Water & Wastewater Rates

Public Works Commission

August 11, 2022

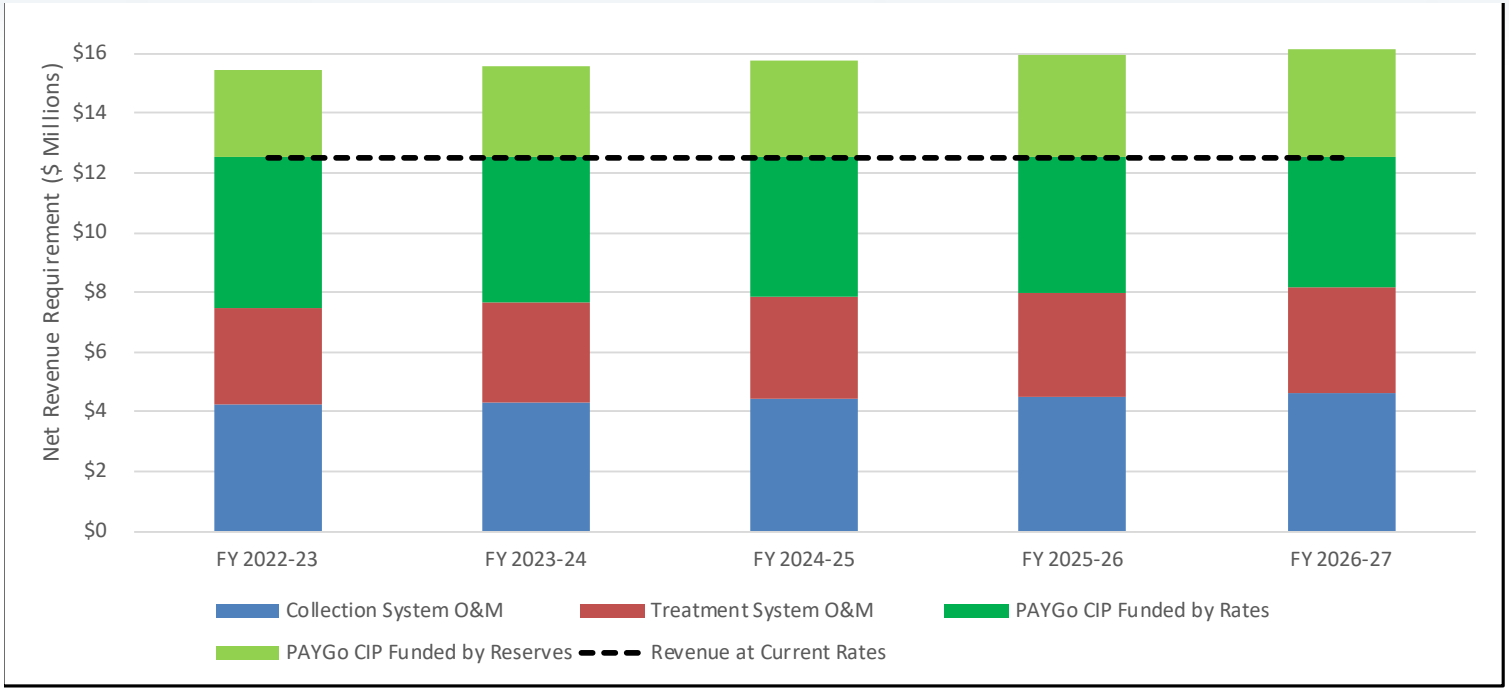
Slides prepared by HF&H Consultants

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

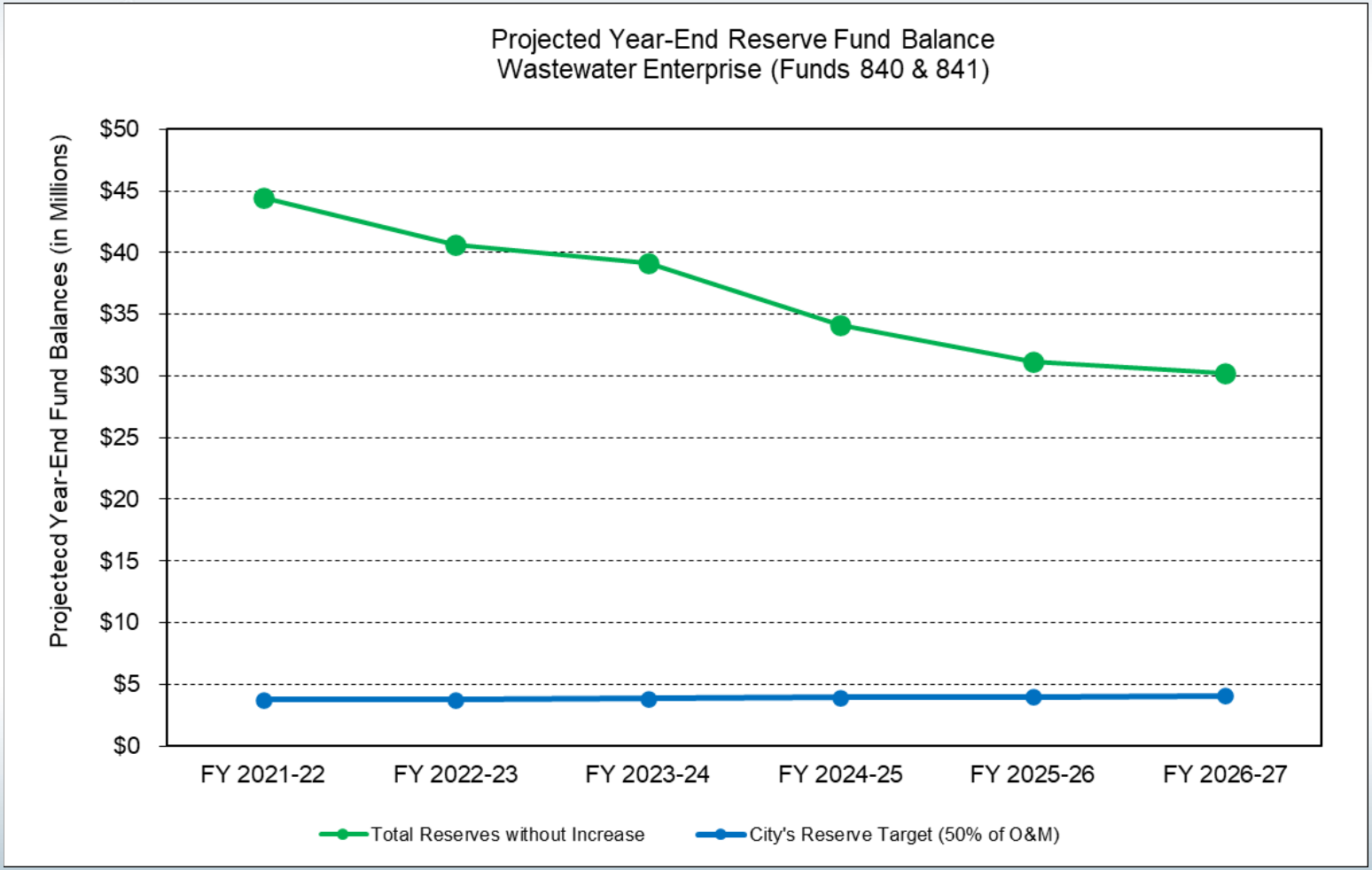
Wastewater Revenue Requirements



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

	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Collection System O&M	$4,201,149	$4,238,395	$4,315,594	$4,434,281	$4,527,779	$4,635,228
Treatment System O&M	$3,300,713	$3,234,500	$3,331,535	$3,398,166	$3,466,129	$3,535,452
PAYGo CIP Funded by Rates	$3,607,958	$5,054,682	$4,880,449	$4,695,131	$4,533,669	$4,356,898
PAYGo CIP Funded by Reserves	$4,404,552	$2,902,316	$3,076,550	$3,261,867	$3,423,329	$3,600,101
Total Revenue Requirement	$15,514,372	$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	$6,242,658	$3,055,035
Multi Family Residential	$5,304,141	$3,246,030	($2,058,111)
Commercial Domestic Strength	$2,739,728	$1,941,207	($798,522)
Commercial Excess Strength	$1,277,538	$1,079,135	($198,403)
Total	**$12,509,029**	**$12,509,029**	**$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

