



CITY OF MONTEREY PARK

Utility Rate Study

September 15, 2023
Revised October 30, 2023



CITY OF MONTEREY PARK

320 West Newmark Ave
Monterey Park, CA 91754



UTILITY RATE STUDY

September 15, 2023
Revised October 30, 2023

HF&H CONSULTANTS, LLC

590 Ygnacio Valley Rd, Suite 105
Walnut Creek, CA 94596





590 Ygnacio Valley Rd, Suite 105
Walnut Creek, California 94596
Tel: (925) 977-6950
Fax: (925) 977-6955
hfh-consultants.com

HF&H CONSULTANTS, LLC
Managing Tomorrow's Resources Today

Robert D. Hilton, CMC
John W. Farnkopf, PE
Laith B. Ezzet, CMC
Richard J. Simonson
Marva M. Sheehan, CPA
Robert C. Hilton

October 30, 2023

Martha Garcia
Director of Finance
City of Monterey Park
320 West Newmark Ave
Monterey Park, CA 91754

Subject: Utility Rate Study Report

Martha Garcia:

HF&H is pleased to submit this cost-of-service report to the City of Monterey Park.

HF&H is pleased to submit this cost-of-service rate study to the City of Monterey Park. This study documents our methodology and recommendations. We recommend adopting rate adjustments for the next five years, beginning January 1, 2024, and each July 1 through July 1, 2027.

We greatly appreciate your assistance in developing this cost-of-service analysis.

Sincerely,

HF&H CONSULTANTS, LLC

Rick Simonson
Senior Vice President

TABLE OF CONTENTS

- 1. EXECUTIVE SUMMARY 1**
 - A. Background 1
 - B. Water Rates 1
 - C. Sewer Rates 3
 - Fund Balance Projections 3
 - Current and Proposed Sewer Rates 4
- 2. INTRODUCTION 5**
 - A. Study Purpose 5
 - B. Study Process 5
 - C. Report Organization 5
- 3. WATER RATE STUDY 6**
 - A. Revenue Requirements and Financial Projections 6
 - Assumptions 6
 - Revenue Projections 8
 - Water Reserve Fund Balance Projections 9
 - B. Cost-of-Service Analysis 11
 - General Approach 11
 - Allocation Factors 11
 - Cost Allocations 13
 - Consumption Charge Cost Allocation 15
 - Summary of Allocations by Customer Class 15
 - C. Rate Design 17
 - Water Meter Charge Rates 17
 - Consumption Charge Design 19
 - All Other Customers Consumption Charges 20
 - Consumption Charge Summary 21
- 4. SEWER RATE STUDY 22**
 - A. Revenue Requirements and Financial Projections 22
 - Assumptions 22
 - Revenue Projections 23
 - Sewer Reserve Fund Balance Projections 24
 - B. Cost-of-Service Analysis 26
 - Analytical Approach 26
 - Allocation Factors 26
 - Cost Allocations 27
 - Cost of Service by Customer Class 27
 - C. Rate Design 29
 - Fixed and Variable Costs 29
 - Residential Rate Design 30
 - Commercial and Institutional Rate Design 30
 - Proposed Rates 31

5. CUSTOMER BILL IMPACTS 32
 Bill Comparisons 32

TABLE OF FIGURES

Figure 1-1. Water Enterprise Projected Fund Balance..... 1
Figure 1-2. Projected Water Rate Revenue Increases 2
Figure 1-3. Proposed Water Monthly Service Charge..... 2
Figure 1-4. Proposed Water Consumption Charge (per hcf) 2
Figure 1-5. Sewer Enterprise Projected Fund Balance..... 3
Figure 1-6. Projected Sewer Rate Revenue Increases 3
Figure 1-7. Current and Proposed Monthly Sewer Rates 4
Figure 3-1. Projection Assumptions 6
Figure 3-2. Projected O&M Expenses 7
Figure 3-3. Annual Debt Service..... 7
Figure 3-4. Debt Coverage 8
Figure 3-5. Water Rate Revenue Adjustments..... 8
Figure 3-6. Projected Water Rate Revenue 9
Figure 3-7. Water Enterprise Projected Fund Balance..... 10
Figure 3-8. Service Level Demands and Load Factors 12
Figure 3-9. Demand Related Allocation Percentages 13
Figure 3-10. Allocation Factors 13
Figure 3-11. Revenue Requirement Allocations 14
Figure 3-12. Comparison of Current Revenue with Cost-of-Service Allocations 15
Figure 3-13. Variable Charge Cost Allocations by Customer Class..... 15
Figure 3-14. Customer Class Allocations 16
Figure 3-15. Service Charge Units of Service 18
Figure 3-16. Proposed Monthly Service Charge Rates – FY 2023-24..... 18
Figure 3-17. Current and Proposed Monthly Service Charge Rates 18
Figure 3-18. Single Family Residential Tier Breakpoint Locations 19
Figure 3-19. Incremental Unit Cost – Single Family Residential 20
Figure 3-20. Calculation All Other Uniform Consumption Charges 21
Figure 3-21. Proposed Consumption Charges 21
Figure 4-1. Projection Assumptions 22
Figure 4-2. Projected Annual Revenue Requirements..... 23
Figure 4-3. Sewer Rate Revenue Adjustments..... 23
Figure 4-4. Projected Sewer Rate Revenue..... 24
Figure 4-5. Sewer Enterprise Projected Fund Balance..... 25
Figure 4-6. Allocation Factors 27
Figure 4-7. Net Revenue Requirement Allocations..... 27
Figure 4-8. Cost-of-Service Allocation to Customer Classes 28
Figure 4-9. Unit Costs by Customer Class 30
Figure 4-10. Derivation of Monthly Residential Rates 30
Figure 4-11. C&I Monthly Rate Calculation..... 31
Figure 4-12. Proposed Sewer Rates 31
Figure 5-1. Single Family Residential Combined Monthly Bill Impact 32
Figure 5-2. Multi Family Residential Combined Monthly Bill Impact 33

Figure 5-3. Commercial and Institutional Combined Monthly Bill Impact 33

ACKNOWLEDGEMENTS

City Council

Jose Sanchez, Mayor
Thomas Wong, Mayor Pro Tem
Vinh T. Ngo, Council Member, District 5
Yvonne Yiu, Council Member, District 2
Henry Lo, Council Member, District 4

City Staff

Inez Alvarez, Interim City Manager
Martha Garcia, Director of Finance
Shawn Igoe, Public Works Director

Legal Counsel

Karl H. Berger, City Attorney

HF&H Consultants, LLC

Rick Simonson, Senior Vice President
Gabe Sasser, Project Manager
Geoff Michalczyk, Senior Associate

Other Consultants

Wing-See Fox, Urban Futures
Michael Busch, Urban Futures

LIMITATIONS

This document was prepared solely for the City of Monterey Park in accordance with the contract between the City and HF&H and is not intended for use by any other party for any other purpose.

In preparing this study, we relied on information from the City, which we consider accurate and reliable. Our analysis is based on the best available information at the time of the study.

Rounding differences caused by stored values in electronic models may exist.

This document represents our understanding of relevant laws, regulations, and court decisions but should not be relied upon as legal advice. Questions concerning the interpretation of legal authorities referenced in this document should be referred to a qualified attorney.



