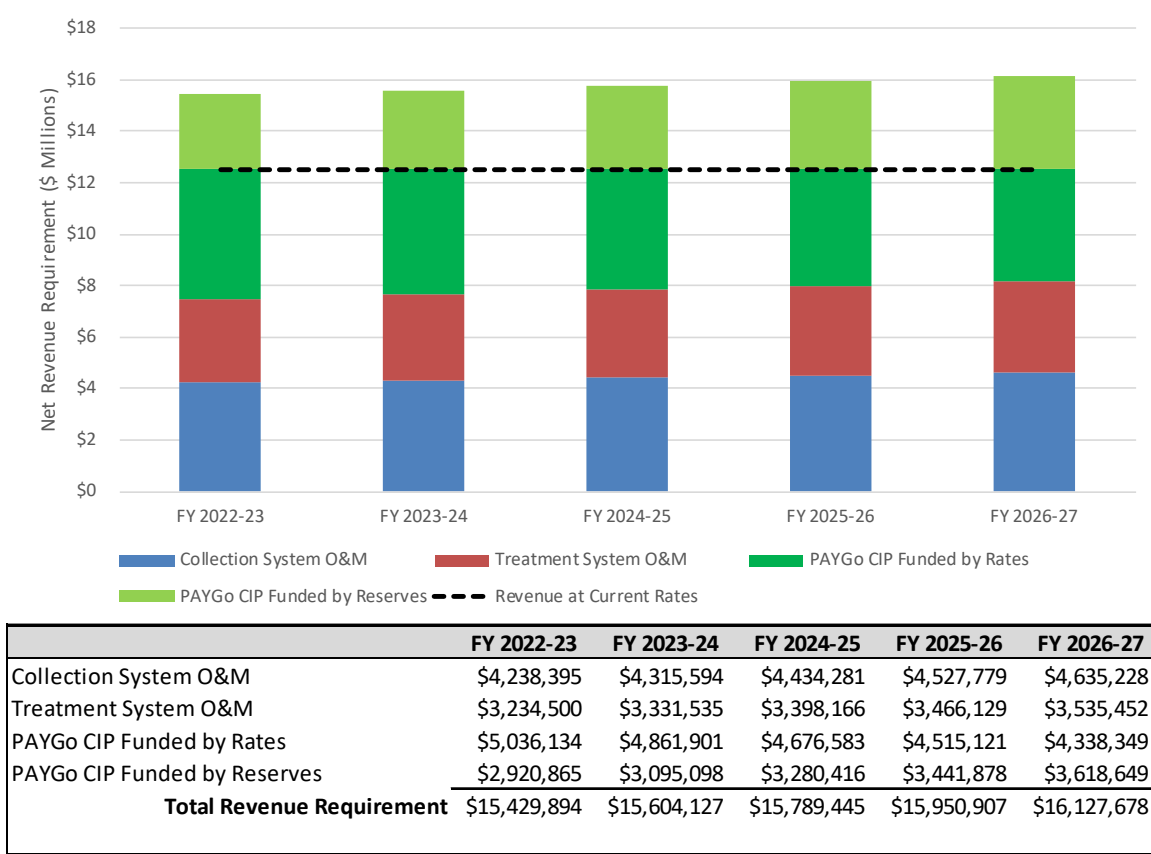
4. Customer bill impacts

- Bill impacts will vary by customer class and actual water use from billing period to billing period.

Five-year Financial Model

HF&H and staff developed a five-year financial projection of operational and maintenance (O&M) and capital costs based on the Council-approved FY 2022-23 budget. As noted in Table 1 below, the average annual expenses amount to \$15.8 million. Revenue at current rates amounts to \$12.5 million. Therefore, an annual average of \$3.3 million of capital expenses will be funded using reserve funds, which have accumulated over the years from sewer rate revenue exceeding expenses. As a result, no additional revenue from rates is necessary during the next five-year period to cover costs and maintain a reasonable reserve fund balance.

Table 1: Revenue Requirements



Although no additional rate revenue is needed to fund wastewater operations, this cost-of-service study determines if each of the customer classes’ rates contributes revenue in proportion to their cost of service. Table 2 below outlines the current revenue collected per customer class and what the cost-of-service study determined to be the actual revenue that should be collected. The shift in cost from multi-family to single-family is the result of the current rate structure, which charges multi-family dwellings the same bi-monthly rate as single-family residents even though the average multi-family dwelling is estimated to discharge 104 gallons per day, while single-family residents are estimated to discharge an average of 354 gallons per day.

Table 2: Cost of Service Allocations

	Current Revenue	Cost-of-Service	Difference
Single Family Residential	\$3,187,622	\$5,881,504	\$2,693,882
Multi Family Residential	\$5,304,141	\$3,505,726	(\$1,798,415)
Commercial Domestic Strength	\$2,739,728	\$2,002,049	(\$737,680)
Commercial Excess Strength	\$1,277,538	\$1,119,750	(\$157,788)
Total	\$12,509,029	\$12,509,029	\$0

Fixed and Quantity Charge Types

Currently, residential customers (single-family and multi-family) are charged only a fixed rate per dwelling unit, which is the same for both classes. Commercial customers pay a fixed rate per account, a flow charge based on actual water use, and some excess strength customers pay an additional water quality surcharge. Commercial customers with higher strength wastewater (e.g., restaurants, grocery stores), which requires greater treatment to meet discharge requirements, are charged a higher flow charge than those customers with average strength wastewater. Due to the disparity between revenues and the cost-of-service for each customer class, HF&H and staff are exploring alternative rate structures to better align revenue from each class with their respective cost of service. Introducing a flow-based quantity charge for residential customers would help address the concern.