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 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	24,558	57.0%	57	431

1. Average of CY 2017 & 2018 annual metered flow
2. Average of lowest three winter months

Proposed Cost-of-Service Rates

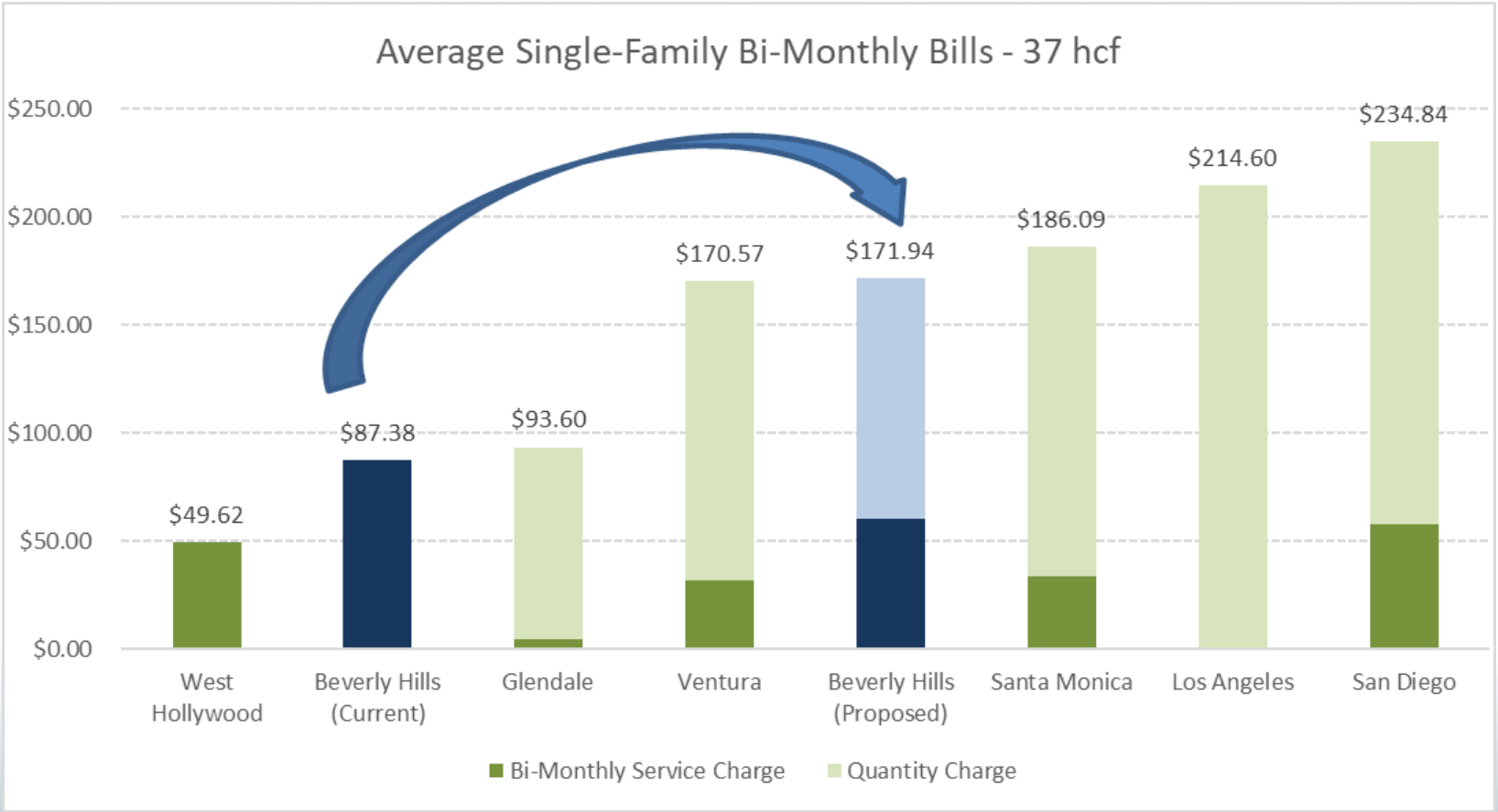
Customer Class	Current Bi-Monthly	Proposed (COS)
Single Family		
Service Charge per dwelling unit	$87.38	$60.27
Quantity Charge	n/a	$3.02
Multi Family		
Service Charge per dwelling unit	$87.38	$26.04
Quantity Charge	n/a	$3.02
Commercial/Municipal		
Service Charge per account	$34.20	$60.27
Quantity Charges (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 sewered flow
  - Metered water use factored down to eliminate flow that is not sewered such as irrigation
  - Return to sewer factors calculated for each customer class

