



Water & Wastewater Rates

Public Works Commission Meeting

August 31, 2022



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

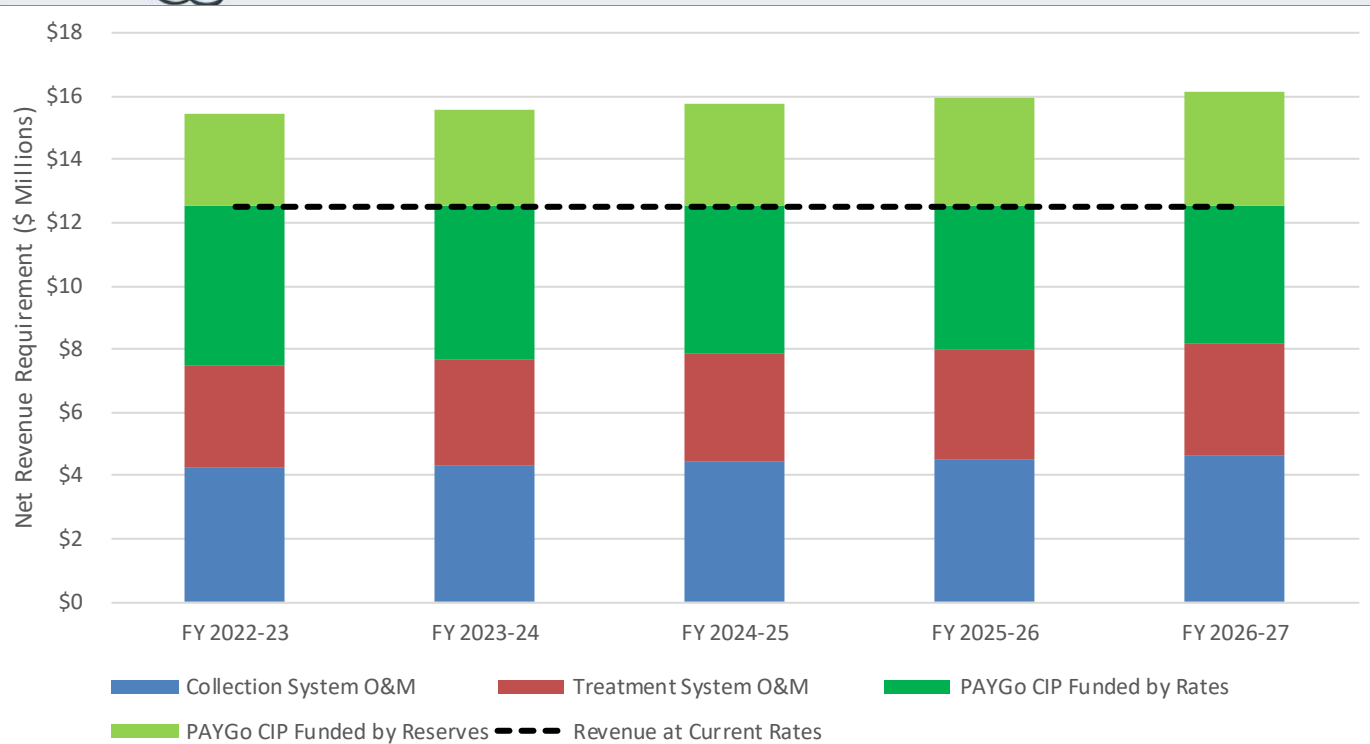
- Water Enterprise
 - Five-year financial projections
 - Confirm key policies
 - Capital spending alternatives
 - Balance of revenue from fixed and quantity charges
 - Outside City rate differential
 - Pass-through adjustments
 - Water reliability charge
 - Water shortage revenue stabilization factors



WASTEWATER RATE STUDY



Wastewater Revenue Requirements

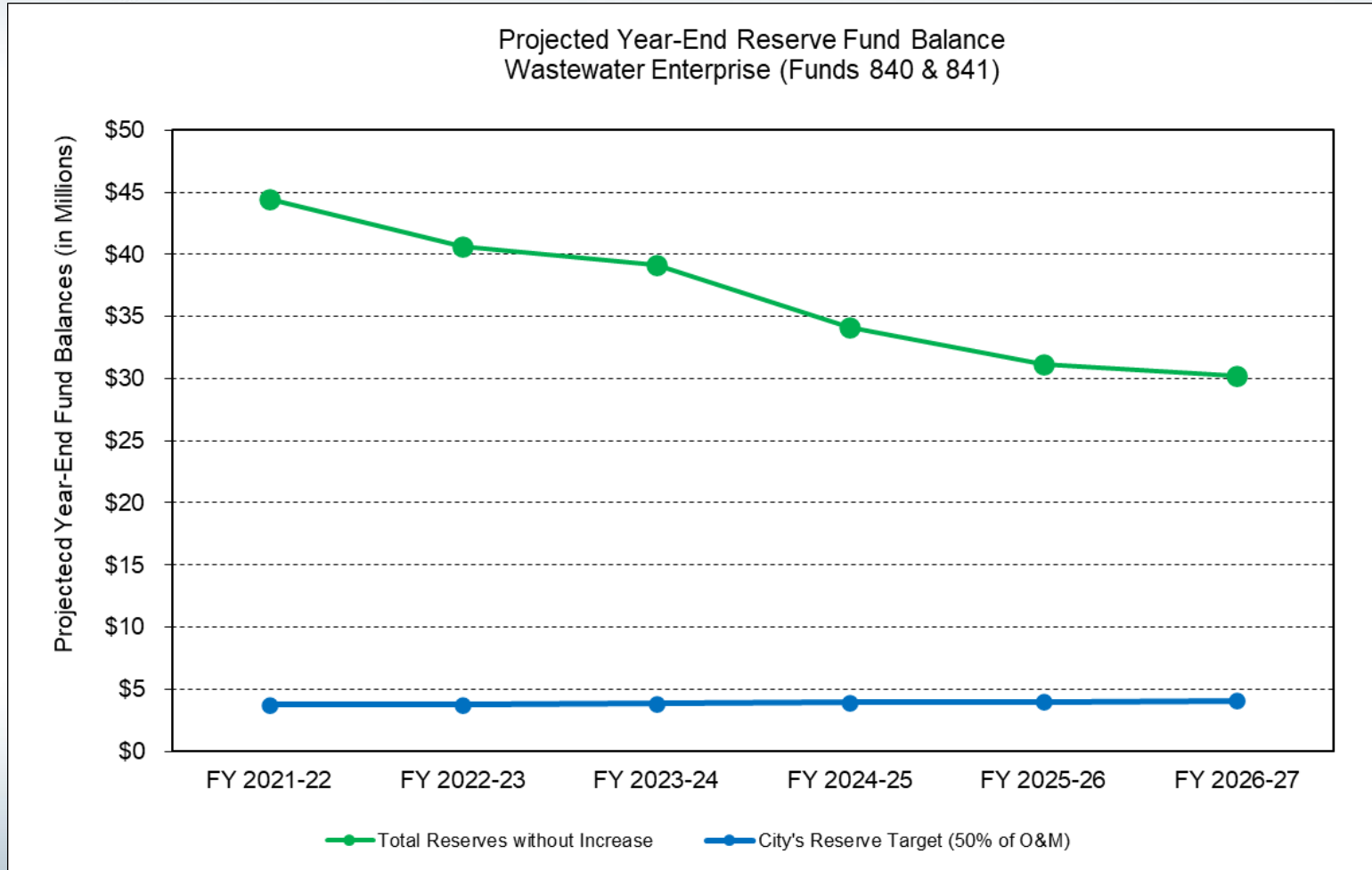


Reserves will be drawn down to meet needs without the need for revenue increases

	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
Single Family Residential	\$3,187,622	\$6,246,176	\$3,058,553
Multi Family Residential	\$5,304,141	\$3,248,480	(\$2,055,661)
Commercial Domestic Strength	\$2,758,277	\$1,953,578	(\$804,698)
Commercial Excess Strength	\$1,277,538	\$1,079,343	(\$198,194)
Total	\$12,527,578	\$12,527,578	\$0