UTILITY RATE STUDY

1. EXECUTIVE SUMMARY

A. BACKGROUND

HF&H Consultants, LLC (HF&H) was retained by the City of Monterey Park (City) to conduct a utility rate study for its Water and Sewer Enterprises. This study documents the process by which our projected water and sewer rates were developed for a ten-year planning period, from FY 2023-24 through FY 2032-33. Though our models looked at a ten-year planning period, Article XIID, Section 6 of the State Constitution limits the adoption of rates to no more than five years at a time. The proposed rates summarized in this executive summary and explained in more detail in Section 3 (Water Rates) and Section 4 (Sewer Rates), are limited to the next five years (FY 2023-24 through FY 2027-28).

B. WATER RATES

The projected fund balance for the Water Enterprise was updated by first preparing a ten-year projection of operating and capital expenses. The projected increases needed in rate revenue were determined by comparing the expense projections with the revenue generated from current rates. The ten-year Water Enterprise fund balance projections are shown in **Figure 1-1** with and without the proposed rate revenue increases shown in **Figure 1-2**. Without rate increases, the Water Enterprise’s fund balance will be depleted before the end of FY 2024-25 (dotted green line). With the proposed revenue increases, the fund balance will always exceed the City’s minimum reserve target (i.e., two months of annual Water Enterprise operating expenses) and approach the total target reserve by FY 2032-33.

Figure 1-1. Water Enterprise Projected Fund Balance

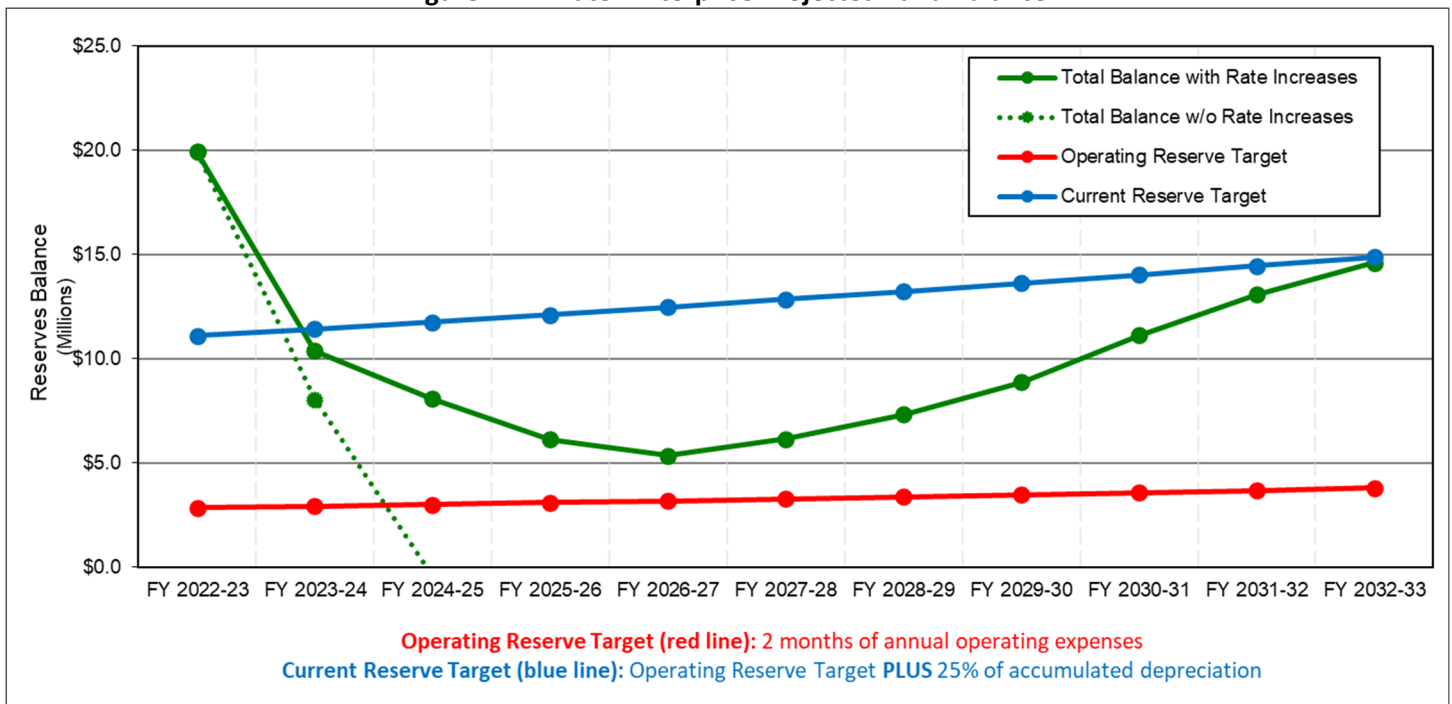


Figure 1-2. Projected Water Rate Revenue Increases

Fiscal Year	Effective Date	Revenue Increase
FY 2023-24	1/1/2024	32.0%
FY 2024-25	7/1/2024	8.0%
FY 2025-26	7/1/2025	8.0%
FY 2026-27	7/1/2026	7.0%
FY 2027-28	7/1/2027	8.0%
FY 2028-29	7/1/2028	3.0%
FY 2029-30	7/1/2029	3.0%
FY 2030-31	7/1/2030	0.0%
FY 2031-32	7/1/2031	0.0%
FY 2032-33	7/1/2032	0.0%

The larger rate increase, effective January 1, 2024 are necessary to cover the existing revenue shortfall from the lack of rate increases since 2017 and to meet the City’s debt coverage ratio the minimum requirement of 1.2x net revenue, for existing debt. This requirement must be met as a condition of the debt agreement for the outstanding loans of the Water Enterprise. This larger increase will also ensure reserves can be maintained above the minimum target through the duration of the planning period.

Current and Proposed Water Rates

Based on the cost-of-service analysis (discussed in detail in Section 3) and the proposed rate revenue increases shown in **Figure 1-2**, the current and projected rates are shown in **Figure 1-3** and **Figure 1-4**.

Figure 1-3. Proposed Water Monthly Service Charge

Monthly Service Charges						
Meter Size	FY 2022-23 Current Rates	FY 2023-24 1/1/2024	FY 2024-25 7/1/2024	FY 2025-26 7/1/2025	FY 2026-27 7/1/2026	FY 2027-28 7/1/2027
5/8" meters	\$26.40	\$20.16	\$21.77	\$23.51	\$25.16	\$27.17
3/4" meters	\$26.40	\$27.18	\$29.36	\$31.71	\$33.93	\$36.64
1" meters	\$28.53	\$41.23	\$44.53	\$48.10	\$51.46	\$55.58
1 1/2" meters	\$44.96	\$76.36	\$82.47	\$89.07	\$95.30	\$102.93
2" meters	\$57.96	\$118.52	\$128.00	\$138.24	\$147.91	\$159.75
3" meters	\$115.98	\$230.92	\$249.40	\$269.35	\$288.20	\$311.26
4" meters	\$191.88	\$357.38	\$385.98	\$416.85	\$446.03	\$481.72
6" meters	\$585.68	\$708.66	\$765.35	\$826.58	\$884.44	\$955.20
8" meters	\$1,464.79	\$1,130.20	\$1,220.61	\$1,318.26	\$1,410.54	\$1,523.38

Figure 1-4. Proposed Water Consumption Charge (per hcf)