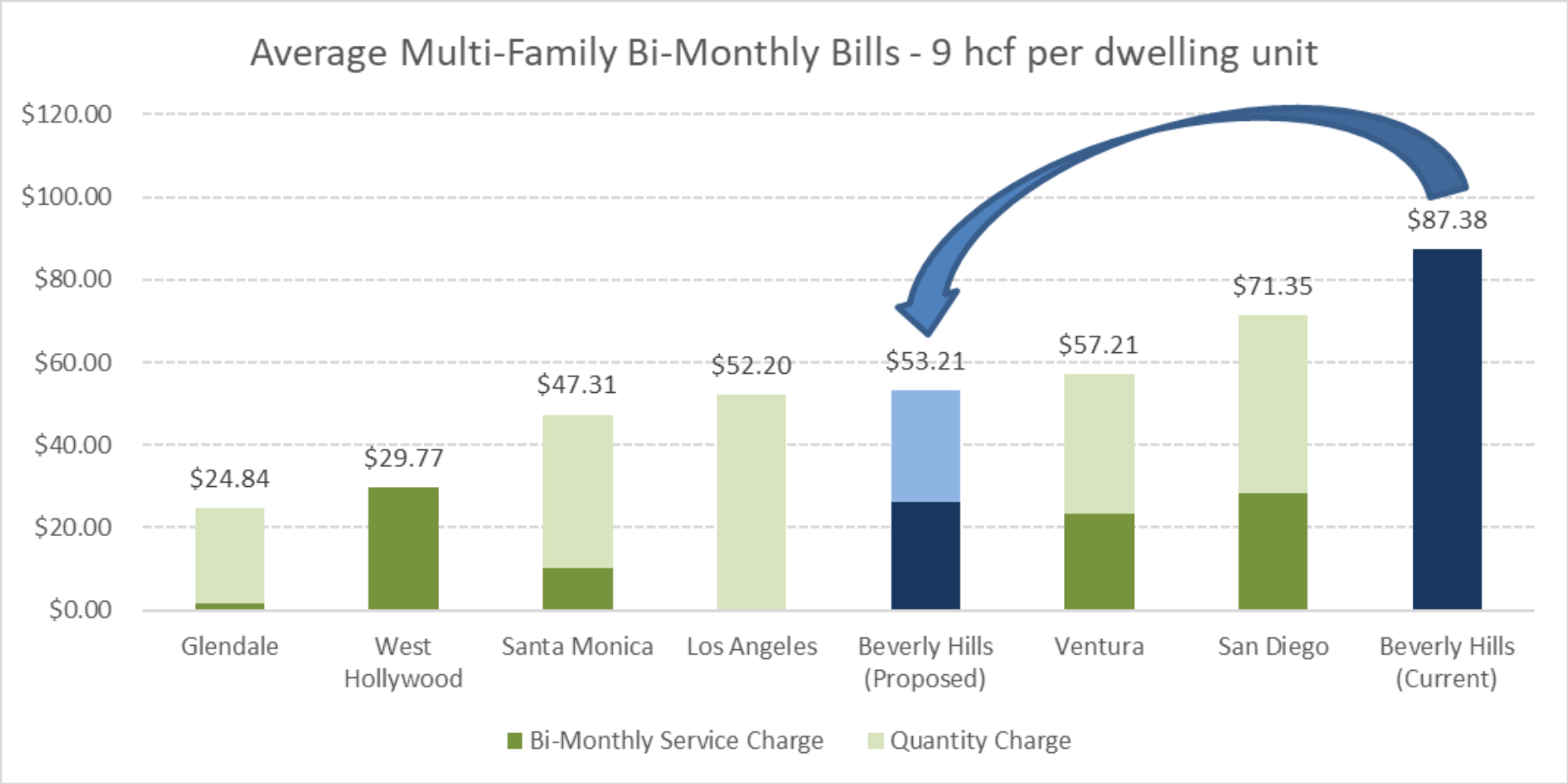
Average Bi-Monthly Bill Comparison

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			112.1	303.6
Rate per hcf			$4.74	$7.08
Total Quantity Charge	n/a	n/a	$531.51	$2,149.52
Current Bi-Monthly Bill	**$87.38**	**$87.38**	**$565.71**	**$2,183.72**
Sample Bills at Proposed Rates				
Bi-Monthly Service Charge	$60.27	$26.04	$60.27	$60.27
Quantity Charge per hcf				
Metered water use	55.7	9.3	112.1	303.6
Return to sewer factor	66.4%	96.4%	94.5%	94.5%
Sewered flow	37.0	9.0	106.0	287.0
Rate per hcf	$3.02	$3.02	$3.02	$5.87
Total Quantity Charge	$111.67	$27.16	$319.91	$1,685.03
Proposed Bi-Monthly Bill	**$171.94**	**$53.21**	**$380.18**	**$1,745.30**
Difference				
Dollar Difference	$84.56	($34.17)	($185.53)	($438.43)