- **Costs shift toward Single Family class**
 - Single Family flow per dwelling unit is higher than Multi Family flow
 - Commercial share of costs has declined relative to the increase in Single Family



Derivation of Return to Sewer Factors

Beverly Hills
(Proposed)

	<u>Annual Flow [1]</u>	<u>Sewered Flow [2]</u>	<u>Return to Sewer</u>	<u>Accounts</u>	<u>Avg Flow per Unit</u>
	hcf	hcf		Units	hcf per year
<u>Customer Class</u>	a	b	c = b/a	d	e = b/d
Single Family Residences	2,017,021	1,339,931	66.4%	6,080	220
Multiple Family Residences	572,457	551,726	96.4%	10,117	55
Commercial/Industrial	734,172	694,018	94.5%	795	873
Municipal	43,051	28,471	66.1%	57	499

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

Other
Jurisdictions

Single Family	Multi Family
Beverly Hills - 66% of water use	Beverly Hills - 96% of water use
Los Angeles - 76% of water use	Los Angeles - 93% of water use
Santa Monica - 85% of lowest 4 consecutive months	Santa Monica - 85% of lowest 4 consecutive months
Ventura - unadjusted water use with 12 hcf monthly cap	Ventura - unadjusted water use with 10 hcf monthly cap
San Diego - 95% of water use with 20 hcf monthly cap	San Diego - 95% of water use with 20 hcf monthly cap
Glendale - 3 month winter average	Glendale - 3 month winter average



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 BOD/TSS)*
 - Hotels with dining, mixed use commercial
 - High strength (over 600 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	Proposed (COS)
Single Family		
Service Charge per dwelling unit	\$87.38	\$60.36
Quantity Charge	n/a	\$3.02
Multi Family		
Service Charge per dwelling unit	\$87.38	\$26.08
Quantity Charge	n/a	\$3.02
Commercial/Municipal		
Service Charge per account	\$34.20	\$60.36
Quantity Charges (option 1 - existing classes)		
Domestic Strength	\$4.74	\$3.02
Excess Strength	\$7.08	\$5.87
Quantity Charges (option 2 - proposed classes)		
Low Strength	n/a	\$3.02
Med Strength	n/a	\$4.42
High Strength	n/a	\$5.87

- Single Family 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



Accounts and EDUs

Customer Class	Accounts/ Dwelling Units	Sewered Flow (hcf per year)	EDU Ratio [1]	EDUs
a	b	c	d	e = b * d
Single Family Residences	6,080	1,339,931	1.00	6,080
Multiple Family Residences	10,117	551,726	0.25	2,503
Domestic Strength Commercial/Industrial	852	545,031	1.00	852
Excess Strength Commercial/Industrial	103	177,458	1.00	103
Subtotal	17,152	2,614,145		9,538

1. Multi Family ratio based on its flow per dwelling compared to Single Family flow per dwelling unit

- EDUs (equivalent dwelling units) are the basis for the service charges, which represent the minimum charge per account regardless of flow.
- The EDU ratio for Single Family and Commercial/Industrial accounts is equal because each account represents one EDU (i.e., each of these accounts has a single lateral connecting to the collection system).
- The EDU ratio for Multi Family is factored down to 0.25 based on the average flow per Multi Family DU compared to a Single Family DU. This accounts for the fact that a single Multi Family account has multiple DUs connecting to the collection system through a single lateral.



Derivation of Unit Costs

Functional Costs	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	(\$353,120)	(\$603,961)	(\$1,198,622)	(\$373,307)	(\$373,307)	(\$2,902,316)
	\$1,524,210	\$2,606,940	\$5,173,739	\$1,611,344	\$1,611,344	\$12,527,578
	÷	÷	÷	÷	÷	
Units of Service	17,152	9,538	2,614,145	4,378,146	3,782,924	
	accts/DUs	EDUs	hcf	lbs	lbs	
Unit Costs	\$88.86	\$273.31	\$1.98	\$0.37	\$0.43	
	\$/acct or DU	\$/EDU	\$/hcf	\$/lb	\$/lb	
Bi-Monthly Unit Costs	\$14.81	\$45.55				
	\$/acct or DU	\$/EDU				
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



Derivation of Service Charges

Derivation of Bi-Monthly Service Charge					
Customer Class	EDU Ratio	per EDU	per Unit	per Acct	Total
a	b	c	d = b*c	e	f = d + e
Single Family Residences	1.00	\$45.55	\$45.55	\$14.81	\$60.36
Multiple Family Residences	0.25	\$45.55	\$11.27	\$14.81	\$26.08
Domestic Strength Commercial/Industrial	1.00	\$45.55	\$45.55	\$14.81	\$60.36
Excess Strength Commercial/Industrial	1.00	\$45.55	\$45.55	\$14.81	\$60.36

- Single Family and Commercial/Industrial accounts pay the same \$45.55 per EDU. Differences in wastewater flows and strength concentrations are recovered through their respective quantity charges.
- Multi Family DUs pay a lower (\$11.27) charge, which are aggregated for each Multi Family account based on the total DUs. Multi Family accounts pay the same quantity charge as Single Family accounts.