The proposed single-family and multi-family bi-monthly fixed service charges (both currently \$87.38) would decrease with the introduction of a flow-based quantity charge as noted in Table 3 below. Quantity charges would be based on estimated sewer flow by factoring down each customer's actual water use by a Sewer Return Factor, which reflects the fact that not all water use (e.g., irrigation) returns to the sewer system. Sewer Return Factors were derived for each customer class and are applied to all customers in each class (see Table 4). At the September 8, 2022 Commission meeting, the Commission supported the use of Sewer Return Factors based on a three-year average of the lowest month for each year.

Table 3: Proposed Cost-of-Service Bi-Monthly Rates

Customer Class	Current Bi-Monthly	Cost of Service
Single Family		
Service Charge per dwelling unit	\$87.38	\$58.16
Quantity Charge	n/a	\$3.58
Multi Family		
Service Charge per dwelling unit	\$87.38	\$27.51
Quantity Charge	n/a	\$3.58
Commercial/Municipal		
Service Charge per account	\$34.20	\$58.16
Quantity Charges (option 1 - existing classes)		
Domestic Strength	\$4.74	\$3.58
Excess Strength	\$7.08	\$6.95
Quantity Charges (option 2 - proposed classes)		
Low Strength	n/a	\$3.58
Med Strength	n/a	\$5.24
High Strength	n/a	\$6.95

Table 4: Sewer Return Factors

Customer Class	Annual Flow [1]	Sewered Flow [2]	Return to Sewer
	hcf	hcf	
	a	b	c = b/a
Single Family Residential			
Without Irrigation meter	2,017,021	1,049,980	52%
With Irrigation meter			100%
Irrigation meter			0%
Multiple Family Residence	572,457	512,609	90%
Low Strength Non Residential			
Commercial	547,737	455,544	83%
Municipal	41,207	20,523	50%
	588,944	476,067	
High Strength Non Residential			
Commercial	186,436	155,056	83%
Municipal	1,844	918	50%
	188,279	155,974	
	3,366,701	2,194,630	65%

1. Average of CYs 2017, 2018, 2019 annual metered flow
2. Average of lowest month for each year

The proposed Commercial bi-monthly fixed service charge would increase from \$34.20 to \$58.16. Proposed quantity charges for low strength customers would decrease from \$4.74 to \$3.58, and for high strength, customers would decrease from \$7.08 to \$6.95. Table 3 demonstrates the current rate schedule and the proposed rates based on the cost-of-service study. There is currently no medium strength class. However, the Commission recommends adding a third commercial strength category for multi-use and other “medium” strength properties. Some commercial accounts are comprised of multiple businesses with a mix of domestic (e.g., retail) and excess strength (e.g., restaurants) wastewater and are served by the same meter. Introducing a third commercial class in-between domestic and excess strength is a common industry practice and will recognize mixed-use properties, which are not 100% domestic or 100% excess strength, as well as other medium strength businesses. Introducing a medium strength class would require the evaluation of each commercial property and business licenses to identify the medium strength customers. Medium strength customers and unassigned commercial customers would remain in their current strength classes until staff evaluates the properties and determines if there should be a change in their strength class. In addition, staff will address any misassigned commercial customers. In order to work effectively with each customer, staff anticipates the process would take approximately a year.

A California State Commercial User Strength Characteristics table is included as Attachment 1. This table will help identify low, medium, and high strength classes. For purposes of the current cost-of-service study, we would define each strength level as the following:

1. Low (Domestic) = If BOD **and** TSS are less than 250 ppm (parts per million)
2. Medium = If BOD **or** TSS is greater than 250 ppm but less than 700 ppm
3. High (Excess) = If BOD **or** TSS is greater than 700 ppm

Additionally, staff is including a detailed list of commercial business types and their respective strength classification as Attachment 2. The reclassification of commercial accounts from the current two classes to three classes would occur over the next year in conjunction with another ongoing review of commercial customers.