Water Consumption Charge (per unit)							
Monthly Use	FY 2022-23 Current Rates	Monthly Use	FY 2023-24 1/1/2024	FY 2024-25 7/1/2024	FY 2025-26 7/1/2025	FY 2026-27 7/1/2026	FY 2027-28 7/1/2027
Single Family Residential							
Tier 1 (0-6 hcf)	\$2.89	Tier 1 (0 - 10 hcf)	\$3.41	\$3.69	\$3.98	\$4.26	\$4.60
Tier 2 (7-12 hcf)	\$3.15	Tier 2 (11 - 16 hcf)	\$4.50	\$4.86	\$5.24	\$5.61	\$6.06
Tier 3 (13+ hcf)	\$3.37	Tier 3 (17+ hcf)	\$8.51	\$9.19	\$9.92	\$10.62	\$11.47
All Other							
All Consumption	\$3.29	All Consumption	\$4.25	\$4.59	\$4.95	\$5.30	\$5.73

C. SEWER RATES

Fund Balance Projections

The projected fund balance for the Sewer Enterprise was updated by first preparing a ten-year projection of operating and capital expenses. The projected increases needed in rate revenue were determined by comparing the expense projections with the revenue generated from current rates. The ten-year fund balance projections are shown in **Figure 1-5** (solid green line) with the associated proposed rate revenue increases shown in **Figure 1-6**. In addition, **Figure 1-5** shows the projected annual fund balances without the revenue increases (dotted green line). As shown, without any rate increases, the fund balance will be fully depleted sometime before the end of FY 2024-25.

Figure 1-5. Sewer Enterprise Projected Fund Balance

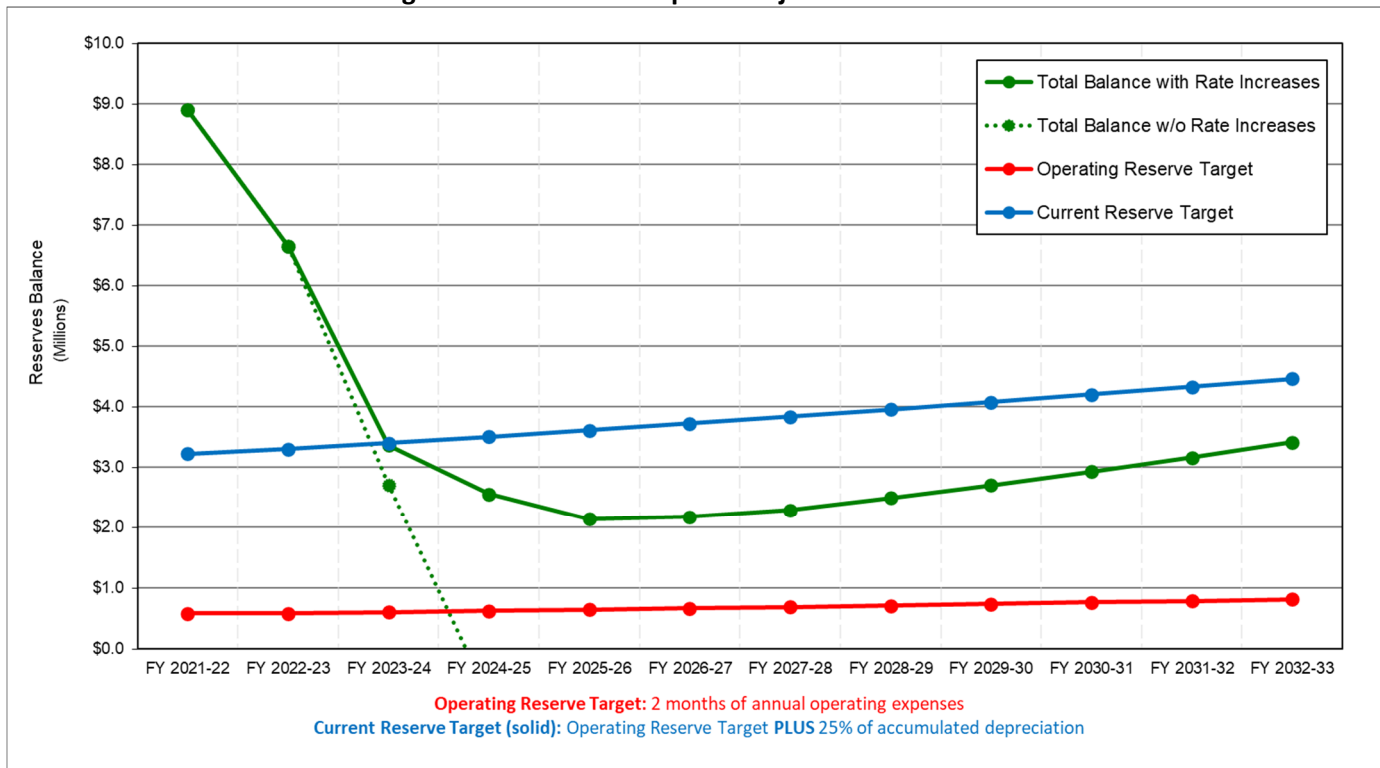


Figure 1-6. Projected Sewer Rate Revenue Increases

Fiscal Year	Effective Date	Overall Rate Revenue Increase
FY 2023-24	1/1/2024	40.0%
FY 2024-25	7/1/2024	30.0%
FY 2025-26	7/1/2025	10.0%
FY 2026-27	7/1/2026	10.0%
FY 2027-28	7/1/2027	4.0%
FY 2028-29	7/1/2028	4.0%
FY 2029-30	7/1/2029	3.0%
FY 2030-31	7/1/2030	3.0%
FY 2031-32	7/1/2031	3.0%
FY 2032-33	7/1/2032	3.0%

The larger rate increase, effective January 1, 2024 are necessary to cover the existing revenue shortfall from the lack of rate increases since 2017, as well as maintaining a reserve balance above the minimum target through the duration of the planning period.

Current and Proposed Sewer Rates

With the modifications and cost recovery calculations described above, the current and proposed rates are shown in **Figure 1-7**.

Figure 1-7. Current and Proposed Monthly Sewer Rates

Monthly Sewer Rates								
Customer Class	Current Units	Current FY 2022-23	Proposed Units	Proposed				
			<i>effective date</i>	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Single Family				1/1/2024	7/1/2024	7/1/2025	7/1/2026	7/1/2027
5/8", 3/4"	account	\$10.17	per account/DU	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
1"	account	\$12.42	per account/DU	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
1 1/2"	account	\$12.86	per account/DU	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
Multi Family								
3/4"	account	\$29.01	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
1"	account	\$34.76	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
1 1/4"	account	\$57.25	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
1 1/2"	account	\$84.15	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
2"	account	\$161.22	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
3"	account	\$413.02	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
4"	account	\$534.30	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
Commercial								
3/4"	account	\$27.09	account	\$27.37	\$35.58	\$39.14	\$43.05	\$44.78
1"	account	\$40.68	account	\$45.61	\$59.30	\$65.23	\$71.75	\$74.62
1 1/4"	account	\$40.68	account	\$91.22	\$118.59	\$130.45	\$143.50	\$149.24
1 1/2"	account	\$78.41	account	\$145.95	\$189.74	\$208.71	\$229.58	\$238.76
2"	account	\$198.97	account	\$291.91	\$379.49	\$417.44	\$459.18	\$477.55
3"	account	\$270.68	account	\$456.11	\$592.94	\$652.23	\$717.45	\$746.15
4"	account	\$386.69	account	\$912.21	\$1,185.88	\$1,304.46	\$1,434.91	\$1,492.31
6"	account	\$1,052.20	account	\$1,459.54	\$1,897.40	\$2,087.15	\$2,295.86	\$2,387.69
Institutional								
3/4"	account	\$46.29	account	\$27.37	\$35.58	\$39.14	\$43.05	\$44.78
2"	account	\$68.48	account	\$291.91	\$379.49	\$417.44	\$459.18	\$477.55
3"	account	\$73.29	account	\$456.11	\$592.94	\$652.23	\$717.45	\$746.15
4"	account	\$168.28	account	\$912.21	\$1,185.88	\$1,304.46	\$1,434.91	\$1,492.31

2. INTRODUCTION

A. STUDY PURPOSE

The purpose of this study is to conduct a cost-of-service analysis that will determine rates that proportionally recover the cost of providing the City's water and sewer services. The cost-of-service analysis is tailored specifically to the City's customer classes and the rate structures that are appropriate for each class. The study identifies the total cost incurred by the City for providing potable water and wastewater services; identifies classes of customers (e.g., residential and commercial); determines the demand created by each class of customer for the potable water and wastewater services; and then calculates the proportionate cost sharing for each customer class to create the rate structure.