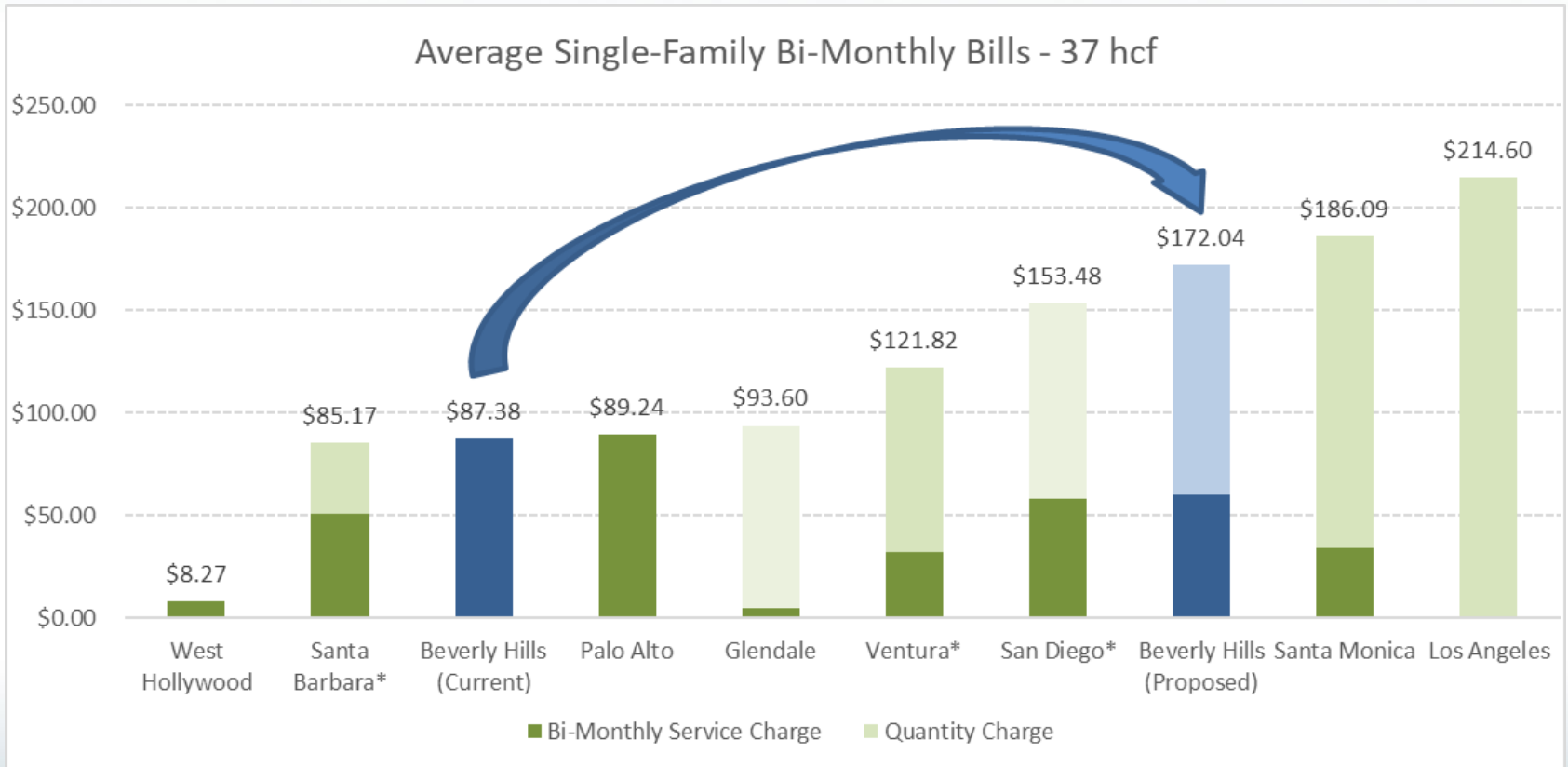


Average Bi-Monthly Bill Comparison

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			113.2	303.6
Rate per hcf			\$4.74	\$7.08
Total Quantity Charge	n/a	n/a	\$536.52	\$2,149.52
Current Bi-Monthly Bill	\$87.38	\$87.38	\$570.72	\$2,183.72
Sample Bills at Proposed Rates				
Bi-Monthly Service Charge	\$60.36	\$26.08	\$60.36	\$60.36
Quantity Charge per hcf				
Metered water use	55.7	9.3	113.2	303.6
Return to sewer factor	66.4%	96.4%	94.5%	94.5%
Sewered flow	37.0	9.0	107.0	287.0
Rate per hcf	\$3.02	\$3.02	\$3.02	\$5.87
Total Quantity Charge	\$111.67	\$27.16	\$322.95	\$1,685.27
Proposed Bi-Monthly Bill	\$172.04	\$53.25	\$383.31	\$1,745.64
Difference				
Dollar Difference	\$84.66	(\$34.13)	(\$187.42)	(\$438.09)



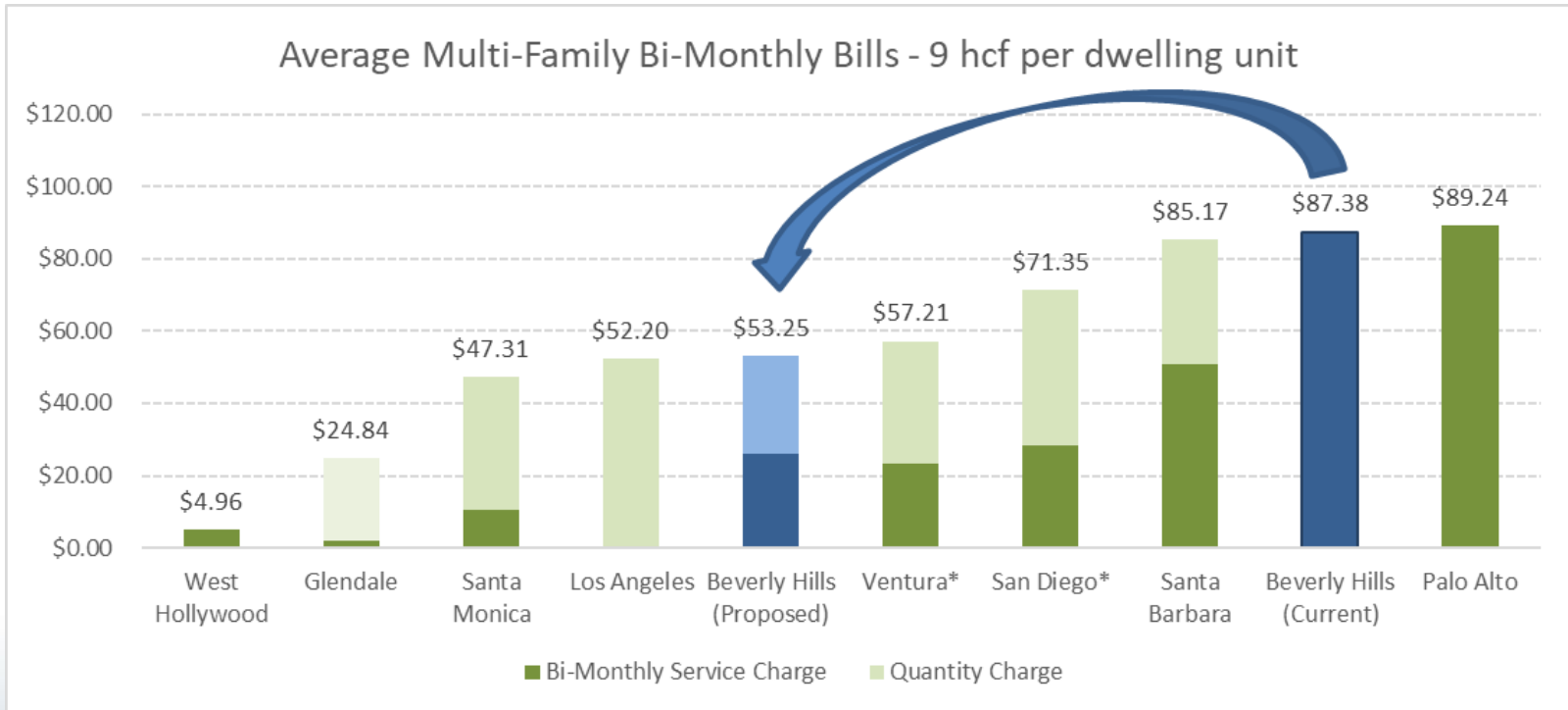
Comparison With Other Agencies – Single Family