Phase-In of Quantity Charge Rate Adjustments

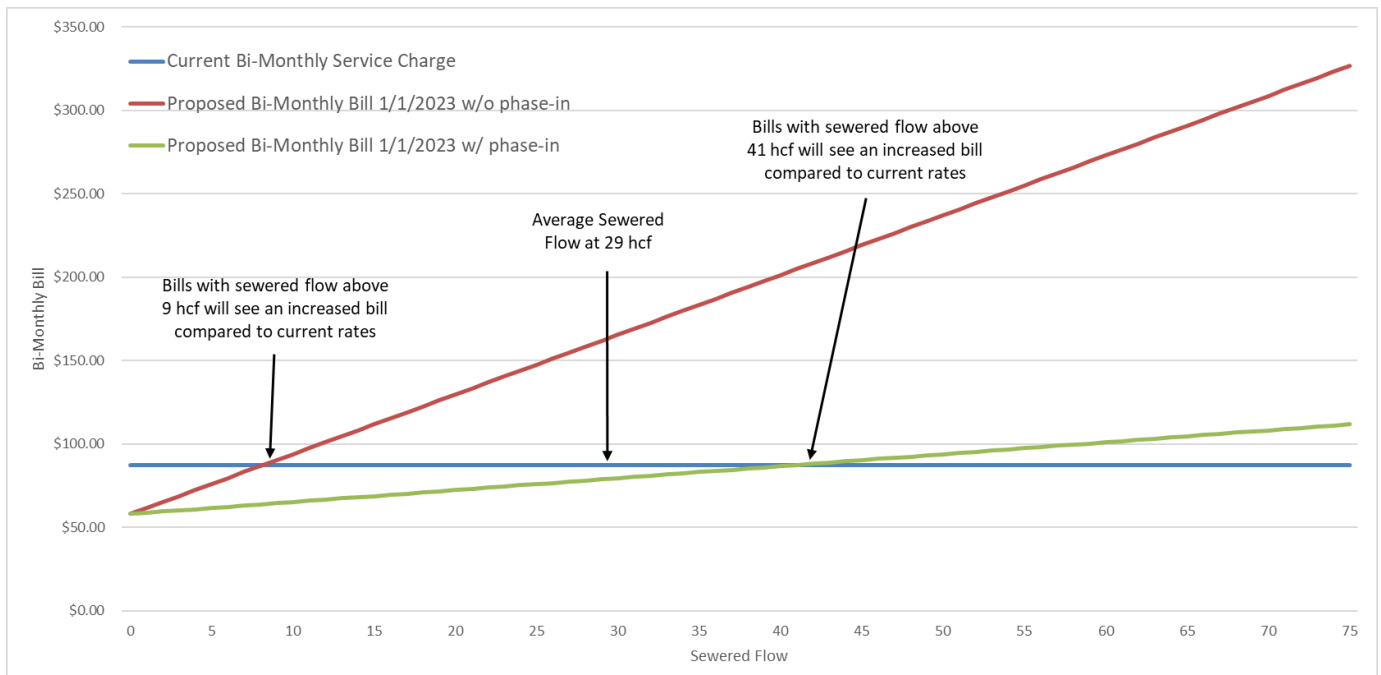
The proposed rate adjustments for service charges for all classes will be made immediately without phasing in. However, the Commission recommends phasing in single-family quantity charges over five years to ease quantity charge adjustments. The proposed quantity charge rate of \$3.58 would be set at 20% in year one, or \$0.72, and increases approximately \$0.72 each year over the five-year phase-in (see Table 5). The quantity charge rates for multi-family and commercial customers will be made immediately and will not be phased in. While the single-family quantity charge rates are phased in, the Wastewater Enterprise reserves will supplement the revenue shortfall of \$7.7 million over five years. The Wastewater Enterprise reserves have sufficient funding to cover the revenue shortfall while maintaining funding above the City’s financial policy. The fund balance is projected to be \$22.4 million at the end of FY 2026-27 with the phased in single-family rate.

Table 5: Phase-In of Quantity Charge Rates for Single-Family Customers

	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Proposed Rate per hcf	\$3.58	\$3.58	\$3.58	\$3.58	\$3.58
Phase-in Increase	20%	40%	60%	80%	100%
Phased-in Rate per hcf	\$0.72	\$1.43	\$2.15	\$2.86	\$3.58
Bi-monthly water use	55	55	55	55	55
Sewer return factor	52.1%	52.1%	52.1%	52.1%	52.1%
Sewered flow (rounded)	29	29	29	29	29
Quantity charge	\$20.77	\$41.54	\$62.31	\$83.08	\$103.85
Service charge	\$58.16	\$58.16	\$58.16	\$58.16	\$58.16
Proposed bill	\$78.93	\$99.70	\$120.47	\$141.24	\$162.00
Bill under current rates	\$87.38	\$87.38	\$87.38	\$87.38	\$87.38
Difference	(\$8.45)	\$12.32	\$33.09	\$53.86	\$74.62

Table 6 provides a single-family customer bill comparison across a range of sewered water use, comparing the bills at current rates, year one of the phase-in, and if rates are not phased in. If the residential quantity rate is not phased-in, customer bills with sewered flow above 9 hcf would see a bill decrease and customer bills with sewered flow above 9 hcf would see a bill increase. If the phase-in approach is selected, the point at which customer bills transition from a decrease to an increase is 41 hcf.

Table 6: Residential Bills by Consumption (With and Without Phase-In)



Water

On June 9, 2022, staff presented to the Commission and discussed the Water Enterprise that included the financial projection assumptions, water purchases, water capital projects, including three options to fund the Cabrillo reservoir project, revenue requirements for each capital improvement projects option, and lastly, service charge policies. Staff returned to the Commission on August 11, 2022 and August 31, 2022, continued the discussion, and asked for direction on a preferred CIP option, fixed charge revenue, and the outside city rate differential. Additionally, staff presented on previously adopted water charges, which include pass-through adjustments, water reliability charges, and water shortage revenue stabilization factors.

CIP Options

There were three CIP options considered as part of this study. All options include funding for three Reservoir Management Systems (RMS) totaling approximately \$3M. With the addition of the new RMS at Greystone (19.4MG), Coldwater (8.3MG), and Sunset (6MG) reservoirs, which make up 77% of the total storage within the City, we will be increasing operational storage by 25% (8.5MG).

- **Option 1** includes funding for the Cabrillo Forebay project. This option would provide added resilience to existing LADWP interconnect and the Montecielo pump station. The improvements for Option 1 include a new pump station for the hillside along with a forebay storage area of approximately 300,000 gallons, new transmission line and backup power.
- **Option 2** includes funding for the full-scale Cabrillo Reservoir project, which includes a new pump station for the hillside, a reservoir with a capacity of 4.3MG, new transmission line and backup power.
- **Option 3** includes funding for the Cabrillo Forebay project and the Reservoir 4C project. The improvements associated with Option 3 include at Cabrillo, a pump station and forebay storage area of 300,000 gallons and a 1MG reservoir at the existing Reservoir 4C site. The Commission discussed the various CIP options and voted in recommendation

of CIP Option 2, the full-scale Cabrillo Reservoir project. Table 7 below shows each CIP Option and the total 5-year spending.