B. STUDY PROCESS

The rate study was conducted following industry standards and practices promulgated by the American Water Works Association (AWWA) and the Water Environment Federation (WEF). A comprehensive rate study involves the four steps:

1. Revenue requirements were projected for a ten-year planning period based on operations, maintenance, capital expenses, and contributions to reserves.
2. The cost-of-service analysis allocates the projected expenses among the customer classes in proportion to their use of the systems.
3. Rates are then calculated so that rate payers are charged equitably based upon each customer classes proportionate use.
4. For illustrative purposes, to demonstrate the impact of the proposed rate adjustments on average water use customers for each customer class, we compare bills under the proposed rates with bills under the current rates.

C. REPORT ORGANIZATION

This report describes each of the four rate-making steps for the Water Fund followed by the Sewer Fund. A glossary of technical terms and acronyms is provided following the Table of Contents. An appendix contains a copy of portions of the rate model that are not included in the body of the report text as tables and figures.

3. WATER RATE STUDY

A. REVENUE REQUIREMENTS AND FINANCIAL PROJECTIONS

To determine whether additional water rate revenue is required, projected operating and capital expenses are compared with projected revenue from current rates. Annual surpluses and deficits are then applied to the reserve funds. Rates are then increased so that the expenses are covered and operating and capital reserves are maintained. The following sections summarize the methodology for determining the annual revenue requirements, the necessary annual revenue increases, and the projected impact these results will have on the Sewer Enterprise fund balance.

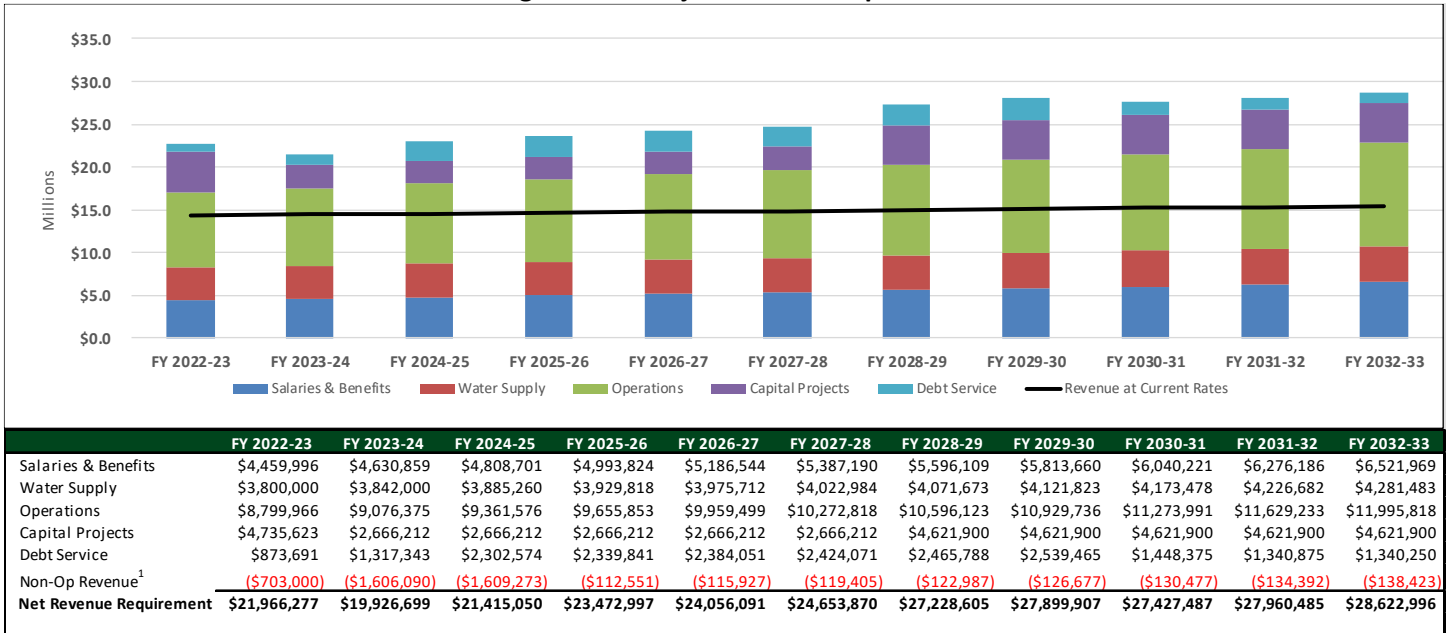
Assumptions

A spreadsheet model was developed to derive revenue requirements for FY 2022-23 through FY 2032-33. The revenue requirements represent the costs that must be covered by revenue from rates and other sources, such as reserves. The City’s Council-approved operating and capital budget for FY 2022-23 served as the starting point for projecting the City’s expenses and revenues over the ten-year financial planning period. We worked with City staff to project beyond FY 2022-23. The assumptions shown in **Figure 3-1** were used to project operating expenses, capital project costs, account growth, and water demand through FY 2032-33. The application of these assumptions to the O&M and capital expenses are summarized in **Figure 3-2** and are described in more detail below. The revenue from current rates (plus growth) is also shown (dotted black line).

Figure 3-1. Projection Assumptions

	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
Annual Account Growth Rate	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Annual Water Demand Increases	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
General Inflation	Budgeted	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Salaries & Wages	Budgeted	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Benefits	Budgeted	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Utilites	Budgeted	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%
Construction Cost Inflation	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%
Interest on Fund Balance	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%

Figure 3-2. Projected O&M Expenses



¹ Water Non-Operating Revenues include meter installation fees, monies received from a settlement with the Environmental Protection Agency (estimated at \$3.6 million to be received from FY 2022-23 through FY 2024-25), and the sale of surplus Water Enterprise property (e.g., vehicles, computers, equipment) which is not longer needed. These non-operating revenues reduce the necessary revenue that needs to come from rates to cover operating and capital costs.

Debt Service. The City’s Water Enterprise has three outstanding loans. **Figure 3-3** shows the annual debt service for each loan.

- **Current:** A 15-year lease purchase agreement with Siemens Public, Inc. for the purchase and installation of interior lighting retrofits, exterior lighting retrofits, HVAC equipment replacement at select sites, building automation system and water meter replacements. The Water Enterprise is responsible for 85% of this debt service.
- **Current:** A 30-year loan agreement with the California Infrastructure and Economic Development Bank for the construction of the La Loma and Highland reservoirs. This study assumes this debt service will be refunded by the proposed \$15 million bond issuance in FY 2023-24.
- **Current:** A 10-year loan agreement with the San Gabriel Valley Water Company for \$4 million at 0% interest. Debt proceeds are anticipated to be received in FY 2022-23 with payment beginning in FY 2023-24.