*Caps water consumption for wastewater billing purposes



Comparison With Other Agencies – Multi Family



*Caps water consumption for wastewater billing purposes



Option: Phase In Single Family Rates

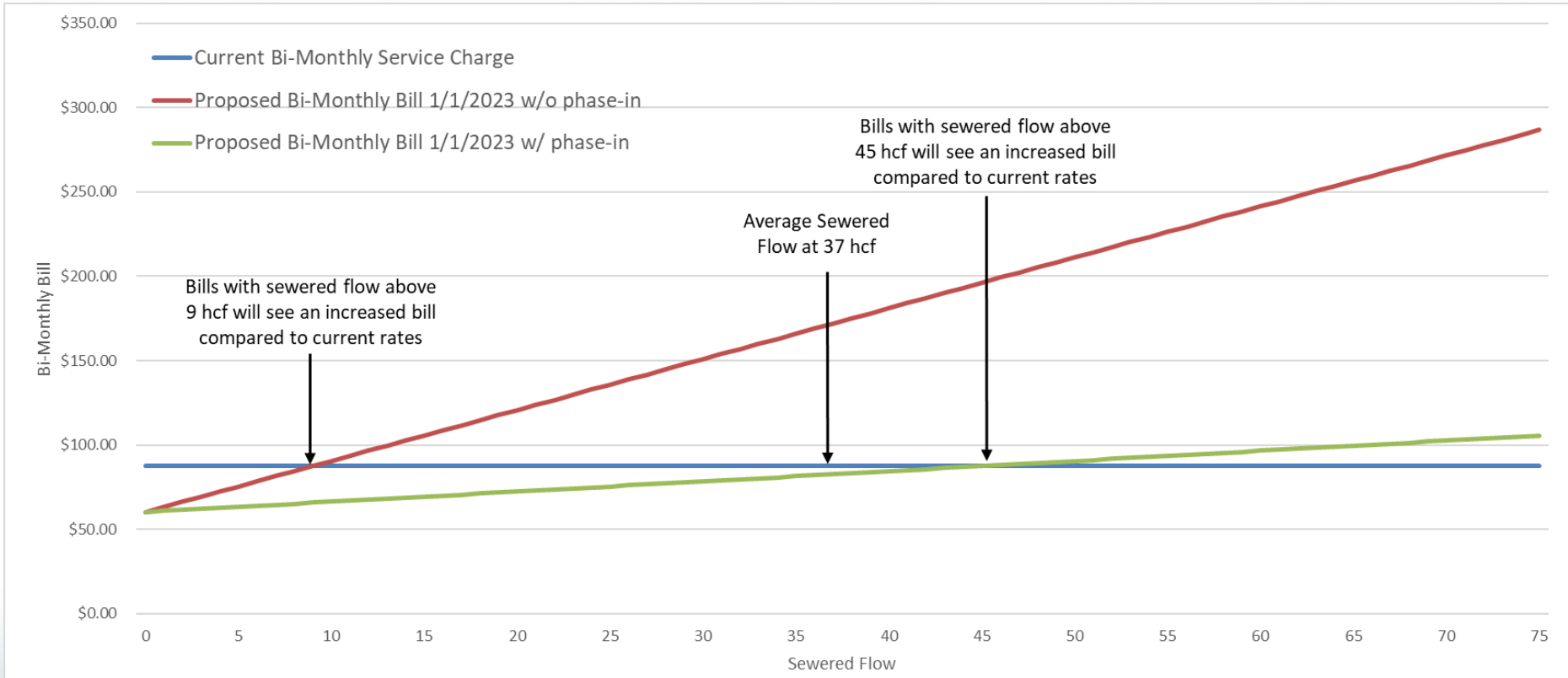
- Phase in Single Family quantity charge over five years
 - Quantity charge increases by 20% of proposed \$3.02 every year over five years

	1/1/2023	1/1/2024	1/1/2025	1/1/2026	1/1/2027
Proposed Rate per hcf	\$3.02	\$3.02	\$3.02	\$3.02	\$3.02
Phase-in Increase	20%	40%	60%	80%	100%
Phased-in Rate per hcf	\$0.60	\$1.21	\$1.81	\$2.41	\$3.02
Bi-monthly water use	55	55	55	55	55
Sewer return factor	66.4%	66.4%	66.4%	66.4%	66.4%
Sewered flow (rounded)	37	37	37	37	37
Quantity charge	\$22.33	\$44.67	\$67.00	\$89.34	\$111.67
Service charge	\$60.36	\$60.36	\$60.36	\$60.36	\$60.36
Proposed bill	\$82.70	\$105.03	\$127.37	\$149.70	\$172.04
Bill under current rates	\$87.38	\$87.38	\$87.38	\$87.38	\$87.38
Difference	(\$4.68)	\$17.65	\$39.99	\$62.32	\$84.66

- Requires use of Wastewater Enterprise reserves of \$8.1 million over five years
- Phase in unnecessary for other classes