Table 7: Water CIP Options

Water Capital Project Schedule Options		Option 1	Option 2	Option 3
1	Cabrillo Reservoir Project ¹	\$4,180,937	\$21,270,460	\$4,180,937
2	Reservoir Repl. & Pump Station Rehab Project ¹	\$2,969,633	\$2,969,633	\$9,508,941
3	All Other Capital Projects ¹	\$45,274,713	\$45,274,713	\$45,274,713
4	Total 5-Year CIP Spending¹	\$52,425,283	\$69,514,806	\$58,964,591
5				
6	Average Annual Increase for Bi-Monthly Bill (2022-2027)			
7	Single-Family/Duplex	\$9.02	\$10.37	\$8.86
8	Multi-Family ²	\$32.34	\$49.81	\$40.21
9	Commercial/Municipal	\$53.62	\$90.06	\$70.18

¹All CIP Figures are escalated and assume CIP Completion Factor of 80% due to project timing.

²Multi-Family bill impact assume a 10-unit complex.

Table 8 below demonstrates the proposed cost-of-service bi-monthly rates for Water CIP Option 2. It is important to note that inside and outside City customers pay the same fixed water and fire service charges. However, the quantity charge differs between inside and outside City customers. The difference is explained later in this report. As part of the cost-of-service analysis, the tier structure was reviewed and updated to reflect current customer demand patterns. Accordingly, the size of the tiers were adjusted to reflect changing customer demands and aligns the level of service with the cost of providing that service within each tier.

Table 8: Proposed Cost-of-Service Bi-Monthly Rates

Current Quantity Charge Rates			COS Quantity Charge Rates		Service Size	Current Charge	COS Charges
Tier Size	\$/HCF		Tier Size	\$/HCF			
Inside City					Fixed Service Charges		
Single-Family/Duplex					1"	\$53.51	\$58.05
Tier 1	0-26 HCF	\$3.54	0-32 HCF	\$4.30	1-1/2"	\$93.84	\$100.46
Tier 2	27-48 HCF	\$6.91	33-48 HCF	\$7.19	2"	\$142.24	\$151.35
Tier 3	49-86 HCF	\$10.17	49-83 HCF	\$10.01	3"	\$271.30	\$287.06
Tier 4	86+ HCF	\$14.44	84+ HCF	\$12.51	4"	\$416.50	\$439.74
Multi-Family					6"	\$819.82	\$863.84
Tier 1	0-8 HCF	\$4.52	0-8 HCF	\$5.79	8"	\$1,311.71	\$1,372.76
Tier 2	9+ HCF	\$12.92	9+ HCF	\$14.98	10"	\$1,967.57	\$3,578.07
Commercial							
		\$7.03		\$7.93			
Water Reliability (all customers)							
		\$0.26		\$0.27	Fire Service Charges		
Outside City					<= 2"	\$29.73	\$31.23
Single-Family/Duplex					2 1/2"	\$44.32	\$46.55
Tier 1	0-26 HCF	\$4.41	0-32 HCF	\$4.96	3"	\$64.56	\$67.81
Tier 2	27-48 HCF	\$7.78	33-48 HCF	\$7.85	4"	\$124.69	\$130.96
Tier 3	49-86 HCF	\$11.03	49-83 HCF	\$10.67	6"	\$340.52	\$357.65
Tier 4	86+ HCF	\$15.31	84+ HCF	\$13.17	8"	\$712.74	\$748.59
Multi-Family					10"	\$1,272.63	\$1,336.64
Tier 1	0-8 HCF	\$5.39	0-8 HCF	\$6.45	12"	\$1,654.42	\$1,737.63
Tier 2	9+ HCF	\$13.78	9+ HCF	\$15.64			
Commercial							
		\$7.90		\$8.59			
Water Reliability (all customers)							
		\$0.41		\$0.42			

Fixed Charge Revenue

HF&H and staff recommend maintaining the current fixed charge revenue balance (16% from fixed service plus fire service charges and 84% from variable quantity charges). Even though the majority of the Water Enterprise fund's costs are fixed, this ratio has allowed customers to manage their bills through consumption. At the same time, the Water Enterprise fund has maintained revenue stability. The Commission agreed to maintain the fixed charge revenue balance.

Outside City Rate Differential

The City provides water services to a portion of the City of West Hollywood. During the previous cost of service study, it was determined that Beverly Hills customers (Inside City customers) and West Hollywood customers (Outside City customers) should pay different quantity charges mainly due to the contribution by the services provided by the City of Beverly Hills' General Fund to the Water Enterprise. These services include public safety from police and fire, use of government facilities such as City Hall and corporation yards, and right-of-way maintenance. Inside City customers pay for these services through property taxes. Outside City, customers do not contribute to property taxes, so their rates reflect an increase over Inside City rates to account for these costs and reimburse the General Fund. As part of the 2018 cost-of-service analysis, HF&H determined that the City's General Fund was projected to incur approximately \$2,440,000 in costs to provide public safety, government facilities, and right-of-way maintenance to the Water Enterprise. Of the total \$2,440,000, the General Fund incurs \$2,015,000 per year to serve Inside City customers and \$425,000 per year to serve Outside City customers. For Inside City customers, these costs are covered by property taxes paid to the City; therefore, no adjustment to the quantity charge rates was made to the Inside City customers. Outside City customers do not contribute property taxes to the City; therefore, an adjustment was made to the Outside City quantity charges rates so the General Fund can recuperate the cost of these services. The reimbursement by Outside City customers (through the quantity charge rate adjustment) for public safety services, government facilities, and right-of-way maintenance was required to maintain parity with Inside City customers, which pay the entire cost through property tax revenue. It was determined that the entire \$425,000 cost was recoverable by adding \$0.82 per HCF to the Outside City quantity charges for its single-family, multi-family, and commercial customers. The service charges to both Inside City and Outside City customers remained the same. For the current cost of service study, it was determined that the Outside City rate differential should be \$0.66 per HCF due to the decrease in Outside City flow. The Commission agreed to maintain the outside city rate differential.