Figure 3-3. Annual Debt Service

	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
Siemens	\$804,851	\$850,949	\$888,341	\$928,551	\$970,446	\$1,014,788	\$1,091,840	\$0	\$0	\$0
I-Bank Loan	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$0	\$0
San Gabriel Valley Water	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Total Debt Service	\$1,317,343	\$1,363,441	\$1,400,833	\$1,441,043	\$1,482,938	\$1,527,280	\$1,604,332	\$512,492	\$400,000	\$400,000

Figure 3-4 shows the debt service coverage provided by the revenue increases in **Figure 3-5**. The City aims to maintain a coverage ratio of 1.25. A higher ratio provides a greater margin of safety to bondholders

and can enhance the credit rating on bonds. This is particularly true with water utilities whose revenues are vulnerable to periods of conservation. It is projected that the City will be above its party debt coverage target through this ten-year planning period.

Figure 3-4. Debt Coverage

Debt Coverage Calculation	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
Funds Available for Debt Service										
Rate revenue - Service Charges	\$16,741,245	\$20,728,063	\$22,553,726	\$24,313,218	\$26,455,205	\$27,453,507	\$28,489,779	\$28,704,346	\$28,920,834	\$29,139,260
Non-Rate Revenue Income	\$1,606,090	\$1,609,273	\$112,551	\$115,927	\$119,405	\$122,987	\$126,677	\$130,477	\$134,392	\$138,423
Interest income	\$60,477	\$36,834	\$29,741	\$28,687	\$26,668	\$26,827	\$32,246	\$39,828	\$48,236	\$55,210
Total Funds Available	\$18,407,811	\$22,374,170	\$22,696,018	\$24,457,833	\$26,601,278	\$27,603,321	\$28,648,702	\$28,874,651	\$29,103,461	\$29,332,893
Expenses										
O&M	\$17,549,234	\$18,055,537	\$18,579,495	\$19,121,755	\$19,682,992	\$20,263,905	\$20,865,219	\$21,487,689	\$22,132,101	\$22,799,270
Total Expenses	\$17,549,234	\$18,055,537	\$18,579,495	\$19,121,755	\$19,682,992	\$20,263,905	\$20,865,219	\$21,487,689	\$22,132,101	\$22,799,270
Net Revenue	\$858,577	\$4,318,633	\$4,116,523	\$5,336,078	\$6,918,286	\$7,339,416	\$7,783,483	\$7,386,962	\$6,971,360	\$6,533,624
New Debt Service - iBank Loan	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$0	\$0
New Debt Service - FY 2024 Issuance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Parity Debt Service	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$0	\$0
Parity Debt Coverage Ratio	7.63	38.39	36.59	47.44	61.50	65.24	69.19	65.67	N/A	N/A
Net Funds Available	\$746,085	\$4,206,141	\$4,004,031	\$5,223,586	\$6,805,794	\$7,226,924	\$7,670,991	\$7,274,470	\$6,971,360	\$6,533,624
Subordinate Debt Service (Siemens, San Gabriel)	\$1,204,851	\$1,250,949	\$1,288,341	\$1,328,551	\$1,370,446	\$1,414,788	\$1,491,840	\$400,000	\$400,000	\$400,000
Subordinate Debt Coverage Ratio	0.62	3.36	3.11	3.93	4.97	5.11	5.14	18.19	17.43	16.33

Revenue Projections

Given the projected O&M and capital costs that need to be recovered through rate (shown in **Figure 3-2**), HF&H developed a rate revenue adjustment scenario that maintains adequate fund balances (see **Figure 3-9**) for the ongoing operations of the Water Enterprise. These rate revenue adjustments are shown in **Figure 3-5**. **Figure 3-6** shows the projected water rate revenue associated with the rate revenue adjustments.

Figure 3-5. Water Rate Revenue Adjustments

Fiscal Year	Effective Date	Revenue Increase
FY 2023-24	1/1/2024	32.0%
FY 2024-25	7/1/2024	8.0%
FY 2025-26	7/1/2025	8.0%
FY 2026-27	7/1/2026	7.0%
FY 2027-28	7/1/2027	8.0%
FY 2028-29	7/1/2028	3.0%
FY 2029-30	7/1/2029	3.0%
FY 2030-31	7/1/2030	0.0%
FY 2031-32	7/1/2031	0.0%
FY 2032-33	7/1/2032	0.0%

Figure 3-6. Projected Water Rate Revenue

	Months Increase In Effect	Projected Water Rate Revenue										
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
Water Rate Revenue		\$14,367,574	\$14,432,107	\$14,539,887	\$14,648,625	\$14,758,330	\$14,869,013	\$14,980,683	\$15,093,350	\$15,207,024	\$15,321,715	\$15,437,433
Increase in Rate Revenue		0.0%	32.0%	8.0%	8.0%	7.0%	8.0%	3.0%	3.0%	0.0%	0.0%	0.0%
Revenue from Rate Increases												
FY 2023-24 (eff. Jan 1, 2024)	6		\$2,309,137	\$4,652,764	\$4,687,560	\$4,722,666	\$4,758,084	\$4,793,819	\$4,829,872	\$4,866,248	\$4,902,949	\$4,939,979
FY 2024-25 (eff. Jul 1, 2024)	12			\$1,535,412	\$1,546,895	\$1,558,480	\$1,570,168	\$1,581,960	\$1,593,858	\$1,605,862	\$1,617,973	\$1,630,193
FY 2025-26 (eff. Jul 1, 2025)	12				\$1,670,646	\$1,683,158	\$1,695,781	\$1,708,517	\$1,721,366	\$1,734,331	\$1,747,411	\$1,760,608
FY 2026-27 (eff. Jul 1, 2026)	12					\$1,590,584	\$1,602,513	\$1,614,549	\$1,626,691	\$1,638,942	\$1,651,303	\$1,663,775
FY 2027-28 (eff. Jul 1, 2027)	12						\$1,959,645	\$1,974,362	\$1,989,211	\$2,004,193	\$2,019,308	\$2,034,559
FY 2028-29 (eff. Jul 1, 2028)	12							\$799,617	\$805,630	\$811,698	\$817,820	\$823,996
FY 2029-30 (eff. Jul 1, 2029)	12								\$829,799	\$836,049	\$842,354	\$848,716
FY 2030-31 (eff. Jul 1, 2030)	12									\$0	\$0	\$0
FY 2031-32 (eff. Jul 1, 2031)	12										\$0	\$0
FY 2032-33 (eff. Jul 1, 2032)	12											\$0
Total Revenue from Rate Increases		\$0	\$2,309,137	\$6,188,176	\$7,905,101	\$9,554,888	\$11,586,191	\$12,472,823	\$13,396,428	\$13,497,322	\$13,599,118	\$13,701,827
Total Current Revenue		\$14,367,574	\$14,432,107	\$14,539,887	\$14,648,625	\$14,758,330	\$14,869,013	\$14,980,683	\$15,093,350	\$15,207,024	\$15,321,715	\$15,437,433
Total Revenue with Rate Increases		\$14,367,574	\$16,741,245	\$20,728,063	\$22,553,726	\$24,313,218	\$26,455,205	\$27,453,507	\$28,489,779	\$28,704,346	\$28,920,834	\$29,139,260
Total Revenue Requirement		\$21,966,277	\$23,254,061	\$22,923,279	\$24,867,777	\$25,446,871	\$26,046,526	\$26,290,097	\$26,964,774	\$26,491,604	\$27,019,610	\$27,682,746
Transfer to/(from) Reserves		(\$7,598,702)	(\$6,512,817)	(\$2,195,216)	(\$2,314,051)	(\$1,133,653)	\$408,679	\$1,163,410	\$1,525,005	\$2,212,742	\$1,901,224	\$1,456,513

Water Reserve Fund Balance Projections

The rate revenue adjustments in **Figure 3-5** were developed by analyzing the City’s projected expenses over the course of the planning period against its projected revenues.