Comparison With Other Agencies – Single Family



Comparison With Other Agencies – Multi Family



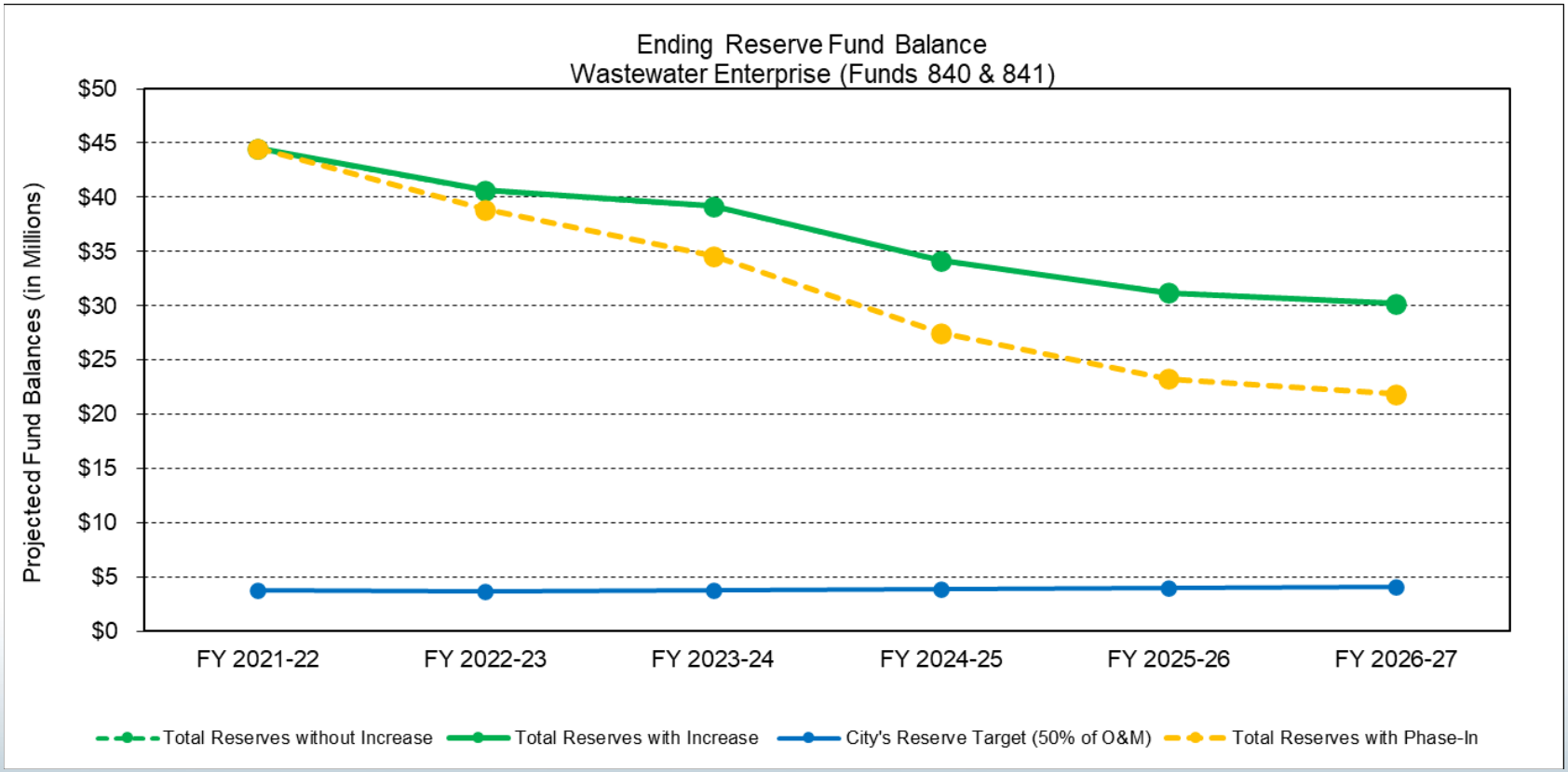
Option: Phase In Single Family Rates

- 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**
Sewered flow	37	37	37	37	37
Quantity charge	$22.33	$44.67	$67.00	$89.33	$111.67
Service charge	$60.27	$60.27	$60.27	$60.27	$60.27
Proposed bill	$82.61	$104.94	$127.27	$149.61	$171.94
Bill under current rates	$87.38	$87.38	$87.38	$87.38	$87.38
Difference	($4.77)	$17.56	$39.89	$62.23	$84.56