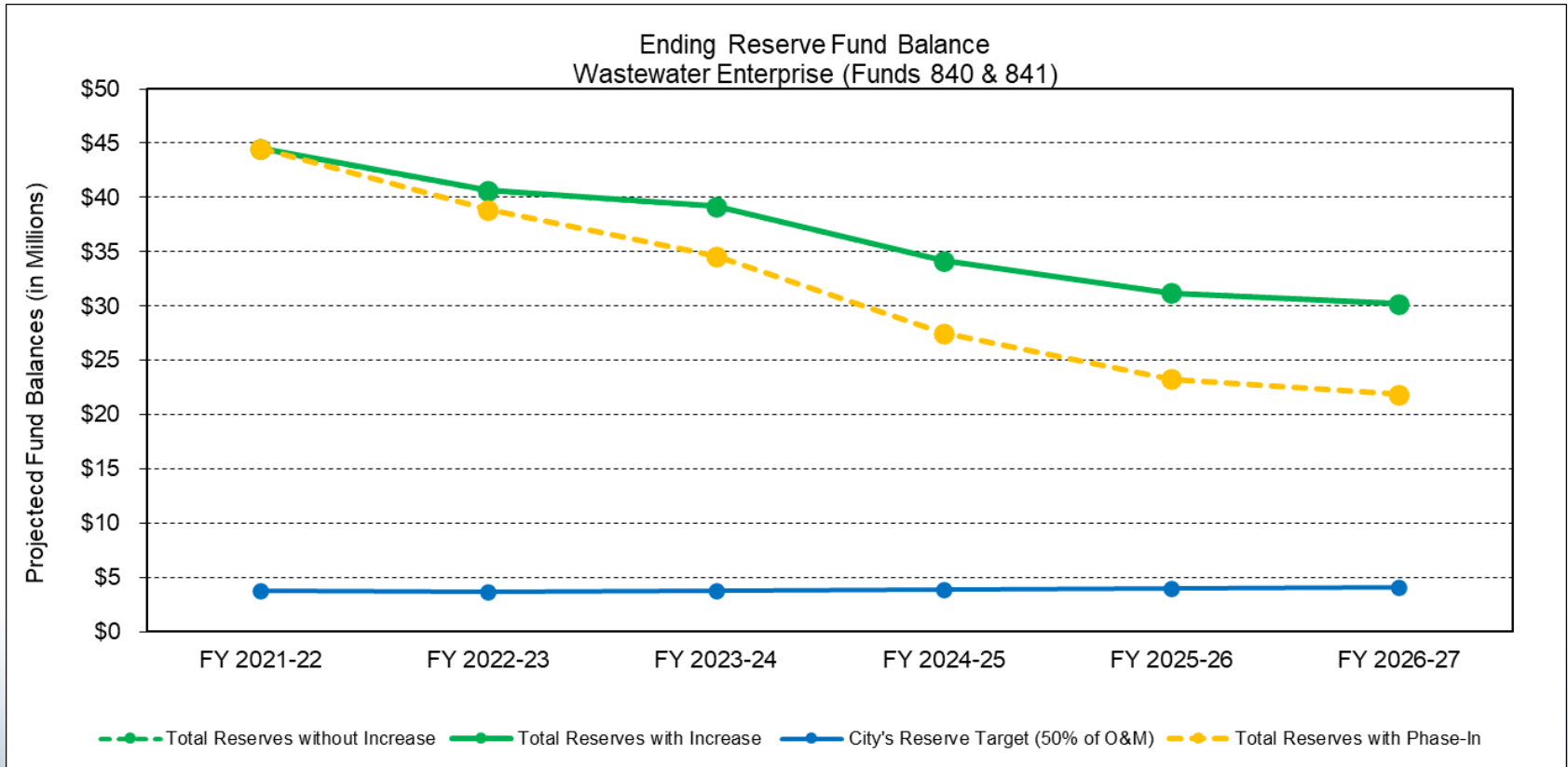
Proposed Bills by Consumption: SFR



Proposed rates as of January 1, 2023



Phase-In Rates

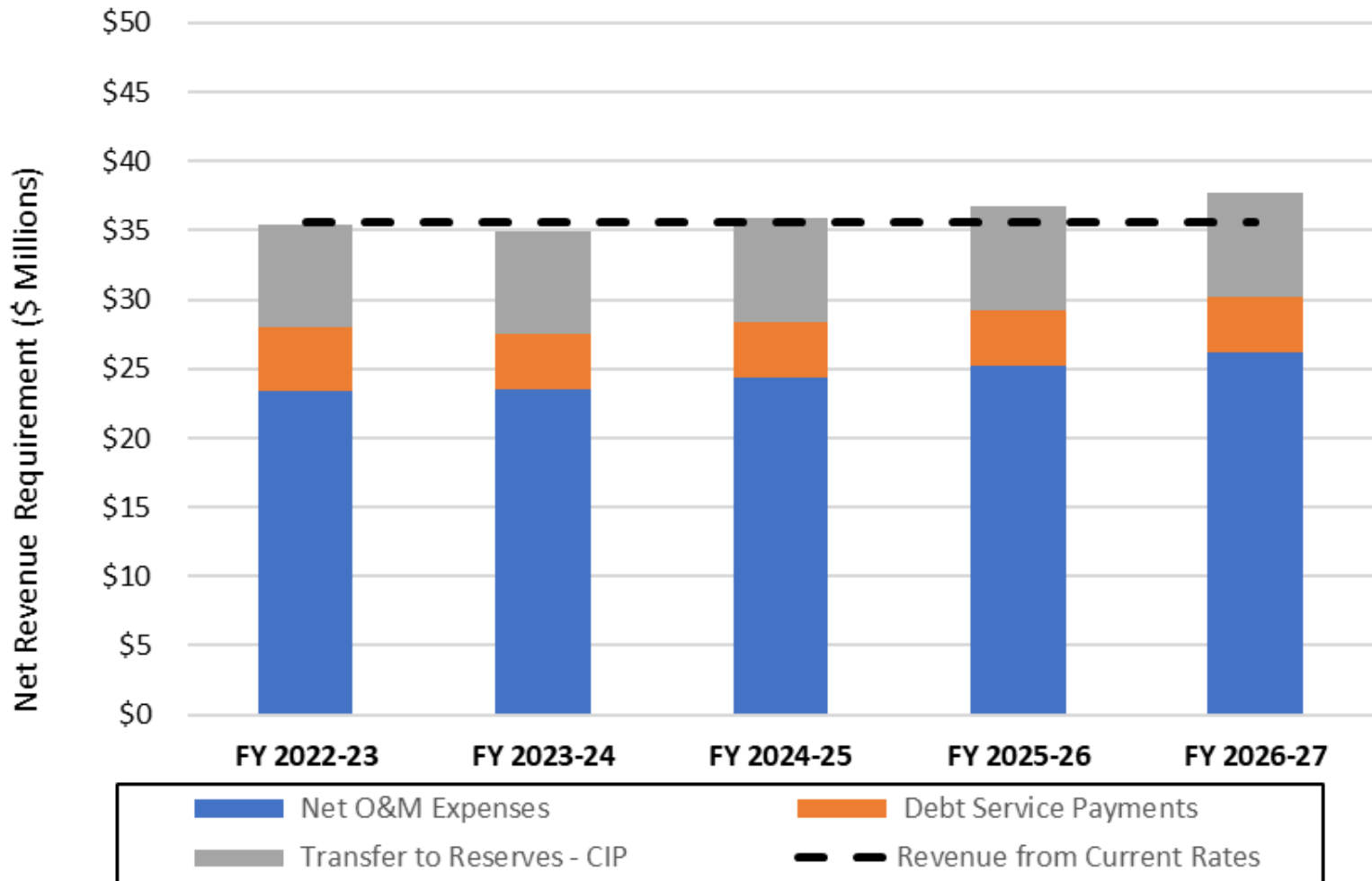




WATER RATE STUDY

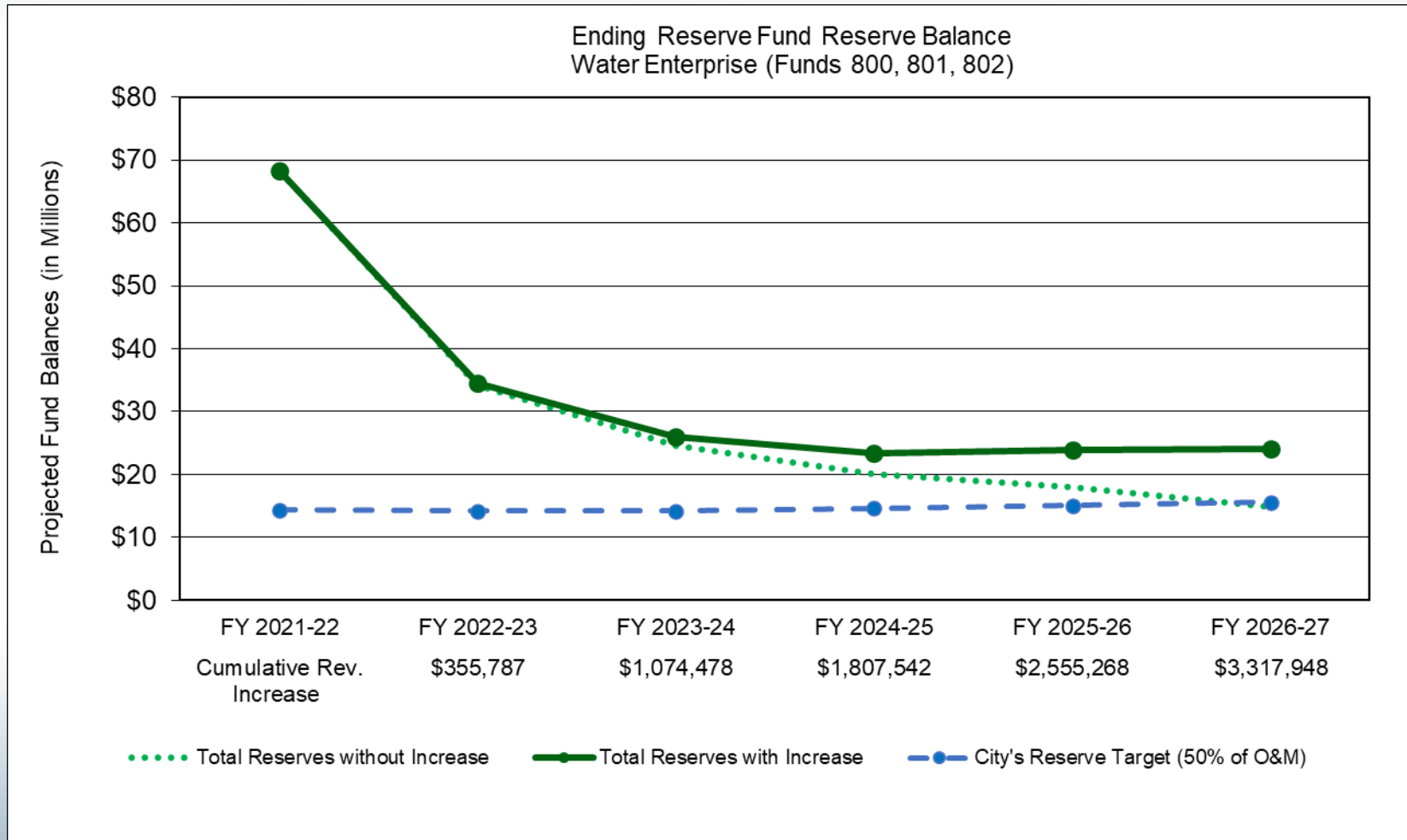


Water Revenue Requirement – CIP Option 1





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



Cabrillo CIP Options

Other Projects	Preliminary Cost Estimate	Increase in Emergency Storage
RMS	\$3M	8.5MG
Treatment Plant Production	N/A	2.3MG

With the addition of the new Reservoir Management Systems (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 emergency storage by 25% (8.5MG).



Water CIP – Option 1

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 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 to Bi-Monthly Bill (2022-2027)			
7	Single-Family/Duplex	\$5.92	\$24.70	\$17.53
8	Multi-Family ²	\$26.60	\$56.22	\$44.91
9	Commercial/Municipal	\$33.92	\$93.09	\$70.50

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.



Water Cost of Service Allocations

	Current		
	Revenue	Cost-of-Service ¹	Difference
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 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	



Proposed Water COS Rates – CIP Option 2

Service Size	Current Charge	COS Charges
Fixed Service Charges		
1"	\$53.51	\$58.05
1-1/2"	\$93.84	\$100.46
2"	\$142.24	\$151.35
3"	\$271.30	\$287.06
4"	\$416.50	\$439.74
6"	\$819.82	\$863.84
8"	\$1,311.71	\$1,372.76