In addition to covering annual expenses, water rates need to generate revenue to maintain adequate operations and capital reserves. To determine what constitutes adequate reserve amounts, the City’s Water Enterprise fund balance is divided into operating and capital reserves. Recommended target balances are set to fund each reserve. The resulting cash balances with the recommended rate revenue increases (shown in **Figure 3-5**), is represented by the solid green line in **Figure 3-7**. In addition, **Figure 3-7** shows the projected annual fund balances without the revenue increases (dotted green line). As shown, without any rate increase, the fund balance will be fully depleted sometime before the end of FY 2024-25.

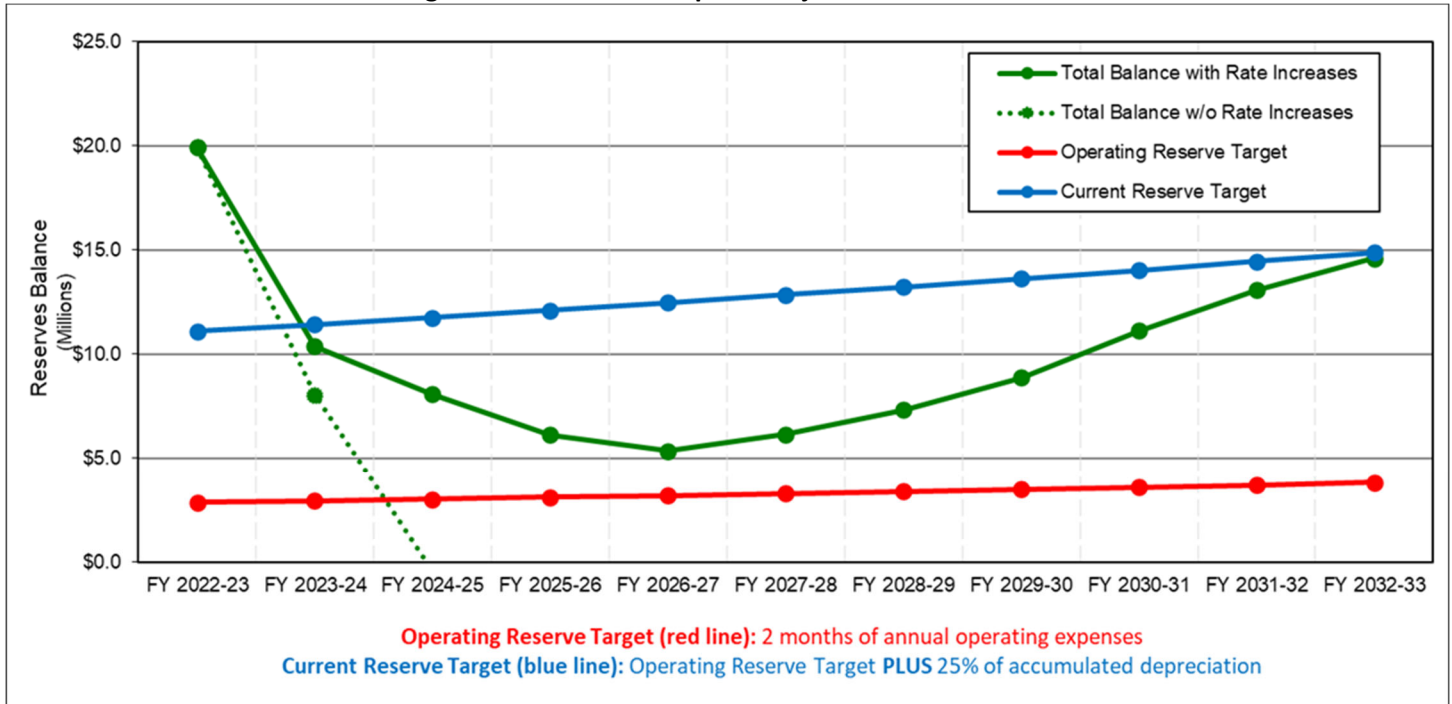
The cash reserve targets used in **Figure 3-7** are as follows:

Operating Reserve. The operating component of the reserves provides working capital for month-to-month O&M expenditures. With sufficient working capital, the City can operate without cash flow constraints. The City’s reserve policy is two months of operating expenses. The City’s reserves should never drop below this minimum balance. The operating reserve target is represented by the red line in **Figure 3-7**.

Capital Reserve. The capital component of the reserves provides working capital for the City’s capital improvement projects. The fund balance needs to be sufficient to at least pay contractors without delays caused by cash flow limitations. The fund balance can be larger so that the City can fund larger construction projects on a pay-as-you-go basis, thereby eliminating financing costs. The City’s reserve policy for the capital reserve is 25% of accumulated depreciation of capital assets.

Total Reserve Target. The total reserve target for the City is the sum of the target balances for the operating reserve and capital reserve. The target balance is represented by the blue line in **Figure 3-7**.

Figure 3-7. Water Enterprise Projected Fund Balance



B. COST-OF-SERVICE ANALYSIS

General Approach

The revenue requirement analysis establishes how much revenue is required from rates. The next step in the analysis is determining the cost of service (COS) by customer class. The cost-of-service analysis performed in this study follows a procedure that has been long established by the American Water Works Association (AWWA), which is referred to as the “base/extra capacity method.” This method allocates the revenue requirements to the components of the rate structure.

The base/extra capacity method in the AWWA M1 Manual contains three categories: base, maximum day, and maximum hour. Base capacity is determined by the average daily flow during the year. The average daily flow determines how much base capacity is needed to provide that flow. Maximum day capacity is determined by the flow on the maximum day of the year. In other words, the maximum day capacity is greater than the base capacity, including the base capacity plus the additional capacity needed to provide for the maximum day flow of the year. Maximum hour capacity is determined by the flow during the maximum hour on the maximum day. In other words, the maximum hour capacity is greater than the maximum day capacity by the amount of peak hour that occurs during the maximum day flow.

As the name implies, COS is a process of determining how much water service costs to provide capacity to meet customer demands. To provide water service, infrastructure must be constructed, operated, and maintained, which must be paid for from cash or debt. The type and size of infrastructure depends on how much service customers require. Water systems are designed to provide sufficient capacity to meet customer demands for service wherever, whenever, and for as long as demanded.

Although each customer places unique demands on the system, water system design is based on the maximum or peak demand for service placed on the system by all customers during the peak demand period. The size of the infrastructure that is needed will depend on the maximum demand. Higher demands will obviously require larger, more costly infrastructure as well as increased operating and O&M costs. Here, the goal of a COS analysis is to allocate the cost of the capacity to meet the peak demand in proportion to how much of the capacity is required by each customer. The proportions correspond to the maximum amount of capacity provided by the infrastructure. This means that customers that place greater demands on the infrastructure – customers with greater service needs (i.e., higher peak demands) – will be apportioned a greater share of the operating and capital costs of the infrastructure required to meet that demand.