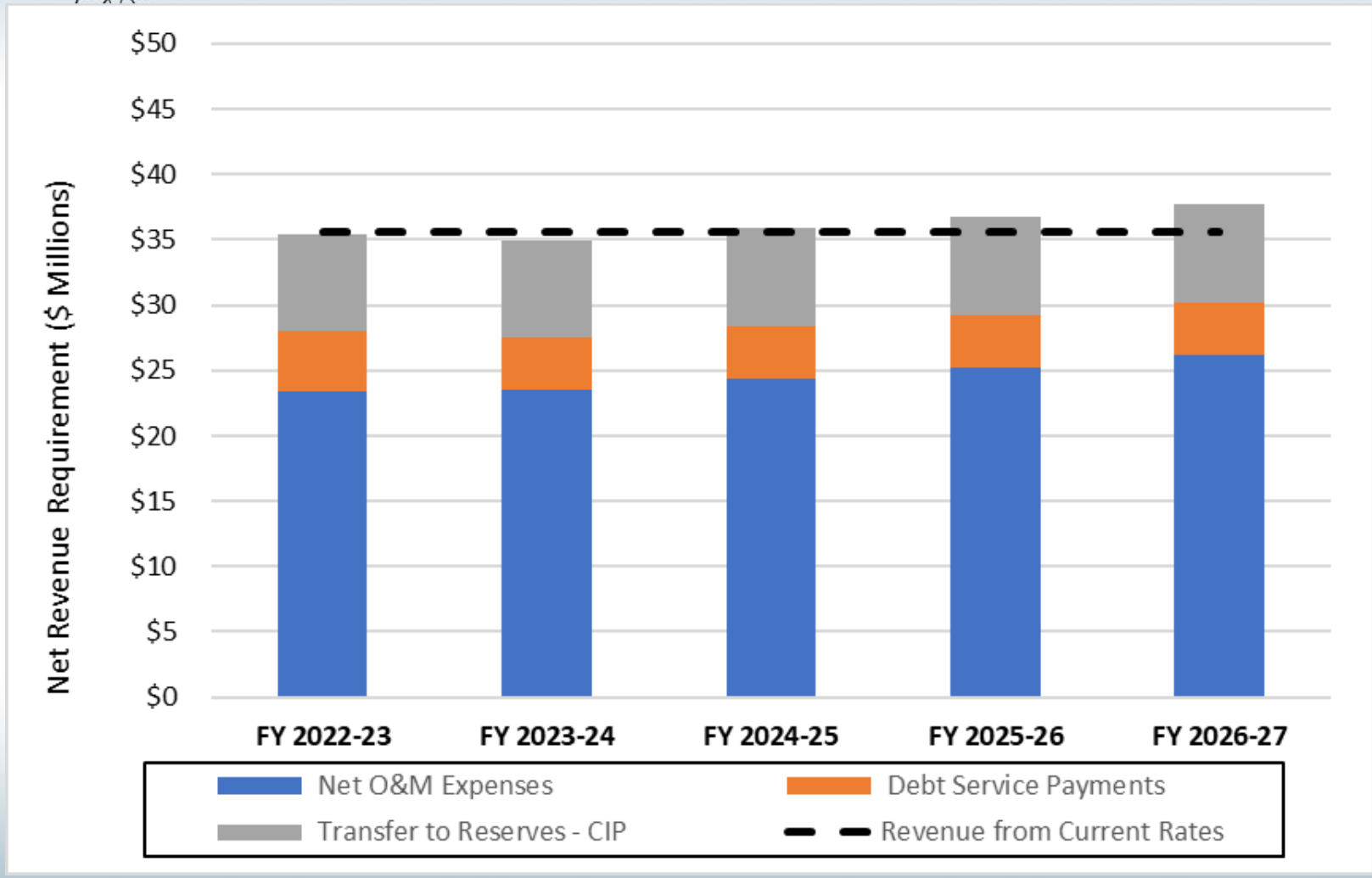
- Requires use of Wastewater Enterprise reserves of $8.1 million over five years
- Phase in unnecessary for other classes