Previously Adopted Water Charges

In addition to the last water rate adjustments, Beverly Hills City Council adopted pass-through charges, water reliability charges, and water shortage revenue stabilization factors. As part of the current cost-of-service study, the pass-through adjustments, water reliability charge, and revenue stabilization factors need to be re-noticed to the community to allow the charges to be implemented for an additional five years.

Pass-Through Adjustments

Government Code Section 53736 allows an agency that provides water, wastewater or sewer service to adopt a schedule of fees or charges authorizing automatic adjustments that pass through increases in wholesale charges for water, or wastewater treatment. City Council adopted pass-through adjustments that would allow increases in wholesale water charges for purchasing water from MWD to be passed through directly to customers if they are higher than the adopted budgeted costs. If future MWD rates are more than what was projected in the cost of service

study, then the incremental difference will be passed through to customers. Customers will be notified prior to the effective date of adjustment. Since the pass-through adoption, the City has not exercised the adjustments. Every five years, this provision needs to be included in the Proposition 218 notification. The Commission agreed to maintain the pass-through adjustments.

Water Reliability Charge

The water reliability charge provides dedicated funding for the expansion of the water system to the La Brea subarea. Developing the La Brea basin will increase local groundwater production and reduce the City's dependence on MWD for water supply. Estimated project costs for the calculation of the water reliability charge were derived from the La Brea Subarea Wells, Water Treatment and Transmission Main Project Preliminary Design Report from May 2017. The water reliability charge is in addition to the quantity and service charges. A customer's water reliability charge is the product of the water reliability charge rate multiplied by the customer's water consumption during the billing period. The water reliability charge will be billed to both inside and outside City customers over 30 years to cover the cost of the project. The 30-year projection of this rate in the last cost of service will be retained for this study and the next five years are recommended to be included in the upcoming cost-of-service study. The Commission agreed to maintain the water reliability charge.

Water Shortage Revenue Stabilization Factors

The State of California has experienced intense periods of drought, resulting in mandatory water restrictions. In extreme cases, restrictions could negatively affect water utility revenues. To prepare, the City adopted a schedule of revenue stabilization factors to be implemented during water shortages with City Council approval and thirty days' notice to water customers. The factors are correlated with reductions in each customer class's required level of conservation for each Stage. The factors are lowest for multi-family customers because their water use has less irrigation than, for example, single-family customers. (During water shortages, irrigation water use is restricted more than indoor water uses). The revenue stabilization factors act as a multiplier to the customers' existing quantity charge rates. Once the water shortage is over, rates will return to the normal rate schedule. The revenue stabilization rates replaced the drought surcharge implemented in prior years. Since the adoption of the revenue stabilization factors, the City has not exercised the charges. The revised water shortage revenue stabilization factors are included in Table 9 below. The Commission agreed to the water shortage revenue stabilization factors.

Table 9: Water Shortage Revenue Stabilization Factors

Revenue Stabilization Factors by Customer Class					
Class	Stage A Up to (5% Reduction)	Stage B Up to (10% Reduction)	Stage C Up to (20% Reduction)	Stage D Up to (30% Reduction)	Stage E Up to (50% Reduction)
Single Family	1.043	1.093	1.217	1.390	1.878
Multi-Family	1.019	1.040	1.085	1.137	1.388
Commercial	1.027	1.057	1.124	1.206	1.511

Water Shortage Reductions by Customer Class					
Class	Stage A Up to (5% Reduction)	Stage B Up to (10% Reduction)	Stage C Up to (20% Reduction)	Stage D Up to (30% Reduction)	Stage E Up to (50% Reduction)
Single Family	6%	12%	25%	37%	57%
Multi-Family	3%	6%	11%	17%	37%
Commercial	4%	8%	16%	24%	44%

NEXT STEPS

If the Liaison decides to move forward, staff will present the final recommendation and public notice to the full City Council at the October 11, 2022, City Council Study Session. If Council wishes to move forward with the proposed rate restructuring, staff will distribute the public notice to customers and implement the proposed community engagement plan detailed below. Following community engagement and in the absence of a majority protest, the revised Water and Wastewater Rates Ordinance will be introduced at a public hearing at the December 6, 2022, City Council meeting. Pending support from a majority of the City Council, the ordinance will be adopted at the December 13, 2022, City Council meeting. If the ordinance is adopted, the adjusted rates will take effect in mid-January 2023.

Community Outreach

Staff will host two town hall meetings to present the proposed rates, the impact on customers' bills, and how the rate adjustments will allow the Water and Wastewater Enterprises to continue serving the community. Since each customer will be impacted differently, a bill impact calculator will be provided on the City's website. Customers will be able to input their water use data and compare their bill under the current and proposed rates. Staff will also provide ample time to respond to questions and concerns from the public. The date, time, and location of the town hall meetings will be advertised in local newspapers, on the City's website, and through multiple social media channels, including Instagram, Facebook and Twitter. In addition, staff will attend community meetings in October and November. Staff will present the proposed rate adjustment to the Chamber of Commerce to address concerns from the business community. Staff will also include information on the water and wastewater rate adjustments in the Public Works newsletter, The Backbone, and the City's social media accounts.