10"	\$1,967.57	\$3,578.07
Fire Service Charges		
<= 2"	\$29.73	\$31.23
2 1/2"	\$44.32	\$46.55
3"	\$64.56	\$67.81
4"	\$124.69	\$130.96
6"	\$340.52	\$357.65
8"	\$712.74	\$748.59
10"	\$1,272.63	\$1,336.64
12"	\$1,654.42	\$1,737.63

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	\$4.30
Tier 2	27-48 HCF	\$6.91	33-48 HCF	\$7.19
Tier 3	49-86 HCF	\$10.17	49-83 HCF	\$10.01
Tier 4	86+ HCF	\$14.44	84+ HCF	\$12.51
Multi-Family				
Tier 1	0-8 HCF	\$4.52	0-8 HCF	\$5.79
Tier 2	9+ HCF	\$12.92	9+ HCF	\$14.98
Commercial		\$7.03	\$7.93	
Water Reliability (all customers)		\$0.26	\$0.27	
Outside City				
Single-Family/Duplex				
Tier 1	0-26 HCF	\$4.41	0-32 HCF	\$4.96
Tier 2	27-48 HCF	\$7.78	33-48 HCF	\$7.85
Tier 3	49-86 HCF	\$11.03	49-83 HCF	\$10.67
Tier 4	86+ HCF	\$15.31	84+ HCF	\$13.17
Multi-Family				
Tier 1	0-8 HCF	\$5.39	0-8 HCF	\$6.45
Tier 2	9+ HCF	\$13.78	9+ HCF	\$15.64
Commercial		\$7.90	\$8.59	
Water Reliability (all customers)		\$0.41	\$0.42	



Proposed Water COS Rates – CIP Option 3

Service Size	Current Charge	COS Charges
Fixed Service Charges		
1"	\$53.51	\$57.49
1-1/2"	\$93.84	\$99.49
2"	\$142.24	\$149.90
3"	\$271.30	\$284.30
4"	\$416.50	\$435.51
6"	\$819.82	\$855.53
8"	\$1,311.71	\$1,359.56
10"	\$1,967.57	\$3,543.67
Fire Service Charges		
<= 2"	\$29.73	\$30.93
2 1/2"	\$44.32	\$46.10
3"	\$64.56	\$67.16
4"	\$124.69	\$129.70
6"	\$340.52	\$354.21
8"	\$712.74	\$741.39
10"	\$1,272.63	\$1,323.79
12"	\$1,654.42	\$1,720.92