Phase-In Rates

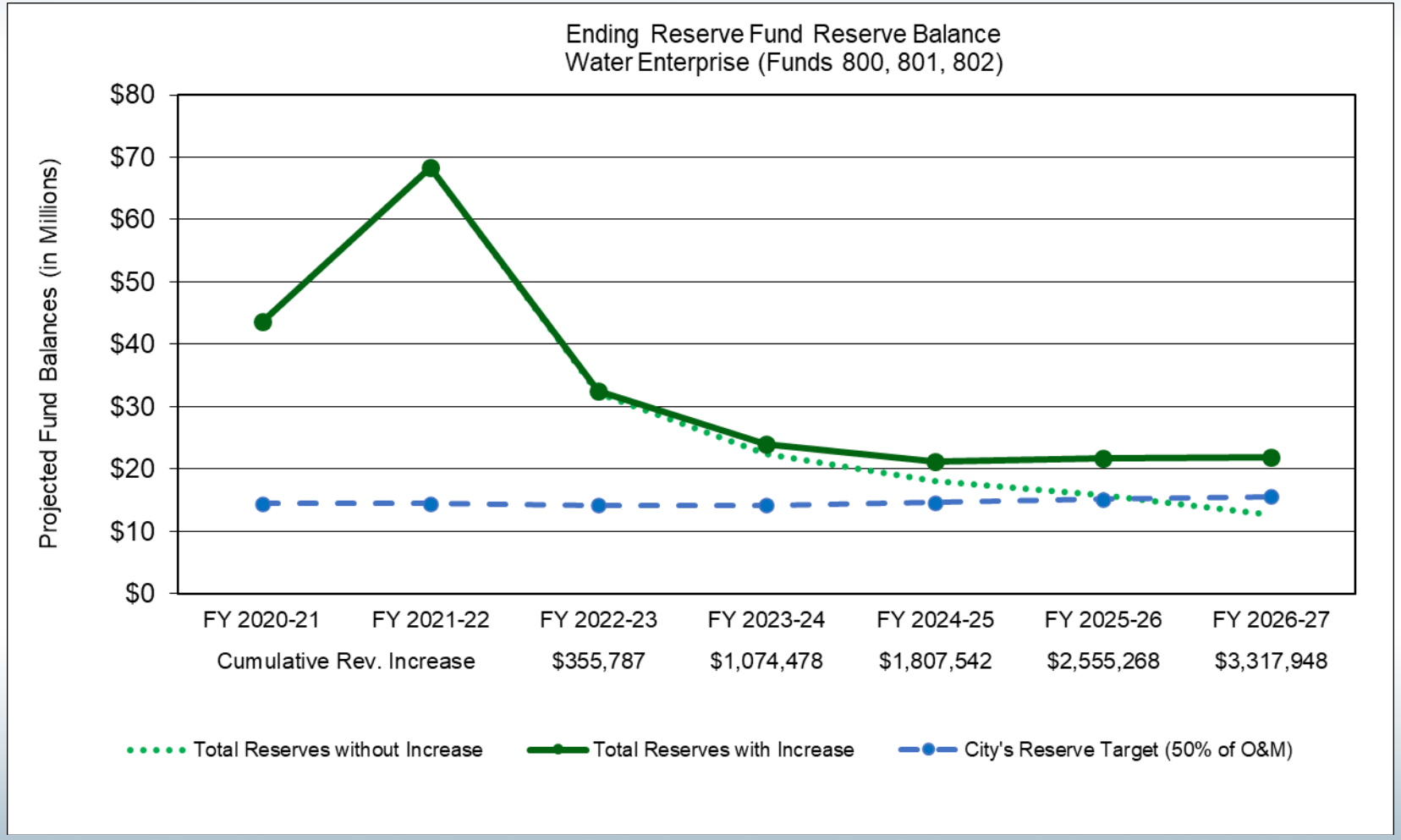


WATER RATE STUDY

Water Revenue Requirement – CIP Option 1



Water Fund Balance – CIP Option 1



Water 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

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).

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

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 Spending[1]**	**$52,425,283**	**$69,514,806**	**$58,964,591**
5				
6	Average Increase to Bi-Monthly Bill Received each Year			
7	Single-Family/Duplex	$5.64	$15.19	$11.35
8	Multi-Family[2]	$44.98	$66.37	$58.00
9	Commercial/Municipal	$36.35	$70.53	$57.19

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

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

Balance of Fixed and Quantity Charge Revenue

- Current practice
  - Fixed charges for water and fire service revenue is based on COS analysis
    - Generates 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

Pass-Through Rate Adjustments

- Current practice
  - 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
  - Confirm adequacy of revenue from charge to meet CIP expenses
  - Rate per HCF continues to increase $0.01 per year

Water Shortage Revenue Stabilization Factors

- Current practice
  - Factors 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

Shortage Reductions By Class					
Customer Class	Stage A	Stage B	Stage C	Stage D	Stage E
	5% Reduction	10% Reduction	20% Reduction	30% Reduction	50% Reduction
Single Family	6%	12%	24%	36%	58%
Multi-Family	3%	5%	11%	16%	31%
Commercial	4%	7%	15%	22%	40%
Irrigation	11%	22%	45%	67%	100%

Revenue Stabilization Factors By Class					
Customer Class	Stage A	Stage B	Stage C	Stage D	Stage E
	5% Reduction	10% Reduction	20% Reduction	30% Reduction	50% Reduction
Single Family	1.039	1.081	1.187	1.333	1.824
Multi-Family	1.016	1.033	1.069	1.110	1.262
Commercial	1.023	1.048	1.103	1.170	1.388
Irrigation	1.076	1.169	1.474	2.192	n/a

To be applied as a multiplier to the regular quantity charges in effect prior to a shortage being declared.

END OF PRESENTATION