Meeting/Action	Date
Presentation to City Council (with Prop 218 notice)	October 11, 2022
Public Notice Distributed	October 21, 2022
Presentation/Discussion at the Public Works Commission	November 10, 2022
Community Outreach <ul style="list-style-type: none"> • Town Hall Meetings • Commission Meeting Presentations • Community Presentations • Presentation to the Chamber of Commerce 	October-December 2022

<ul style="list-style-type: none"> • Article on the Backbone Newsletter • Newspaper Ads • Social Media Posts • Website • Bill Impact Calculator 	
Public Hearing (1 st Reading)	December 6, 2022
Public Hearing (2 nd Reading)	December 13, 2022
Rates Effective	Mid-January 2023

Attachment 1

COMMERCIAL USER STRENGTH CHARACTERISTICS

<u>STANDARD CLASSIFICATIONS</u>	<u>BOD₅(ppm)</u>	<u>SS(ppm)</u>
Residential (average varies depending on average water usage per capita)	175 to 250	175 to 250
Auto Steam Cleaning	1,150	1,250
Bakery, wholesale	1,000	600
Bars without dining facilities	200	200
Car Wash	20	150
Department and Retail Store	150	150
Hospital and Convalescent	250	100
Hotel with dining facilities	500	600
Hotel/Motel without dining	310	120
Industrial Laundry	670	680
Laundromat	150	110
Laundry, commercial	450	240
Market with garbage grinders	800	800
Mortuary	800	800
Professional Office	130	80
Repair Shop and Service Station	180	280
Restaurant	1,000	600
School and College	130	100
Septage	5,400	12,000
Soft Water Service	3	55

Attachment 2

Example Commercial Sewer Strength Classifications

Low Strength

Banks & Financial Institutions
Barber Shops/Hair Salons (Hair Cutting Only)
Post Offices/Government
Retail Stores
Libraries
Schools
Religious Buildings, Halls & Lodges
Offices (Business and Professional)

Medium Strength

Bars & Taverns (w/o Dining)
Appliance Repair
Barber Shops/Hair Salons (Haircutting w/Add'l Treatments)
Dry Cleaners
Nail Salons
Pet Groomers
Commercial Laundromats
Tasting Rooms
Medical Offices/Hospitals (General, Cosmetic, Dental, Convalescent & Veterinarian)
Hotels, Motels, or Bed & Breakfast

Pools with Restrooms (Clubhouse)
Theaters
Warehouses
Car Washes
Gym or Health Club
Service Stations, Garages, Auto Repair Shops
Car Rental/Car Service
Mini Marts (w/o Dish Washer or Garbage Disposal)
Mini Mart with Gas Pumps – (w/o Dish Washer or Garbage Disposal)
Spa

High Strength

Restaurants
Coffee Shops
Ice Cream Parlors
Catering
Eatery
Juice Bars
Bakeries Butcher Shops
Bars & Taverns (w/ Dining)

Grocery Stores or Markets
Mini Marts (w/ Dish Washer or Garbage Disposal)
Delicatessens

Attachment 3



CITY OF BEVERLY HILLS
PUBLIC WORKS DEPARTMENT
MEMORANDUM

TO: Vice Mayor Julian A. Gold, M.D. and
Councilmember Sharona Nazarian PsyD

FROM: Shana Epstein, Director of Public Works
Robert Welch, P.E. Utilities General Manager
Melissa Gomez, Senior Management Analyst

DATE: September 29, 2022

SUBJECT: Status Update for the Water and Wastewater Cost of Service Study

ATTACHMENTS: 1. 9/13/22 Agenda Report- Status Update for the Water and
Wastewater Cost of Service Study

RECOMMENDATION

Staff recommends that the City Council Public Works Liaison Committee receive and provide direction on:

1. The proposed policy recommendations, which separate the residential wastewater customers (single-family and multi-family) and add a quantity (volumetric) charge for the single-family and multi-family classes;
2. The proposed sewer return factors based on a three-year average of the lowest month for each year;
3. The proposed change in the commercial wastewater customer classes to include a third class;
4. The proposed water CIP scenario 2 (full scale Cabrillo Reservoir project) recommend by the Public Works Commission;
5. The proposed fixed charge revenue ratio for water;
6. The proposed pass-through charges, outside city differential, water reliability charge, and water shortage revenue stabilization factors; and
7. Recommend that City Council begin the required Proposition 218 public notice process for rates based on the cost of service studies.

DISCUSSION

At the September 13, 2022 Public Works Liaison Committee, staff and consultants introduced the water and wastewater cost of service study. This item is a continuation of that discussion. The September 13, 2022 agenda report is included as reference.

Attachment 4

Attachment 4- Water and Wastewater Bill Impacts

Combined Bill Impact – Single Family

	Current		Proposed			
		<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Assumptions						
Meter Size	1" meter	1" meter				
Water Consumption	56	56				
Return to Sewer Factor	n/a	52%				
Sewered Flow	n/a	29				
Water						
Fixed Service Charge	\$53.51	\$56.38	\$57.50	\$58.65	\$59.83	\$61.02
Quantity Charge	\$325.42	\$322.88	\$329.60	\$336.00	\$342.88	\$349.76
Water Reliability Charge	\$14.56	\$15.12	\$15.68	\$16.24	\$16.80	\$17.36
Total	\$393.49	\$394.38	\$402.78	\$410.89	\$419.51	\$428.14
Increase/(Decrease)		\$0.89	\$8.41	\$8.11	\$8.61	\$8.64
Wastewater						
Service Charge	\$87.38	\$77.92	\$68.46	\$59.00	\$49.54	\$40.08
Quantity Charge	\$0.00	\$20.88	\$41.47	\$62.35	\$82.94	\$103.82
Total	\$87.38	\$98.80	\$109.93	\$121.35	\$132.48	\$143.90
Increase/(Decrease)		\$11.42	\$11.13	\$11.42	\$11.13	\$11.42
Total Bi-monthly Bill	\$480.87	\$493.18	\$512.71	\$532.24	\$551.99	\$572.04
Increase/(Decrease)		\$12.31	\$19.54	\$19.53	\$19.74	\$20.06