It is important to realize that once the peak demand is used to design the infrastructure, the capacity is available at all times, not just during peak demands. The capacity is available for the potential peak when it occurs. During off-peak demands, the same facilities are being used, but the capital cost of the facilities is determined by the peak demand only, and it is the peak demand that is used to allocate costs. Note that the costs are not allocated only to those who peak. Those who do not peak as much are also using the same facilities. Consequently, they are allocated a share of the costs of the facilities in proportion to their contribution to the peak demand, even though their contribution to peaking may be significantly less.

Allocation Factors

Within the demand service function, allocations are made to varying levels of service ranging from average day demand to the highest level of peak demand for outdoor water use and irrigation during the peak

hour of the peak day. With these allocations, rates can be designed to proportionately charge customers based on their demands.

Average Day Demand: Average day demand represents demand that includes only an average level of peaking. The average day demand was derived for each customer class from the City’s customer billing data of actual water use.

Maximum Day Demand: Maximum day demand includes average day demand plus peak day demand in the irrigation season. The City does not directly meter maximum day demand, so this analysis relied on the City’s most recent water system master plan which estimated the maximum day demand to be 1.60 times the average day demand.

Maximum Hour Demand: Maximum hour demand represents the maximum hour demand on the maximum day. The City does not directly meter maximum day demand, so this analysis relied on the City’s most recent water system master plan which estimated the maximum day demand to be 3.00 times the average day demand.

The flows associated with the demand service levels for each customer class are shown in **Figure 3-8**. The system-wide allocation percentages corresponding to those flows are shown in **Figure 3-9**. Note that costs that are classified as maximum day are allocated across average day and maximum day and not allocated only to maximum day. This is done because the capacity provided by maximum day facilities also provides capacity to meet average day demands. Similarly, maximum hour costs are spread across average day and maximum hour demands.

Figure 3-8. Service Level Demands and Load Factors

	Levels of Demand		
	Base Day	Maximum Day	Maximum Hour
Demand by Customer Category			
Single Family Residential	3,529	5,646	10,586
All Other	4,618	7,388	13,853
Total	8,146	13,034	24,439
Ratio of Flows to Base Day			
Single Family Residential	1.00	1.60	3.00
All Other	1.00	1.60	3.00
Total	1.00	1.60	3.00
Level of Service	8,146	13,034	24,439
Base Day Demand	8,146	8,146	8,146
Ratio of Level of Service to Base Day	1.00	1.60	3.00

Base Day: Average of February and March Billed Usage Annualized

Maximum Day: Per 1-5 of 2012 Master Plan

Maximum Hour: Per 1-5 of 2012 Master Plan

Figure 3-9. Demand Related Allocation Percentages

Allocation Basis	Load Factors	Demand Service Levels			Totals
		Base Day	Maximum Day	Maximum Hour	
Base Day <i>Allocation %</i>	1.00	1.00 100%			1.00 100%
Maximum Day <i>Allocation %</i>	1.60	1.00 63%	0.60 38%		1.60 100%
Maximum Hour <i>Allocation %</i>	3.00	1.00 33%	0.60 20%	1.40 47%	3.00 100%

The allocation factors for costs classified as meter charge are either 100% account or capacity allocations. **Figure 3-10** summarizes the allocation factors for the demand and customer service costs. In addition, it shows the composite allocations. The O&M and Capital composite allocations are based on subtotals of the O&M and Capital costs that were directly allocated to either the demand or customer service categories. The expense composite is based on the combined subtotal of all directly classified costs.

Figure 3-10. Allocation Factors

System-Wide Cost Allocation Factors	Demand Services			Customer Services		Total
	Base	Maximum Day	Maximum Hour	Accounts	Capacity	
<u>Demand Services</u>						
Base Day	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Max Day	62.5%	37.5%	0.0%	0.0%	0.0%	100.0%
Max Hour	33.3%	20.0%	46.7%	0.0%	0.0%	100.0%
<u>Customer Services</u>						
Capacity	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Accounts	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
<u>Composite Allocations</u>						
O&M Composite	79.7%	6.0%	11.9%	1.9%	0.6%	100.0%
CIP Composite	10.0%	3.2%	2.2%	0.6%	84.0%	100.0%
Exp Composite	64.2%	5.4%	9.8%	1.6%	19.1%	100.0%

Cost Allocations

Figure 3-11 shows the FY 2022-23 revenue requirement allocated into the demand and customer services. Each line item was classified according to the associated function. The allocation factors summarized in **Figure 3-10** allocate costs across the services based on the allocation factor column in **Figure 3-11**.

Figure 3-11. Revenue Requirement Allocations

	FY 2022-23 Revenue Requirement	Allocation Factor	Consumption Charge			Meter Charge	
			Base Day	Maximum Day	Maximum Hour	Accounts	Capacity
O&M Expenses							
1406 - Revenue Collection	\$182,828	Accounts	\$0	\$0	\$0	\$182,828	\$0
3240 - Code Compliance	\$130,511	Accounts	\$0	\$0	\$0	\$130,511	\$0
4212 - Engineering	\$380,287	Max Day	\$237,679	\$142,608	\$0	\$0	\$0
4221 - Water Commercial	\$1,736,604	Base Day	\$1,736,604	\$0	\$0	\$0	\$0
4222 - Water Production	\$4,913,136	Base Day	\$4,913,136	\$0	\$0	\$0	\$0
4223 - Water Distribution	\$4,249,920	Max Hour	\$1,416,640	\$849,984	\$1,983,296	\$0	\$0
4226 - Well No. 5	\$1,277,666	Base Day	\$1,277,666	\$0	\$0	\$0	\$0
4227 - Well No. 12 Treatment Plant	\$1,167,904	Base Day	\$1,167,904	\$0	\$0	\$0	\$0
4229 - Well No. 1, 3, 10	\$1,113,670	Base Day	\$1,113,670	\$0	\$0	\$0	\$0
4230 - Well 12 Dual Barrier	\$814,220	Base Day	\$814,220	\$0	\$0	\$0	\$0
4231 - Well 15	\$598,299	Base Day	\$598,299	\$0	\$0	\$0	\$0
4202 - Street Maintenance	\$101,220	Capacity	\$0	\$0	\$0	\$0	\$101,220
Total Allocable O&M	\$16,666,265		\$13,275,818	\$992,592	\$1,983,296	\$313,339	\$101,220
O&M Composite			79.7%	6.0%	11.9%	1.9%	0.6%
Capital Expenses (PayGo)	\$4,735,623	CIP Composite	\$471,365	\$153,787	\$104,008	\$26,634	\$3,979,829
Subtotal - O&M and Capital	\$21,401,888		\$13,747,183	\$1,146,378	\$2,087,304	\$339,974	\$4,081,049
		% of Consumption	81.0%	6.8%	12.3%		
		% of total	64.2%	5.4%	9.8%	1.6%	19.1%
Administrative Costs							
1702 - Building & Safety	\$132,198	Accounts	\$0	\$0	\$0	\$132,198	\$0
4210 - Maintenance	\$369,693	Accounts	\$0	\$0	\$0	\$369,693	\$0
4220 - Water Administration	\$568,981	Accounts	\$0	\$0	\$0	\$568,981	\$0
5102 - Post Employment	\$196,516	Accounts	\$0	\$0	\$0	\$196,516	\$0
Administrative Costs	\$1,267,389		\$0	\$0	\$0	\$1,267,389	\$0
Subtotal O&M, Capital, Non-Operat Expense Allocation	\$22,669,277		\$13,747,183	\$1,146,378	\$2,087,304	\$1,607,362	\$4,081,049
			60.6%	5.1%	9.2%	7.1%	18.0%
Non-Operating Revenue							
Meter Installation	(\$100,000)	Accounts	\$0	\$0	\$0	(\$100,000)	\$0
EPA Settlement	(\$600,000)	Accounts	\$0	\$0	\$0	(\$600,000)	\$0
Sale of Surplus Property	(\$3,000)	Exp Composite	(\$1,927)	(\$161)	(\$293)	(\$48)	(\$572)
Total Non-Operating	(\$703,000)		(\$1,927)	(\$161)	(\$293)	(\$700,048)	(\$572)
Transfers to/(from) Reserves	(\$7,598,702)	O&M Composite	(\$6,052,885)	(\$452,555)	(\$904,250)	(\$142,862)	(\$46,150)
Total Revenue Requirement	\$14,367,574		\$7,692,370	\$693,662	\$1,182,761	\$764,453	\$4,034,328
					\$9,568,794	\$764,453	\$4,034,328
		% of total revenue requirement			66.6%		33.4%
					<i>Consumption Charge COS</i>		<i>Service Charge COS</i>