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	\$4.25
Tier 2	27-48 HCF	\$6.91	33-48 HCF	\$7.12
Tier 3	49-86 HCF	\$10.17	49-83 HCF	\$9.92
Tier 4	86+ HCF	\$14.44	84+ HCF	\$12.39
Multi-Family				
Tier 1	0-8 HCF	\$4.52	0-8 HCF	\$5.74
Tier 2	9+ HCF	\$12.92	9+ HCF	\$14.84
Commercial		\$7.03	\$7.85	
Water Reliability (all customers)		\$0.26	\$0.27	
Outside City				
Single-Family/Duplex				
Tier 1	0-26 HCF	\$4.41	0-32 HCF	\$4.91
Tier 2	27-48 HCF	\$7.78	33-48 HCF	\$7.78
Tier 3	49-86 HCF	\$11.03	49-83 HCF	\$10.58
Tier 4	86+ HCF	\$15.31	84+ HCF	\$13.05
Multi-Family				
Tier 1	0-8 HCF	\$5.39	0-8 HCF	\$6.40
Tier 2	9+ HCF	\$13.78	9+ HCF	\$15.50
Commercial		\$7.90	\$8.51	
Water Reliability (all customers)		\$0.41	\$0.42	



Bill Comparison – Inside City

Beverly Hills - 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	\$58.05	\$57.49	\$61.02	\$77.51	\$71.22
10	\$88.91	\$100.80	\$103.71	\$102.74	\$109.28	\$137.98	\$127.02
20	\$124.31	\$145.22	\$149.37	\$147.98	\$157.54	\$198.44	\$182.83
30	\$173.19	\$189.64	\$195.03	\$193.23	\$205.80	\$258.90	\$238.63
40	\$242.29	\$256.54	\$263.84	\$261.40	\$278.39	\$350.28	\$322.84
50	\$317.91	\$334.54	\$344.08	\$340.90	\$363.01	\$456.92	\$421.07
60	\$419.61	\$434.47	\$446.90	\$442.76	\$471.35	\$593.71	\$547.00
70	\$521.31	\$534.40	\$549.72	\$544.61	\$579.70	\$730.50	\$672.94
80	\$623.01	\$634.33	\$652.53	\$646.47	\$688.04	\$867.28	\$798.87
90	\$741.79	\$751.26	\$772.86	\$765.66	\$814.79	\$1,027.44	\$946.27
100	\$886.19	\$875.47	\$900.68	\$892.28	\$949.42	\$1,197.62	\$1,102.88

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	\$58.05	\$57.49	\$61.02	\$77.51	\$71.22
10	\$101.71	\$108.92	\$111.81	\$110.84	\$117.95	\$148.29	\$136.70
20	\$149.91	\$161.46	\$165.57	\$164.18	\$174.88	\$219.07	\$202.18
30	\$211.59	\$214.00	\$219.33	\$217.53	\$231.81	\$289.84	\$267.66
40	\$293.49	\$289.03	\$296.24	\$293.80	\$313.07	\$391.53	\$361.54
50	\$381.89	\$380.64	\$390.22	\$386.99	\$412.28	\$516.02	\$476.38
60	\$496.29	\$488.69	\$501.14	\$496.95	\$529.30	\$663.12	\$611.98
70	\$610.69	\$596.74	\$612.06	\$606.90	\$646.31	\$810.22	\$747.59
80	\$725.09	\$704.80	\$722.98	\$716.86	\$763.33	\$957.32	\$883.20
90	\$856.61	\$829.85	\$851.40	\$844.15	\$898.74	\$1,127.80	\$1,040.28
100	\$1,013.81	\$962.18	\$987.32	\$978.87	\$1,042.04	\$1,308.28	\$1,206.56

Average bill is 48 HCF.



2023 Combined Bill Impact – Single Family

	Current	Proposed	Difference
Assumptions			
Meter Size	1" meter	1" meter	
Water Consumption	55.7	55.7	
Return to Sewer Factor	n/a	66.4%	
Sewered Flow	n/a	37.0	
Water			
Fixed Service Charge	\$53.51	\$56.38	\$2.87
Quantity Charge	\$315.25	\$313.28	(\$1.97)
Water Reliability Charge	\$14.48	\$15.04	\$0.56
Total	\$383.24	\$384.70	\$1.45
Wastewater			
Service Charge	\$87.38	\$60.36	(\$27.02)
Quantity Charge	\$0.00	\$111.67	\$111.67
Total	\$87.38	\$172.04	\$84.66
Total Bi-monthly Bill	\$470.62	\$556.73	\$86.11



2023 Combined Bill Impact – Single Family

Wastewater Phase-In Option			
	Current	Proposed	Difference
Assumptions			
Meter Size	1" meter	1" meter	
Water Consumption	55.7	55.7	
Return to Sewer Factor	n/a	66.4%	
Sewered Flow	n/a	37	
Water			
Fixed Service Charge	\$53.51	\$56.38	\$2.87
Quantity Charge	\$315.25	\$313.28	(\$1.97)
Water Reliability Charge	\$14.48	\$15.04	\$0.56
Total	\$383.24	\$384.70	\$1.45
Wastewater			
Service Charge	\$87.38	\$60.36	(\$27.02)
Quantity Charge	\$0.00	\$22.33	\$22.33
Total	\$87.38	\$82.70	(\$4.68)
Total Bi-monthly Bill	\$470.62	\$467.39	(\$3.23)



2023 Combined Bill Impact – Multi Family

	Current	Proposed	Difference
Assumptions			
Meter Size	1.5" meter	1.5" meter	
Water Consumption per unit	9.3	9.3	
Return to Sewer Factor	n/a	96.4%	
Sewered Flow	n/a	9.0	
Dwelling Units	10	10	
Water			
Fixed Service Charge	\$93.84	\$97.56	\$3.72
Quantity Charge	\$490.80	\$595.10	\$104.30
Water Reliability Charge	\$24.18	\$25.11	\$0.93
Total	\$608.82	\$717.77	\$108.95
Wastewater			
Service Charge	\$873.80	\$260.83	(\$612.97)
Quantity Charge	\$0.00	\$271.64	\$271.64
Total	\$873.80	\$532.46	(\$341.34)
Total Bi-monthly Bill	\$1,482.62	\$1,250.23	(\$232.39)



Combined Bill Impact – Commercial

	Current	Proposed	Difference
Assumptions			
Meter Size	1" meter	1" meter	
Water Consumption per unit	113.0	113.0	
Return to Sewer Factor	n/a	94.5%	
Sewered Flow	113.0	106.8	
Commercial Strength	Domestic	Low	
Water			
Fixed Service Charge	\$53.51	\$56.38	\$2.87
Quantity Charge	\$794.39	\$822.36	\$27.97
Water Reliability Charge	\$29.38	\$30.51	\$1.13
Total	\$877.28	\$909.25	\$31.97
Wastewater			
Service Charge	\$34.20	\$60.36	\$26.16
Quantity Charge	\$535.62	\$322.34	(\$213.28)
Total	\$569.82	\$382.70	(\$187.12)
Total Bi-monthly Bill	\$1,447.10	\$1,291.95	(\$155.15)



Balance of Fixed and Quantity Charge Revenue

- Current practice
 - Fixed charges for water and fire service revenue is 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



Accounts and EMUs

	Accounts	EMU Ratio	EMU
1"	7,051	1.00	7,051
1-1/2"	1,877	2.00	3,754
2"	1,140	3.20	3,648
3"	170	6.40	1,088
4"	92	10.00	920
6"	20	20.00	400
8"	0	32.00	0
10"	0	84.00	0
	<u>10,350</u>		<u>16,861</u>

EMU ratios are based on the capacities of each meter compared with the capacity of a 1" meter.