Combined Bill Impact – Multi Family

	Current		Proposed			
		<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Assumptions						
Meter Size	1.5" meter	1.5" meter				
Water Consumption per unit	9.3	9.3				
Return to Sewer Factor	n/a	90.0%				
Sewered Flow	n/a	8.4				
Dwelling Units	10	10				
Water						
Fixed Service Charge	\$93.84	\$97.56	\$99.51	\$101.50	\$103.53	\$105.60
Quantity Charge	\$529.56	\$595.10	\$607.60	\$619.40	\$632.00	\$644.70
Water Reliability Charge	\$24.18	\$25.11	\$26.04	\$26.97	\$27.90	\$28.83
Total	\$647.58	\$717.77	\$733.15	\$747.87	\$763.43	\$779.13
Increase/(Decrease)		\$70.19	\$15.38	\$14.72	\$15.56	\$15.70
Wastewater						
Service Charge	\$873.80	\$779.20	\$684.60	\$590.00	\$495.40	\$400.80
Quantity Charge	\$0.00	\$60.26	\$119.69	\$179.96	\$239.38	\$299.65
Total	\$873.80	\$839.46	\$804.29	\$769.96	\$734.78	\$700.45
Increase/(Decrease)		(\$34.34)	(\$35.17)	(\$34.34)	(\$35.17)	(\$34.34)
Total Bi-monthly Bill	\$1,521.38	\$1,557.24	\$1,537.44	\$1,517.83	\$1,498.22	\$1,479.58
Increase/(Decrease)		\$35.86	(\$19.79)	(\$19.62)	(\$19.61)	(\$18.64)

Combined Bill Impact – Commercial

	Current	Proposed				
		<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Assumptions						
Meter Size	1" meter	1" meter				
Water Consumption per unit	113	113				
Return to Sewer Factor	n/a	83.0%				
Sewered Flow	113	94				
Commercial Strength	Domestic	Low				
Water						
Fixed Service Charge	\$53.51	\$56.38	\$57.50	\$58.65	\$59.83	\$61.02
Quantity Charge	\$794.39	\$870.33	\$888.18	\$905.13	\$923.21	\$942.42
Water Reliability Charge	\$29.38	\$30.51	\$31.64	\$32.77	\$33.90	\$35.03
Total	\$877.28	\$957.22	\$977.32	\$996.55	\$1,016.94	\$1,038.47
Increase/(Decrease)		\$79.94	\$20.10	\$19.23	\$20.38	\$21.54
Wastewater						
Service Charge	\$34.20	\$35.38	\$36.55	\$37.73	\$38.91	\$40.08
Quantity Charge	\$535.62	\$472.82	\$438.04	\$404.20	\$370.36	\$336.52
Total	\$569.82	\$508.20	\$474.59	\$441.93	\$409.27	\$376.60
Increase/(Decrease)		(\$61.62)	(\$33.61)	(\$32.66)	(\$32.66)	(\$32.67)
Total Bi-monthly Bill	\$1,447.10	\$1,465.42	\$1,451.91	\$1,438.48	\$1,426.21	\$1,415.07
Increase/(Decrease)		\$18.32	(\$13.51)	(\$13.43)	(\$12.28)	(\$11.13)

WATER FACTS



Volumetric Wastewater Pricing: Frequently Asked Questions

1. Will volumetric pricing of wastewater service require the installation of meters on sewer lines, and is that even practical?

No—separate installation of meters on household sewer lines is not necessary, and would not be practical. Residential customers with volumetric sewer rates are billed for sewer service based on the amount of water use shown on the water meter serving the home.

2. How can residential sewer service be billed from the customer's water meter, since so much of the water used at home is used outdoors and does not enter the sanitary sewer system?

Here's how—in areas where landscape irrigation is a significant amount of total water use, as is the case in much of California, it is common to use meter readings for the winter months (when outdoor use is at its lowest) as the basis for the volume charge on the sewer bills for the remainder of the year.

3. If wastewater service is billed from the water meter readings, won't wastewater utility revenues fluctuate from one month to the next depending on the weather, and be mismatched with wastewater system costs, which are much more consistent between months?

Not really—Most California wastewater utilities will find it advantageous to base the volumetric charge on the level of use recorded by the water meter during the winter months. Billing throughout the year will be quite stable because the residential bills can be re-set once a year and need not fluctuate month-to-month.



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4. If a wastewater agency serves a customer that has no water meter, either because the house has a private well or because the water supplier has not yet installed a water meter, would a separate wastewater meter be installed?

No—in cases where a residential customer receives sanitary sewer service but the home has no water meter, the wastewater utility cannot be expected to bill by volume. All public water suppliers are required by state law to install water meters at any remaining unmetered households by 2025.

5. Volumetric billing makes sense for water utilities, but does it work for sewer utilities? Aren't most wastewater system costs fixed costs?

Yes—but the portion of total costs that is fixed is similar for both water and sewer systems. As with water systems, in the short run, the majority of wastewater costs are fixed, although energy and other variable costs may be significant. But in the long run, also as with water systems, a wastewater system may be able to avoid additional fixed costs by reducing wastewater flows, so billing at least in part by volume makes sense.

6. Must a customer's entire sewer bill be based entirely on metered water use?

No—most utility bills are a combination of fixed charges unrelated to the amount of usage, and variable (or volumetric) charges based on the level of usage recorded by the water meter. Fixed charges can be 10 to 30 percent of an average customer's total bill.

7. How will wastewater agencies obtain the customer water consumption data that is to be used for billing sewer service?

Here's how—wastewater utilities will collect customer consumption data from water suppliers with whom they have common residential customers. Data-sharing is already in place between many water and wastewater utilities for the large commercial and industrial customers that they have in common. These arrangements would need to be expanded to cover the more numerous residential customers.

In some cases, the wastewater agency's service area is served by more than one water supplier, which complicates the process. However, with today's electronic databases and file transfer capabilities, meter data can readily be transferred between utilities.

8. With volumetric billing, would wastewater agencies have to let water suppliers issue their sewer bills and collect their revenue for them?

No—not unless they found it convenient or economical to do so. Wastewater agencies could continue to generate their own bills for their own customers if they so choose. Agencies that bill on the tax rolls can derive volumetric rates and continue to bill the charges on the tax rolls.

9. With volumetric billing, would wastewater agencies have to send out bills more frequently than they do now?

No—water utilities usually bill their residential customers on a monthly or bi-monthly basis, while many wastewater agencies bill annually or semi-annually. Customers may find it more convenient to be billed at the same frequency for both services, but changing billing frequency is not an essential part of the conversion to volumetric billing for wastewater service.

10. Won't volumetric billing have an effect on the amounts customers pay for wastewater service?

Maybe—if a household is a large water user. Individual customers will see increases or decreases in their individual bills based on their relative indoor (wintertime) water consumption compared to the average customer in the community. However, with the typical distribution of bills above and below the average, the expectation is that slightly more customers will experience bill reductions rather than increases. And as customers learn they can lower their sewer bills by conserving water, more customers' bills will decrease over time. The total amount that wastewater utilities collect from their residential customers should remain virtually the same.

11. Are any sanitary sewer systems being supported by volumetric billing today?

Yes—this is the prevailing form of revenue supporting sanitary sewer systems around the country (for example, in Boston, New York, Philadelphia, Atlanta, Houston, and Seattle). In California, cities large and small support their sewer service with volumetric rates billed from the water meter (for example, Los Angeles, San Diego, San Francisco, Long Beach, Pasadena, and San Luis Obispo). Furthermore, non-residential sewer customers have commonly been billed with volumetric rates for decades. Often, however, sewer service that is provided by a separate local agency, such as a sanitation district rather than a municipality, is billed with flat rates.

Because over 75 percent of residential sewer accounts in California are billed flat rates, the state is missing a huge opportunity for water conservation. However, momentum is gaining to convert residential sewer customers from flat to volumetric rates. In California, two factors are contributing to this accelerating conversion. First, the California Urban Water Conservation Council's best management practices require utilities that provide both water and wastewater service to bill with volumetric sewer rates. Second, the soaring cost of providing wastewater service has encouraged consumers to ask for volumetric rates, which are more equitable and affordable for conserving customers.

12. Won't this conversion take a lot of time to implement?

Not necessarily—in contrast with physical construction projects, a new rate structure may be undertaken and completed in a relatively short period of time. Some time will be required, however, to make arrangements for the regular transfer of meter data from water suppliers to the wastewater agencies with which they share customers. Just as importantly, time has to be allowed for customer education and outreach, to ensure that the community is fully informed of the conversion and how it will affect the basis for their sewer bills in the future. After the initial implementation, subsequent ongoing administration is comparatively routine.

13. How much money will this conversion take to implement?

It varies—the cost per account will vary depending on the size of the system and the method of billing. For agencies that already bill for both metered water service and non-volumetric sewer service, the cost should be minimal for one-time programming changes. For wastewater agencies that do not have direct access to meter data and that bill annually on the tax rolls, the initial implementation cost can range from \$2.00 to \$5.00 per account, depending on the size of the agency and the amount of effort required to align meter accounts from the water supplier with assessor parcel numbers from the county; ongoing administration may be \$1.50 per account per year in addition to the existing charges by the county, which is typically \$2.00 per account, per year. These costs do not include the incremental additional cost of staff time. Most water suppliers provide their meter data at no cost.

14. How much water can volumetric wastewater pricing save across the state of California?

A recent study by A&N Technical Services (http://docs.nrdc.org/water/files/wat_11121301a.pdf) commissioned by NRDC quantifies the effect of shifting residential sewer service billing in California, from collections based on flat charges to a billing system based on the volume of water consumption. Table 1 below shows that conversion can save California approximately 141,000 acre-feet per year (AFY) in the short term (a one to four year period), and over 283,000 AFY in the long term (over a 10 to 20 year period). Table 2 below shows the savings expressed as gallons per capita per day (GPCD). For California as a whole, conversion could save four GPCD in the short run, and seven GPCD in the long run.

Table 1: Estimate of the Statewide Volume of Price-Induced Water Conservation from Volumetric Sewer Pricing by Hydrologic Region, Expressed in Acre-Feet per Year

Hydrologic Region	Total Estimated Residential Use (AFY)	Short Run Water Savings (AFY)	Long Run Water Savings (AFY)
North Coast	22,335	715	1,429
San Francisco Bay	782,250	25,025	50,051
Central Coast	123,283	3,944	7,888
South Coast	2,173,581	69,536	139,073
Sacramento River	588,625	18,831	37,662
San Joaquin River	180,141	5,763	11,526
Tulare Lake	516,986	16,539	33,078
North Lahontan	1,770	57	113
South Lahontan	9,753	312	624
Colorado River	29,331	938	1,877
California (Total)	4,428,055	~141,700	~283,400

~ =approximately

Table 2: Estimate of Price-Induced Water Conservation after Adoption of Volumetric Sewer Pricing by Hydrologic Region, Expressed in Gallons per Capita per Day

Hydrologic Region	Baseline GPCD (1995-2005)	GPCD-After, Short Run	GPCD-After, Long Run	2015 Target	2020 Target
North Coast	165	164	163	151	137
San Francisco Bay	157	153	150	144	131
Central Coast	154	152	149	139	123
South Coast	180	177	173	165	149
Sacramento River	253	247	240	215	176
San Joaquin River	248	245	242	211	174
Tulare Lake	285	277	269	237	188
North Lahontan	243	242	242	208	173
South Lahontan	237	237	236	204	170
Colorado River	346	345	343	278	211
California	192	188	185	173	154

GPCD=Gallons per capita per day