Fixed Charge Derivation

Function Costs	Service Charge Component		Quantity Charge Component	Total
	Accounts/ Dwellings	Capacity		
O&M Expenses	\$1,135,619	\$2,133,325	\$18,911,678	\$22,180,623
Capital Expenses	\$1,048,947	\$1,327,565	\$9,667,893	\$12,044,405
Administrative Overhead	\$383,783	\$608,007	\$5,020,839	\$6,012,629
Non-Operating Revenue	(\$598,579)	\$97,780	(\$3,446,547)	(\$3,947,347)
	\$1,969,770	\$4,166,677	\$30,153,863	\$36,290,310
Fire Service Revenue	(\$1,026,537)	-		(\$1,026,537)
	\$943,233	\$4,166,677	\$30,153,863	\$35,263,773
	÷	÷	÷	
Units of Service	10,350	16,861	3,999,875	
Bi Monthly Unit Costs	Accounts/DU \$15.19	EMUs \$41.19	HCF \$7.54	
	\$/Account or DU	\$/EMU	\$/HCF	
Portion of Rate Revenue	17%		83%	100%



Derivation of Service Charges

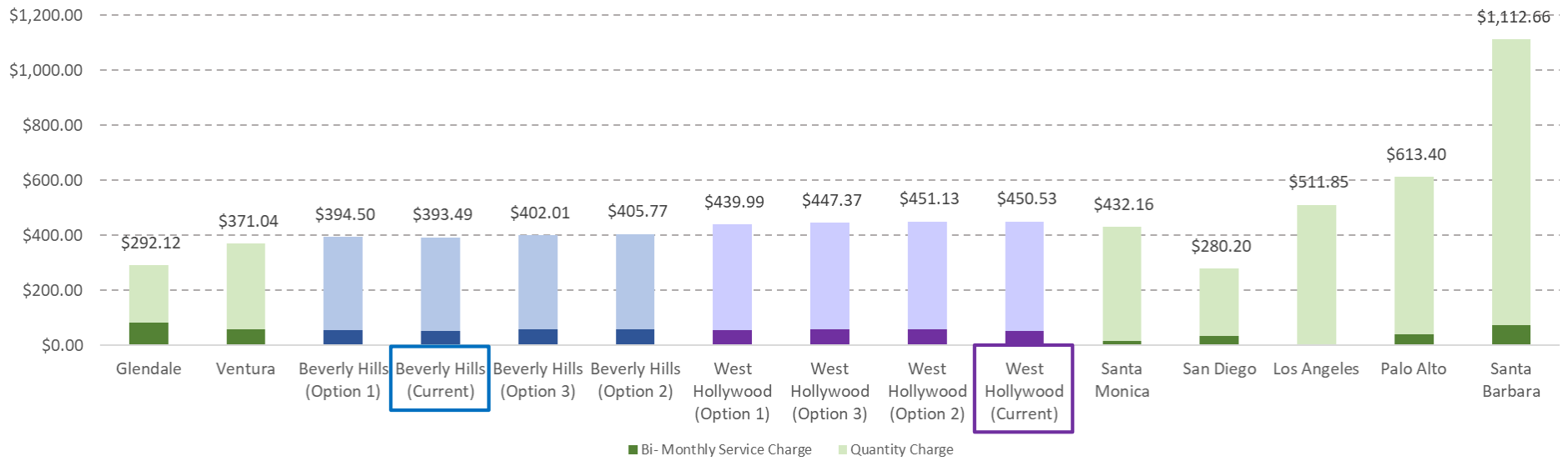
Meter Size	EMU Ratio	per EMU	per Unit	per Account	Total
a	b	c	d = b*c	e	f = d + e
1"	1.00	\$41.19	\$41.19	\$15.19	\$56.38
1-1/2"	2.00	\$41.19	\$82.37	\$15.19	\$97.56
2"	3.20	\$41.19	\$131.80	\$15.19	\$146.99
3"	6.40	\$41.19	\$263.59	\$15.19	\$278.78
4"	10.00	\$41.19	\$411.87	\$15.19	\$427.05
6"	20.00	\$41.19	\$823.73	\$15.19	\$838.92
8"	32.00	\$41.19	\$1,317.97	\$15.19	\$1,333.16
10"	84.00	\$41.19	\$3,459.67	\$15.19	\$3,474.86



Comparison With Other Agencies – Single Family

2023 Rates

Average Single-Family Bi-Monthly Bills - 56 hcf



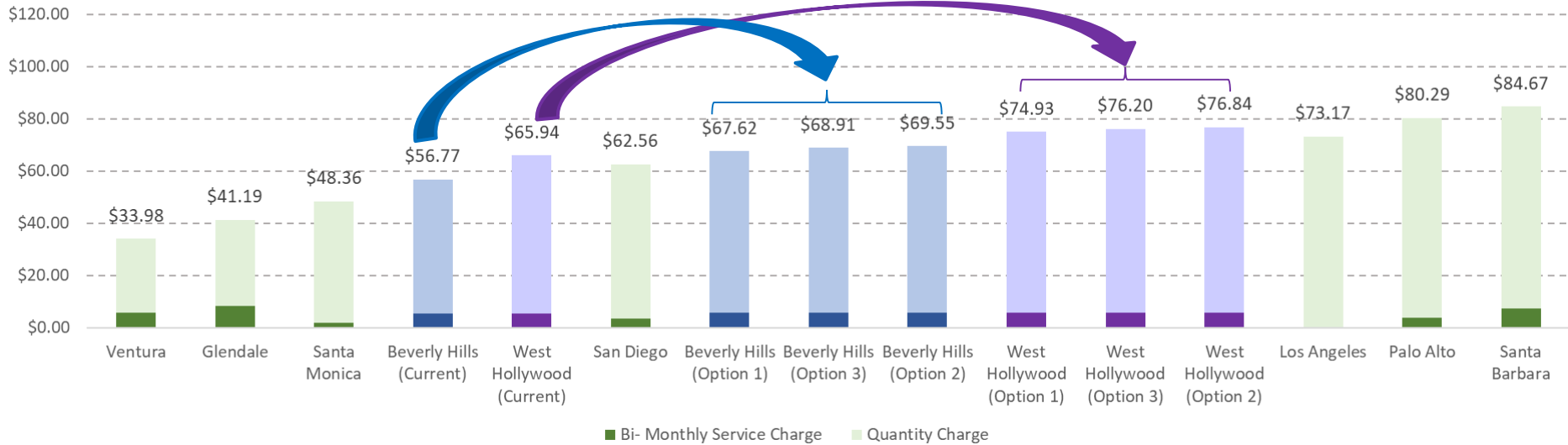
Beverly Hills and West Hollywood bills include Water Reliability Charge.



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.



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



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



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



END OF PRESENTATION