The results of the cost-of-service allocations are shown in **Figure 3-12** which compares the revenue produced by the current rates for each of the charges with the cost-of-service allocations, which do not include the proposed rate revenue increase. The allocations slightly shift costs from the meter charges to the consumption charges.

Figure 3-12. Comparison of Current Revenue with Cost-of-Service Allocations

Components of Rate Structure	Revenue at		Cost of Service		Difference	
	Current Rates FY 2022-23		FY 2022-23		COS Minus Current	
Total						
Consumption Charge Revenue	\$9,373,164	65%	\$9,568,794	67%	\$195,630	2.1%
Meter Charge Revenue	\$4,994,411	35%	\$4,798,781	33%	(\$195,630)	-3.9%
Total	\$14,367,574	100%	\$14,367,574	100%	(\$0)	0.0%

Consumption Charge Cost Allocation

Figure 3-13 derives the cost-of-service for each of the City’s customer classes. The allocation for the potable water classes encompasses each classes’ proportionate share of the three demand service levels (i.e., average day, maximum day, and maximum hour) because they share common facilities. Moreover, the allocation of costs to the single family customers needs to be tracked by demand service level for purposes of calculating the single family tiered rates.

Figure 3-13. Variable Charge Cost Allocations by Customer Class

Consumption Charge Cost-of-Service	Base Day	Max Day	Max Hour	Total
Operations & Maintenance	\$13,275,818	\$992,592	\$1,983,296	\$16,251,706
Capital Expenses (PayGo)	\$471,365	\$153,787	\$104,008	\$729,159
Non-Operating Revenue	(\$1,927)	(\$161)	(\$293)	(\$2,380)
Transfers to/(from) Reserves	(\$6,052,885)	(\$452,555)	(\$904,250)	(\$7,409,691)
Total Consumption Charge COS	\$7,692,370	\$693,662	\$1,182,761	\$9,568,794
Units of Service (hcf)				
Single Family Residential	3,529	5,646	10,586	
All Other	4,618	7,388	13,853	
	8,146	13,034	24,439	
Proportional Allocation Factors				
Single Family Residential	43.32%	43.32%	43.32%	
All Other	56.68%	56.68%	56.68%	
	100.00%	100.00%	100.00%	
Total COS - Residential	\$3,332,147	\$300,478	\$512,343	\$4,144,968
Total COS - All Other	\$4,360,223	\$393,185	\$670,418	\$5,423,826
Grand Total Consumption Charge COS	\$7,692,370	\$693,662	\$1,182,761	\$9,568,794

Summary of Allocations by Customer Class

The allocations by customer class are summarized in Figure 3-14. Both the single family class and all other classes (non-single family) will only see a slight shift from the revenue being generated at current rates compared with the cost-of-service.

Figure 3-14. Customer Class Allocations

Components of Rate Structure	Revenue at		Cost of Service		Difference	
	Current Rates FY 2022-23		FY 2022-23		COS Minus Current	
Single Family Residential						
Consumption Charge Revenue	\$3,834,482	52%	\$4,144,968	57%	\$310,486	8.1%
Meter Charge Revenue	\$3,570,143	48%	\$3,094,356	43%	(\$475,787)	-13.3%
Subtotal - SFR	\$7,404,625	100%	\$7,239,324	100%	(\$165,301)	-2.2%
All Other						
Consumption Charge Revenue	\$5,538,682	80%	\$5,423,826	76%	(\$114,856)	-2.1%
Meter Charge Revenue	\$1,424,268	20%	\$1,704,424	24%	\$280,157	19.7%
Subtotal - All Other	\$6,962,950	100%	\$7,128,250	100%	\$165,301	2.4%
Total						
Consumption Charge Revenue	\$9,373,164	65%	\$9,568,794	67%	\$195,630	2.1%
Meter Charge Revenue	\$4,994,411	35%	\$4,798,781	33%	(\$195,630)	-3.9%
Total	\$14,367,574	100%	\$14,367,574	100%	(\$0)	0.0%

C. RATE DESIGN

The City charges water customers the sum of a fixed monthly meter charge and a consumption charge that varies based on monthly water use. This section explains the derivation of the rates that determine each customer's charges. These rates are based on the results of the cost-of-service analysis in the preceding chapter.

Water Meter Charge Rates

Meter charges are fixed rates charged per account that are billed each billing period to recover the cost of the customer service function. The meter charges are graduated in proportion to the maximum capacity (i.e., maximum flow through a meter) serving a property. Meter charges are also independent of customer classes because the capacity of a service does not change depending on what class of customer that is connected to the water system.

The cost-of-service analysis determined how much of the revenue requirement is attributable to the customer service function. The function has two components – customer accounts (e.g., customer service staffing, billing) and customer capacity (e.g., capital and operating costs associated with maintaining the water transmission and distribution system) – each of which is itemized in the cost-of-service analysis in **Figure 3-11**. Costs attributable to customer accounts are allocated to customers in proportion to the number of accounts. As such, all customers pay the same for these costs which do not vary based on flow. Costs attributable to customer capacity are allocated to customers in proportion to the capacity of their services. As such, customer pay a graduated rate based on their meter size, as larger meters provide more capacity to the customer. The sum of the two components equals the meter charge per connection.

Figure 3-15 lists the units of service corresponding to each of the cost components. The 13,770 accounts are used for apportioning the customer accounts cost component.

Capacity costs associated with the distribution system are apportioned among the connections in proportion to the capacity associated with each connection in accordance with the American Water Works Association's recommended rated capacities. Accounts are converted to Equivalent Meter Units (EMUs) to apportion the customer capacity cost component. An EMU represents the number of ¾-inch meters to which a larger meter is equivalent. For example, a 1-inch meter provides 1.67 times as much capacity as a ¾-inch meter. The capacity multipliers are based on the nominal capacity of the City's meters. The 2,445 1-inch meters equal 4,075 EMUs. There are 21,055 total EMUs. In effect, the 13,770 services of assorted sizes have the equivalent capacity as 21,055 ¾-inch meters.

Figure 3-15 also derives the unit costs for the customer accounts and customer capacity cost components. Each account is allocated \$4.63 for the customer account cost component. That amount represents the costs the City incurs to maintain an account regardless of the capacity of the service. Each account is also allocated \$15.97 per EMU. That amount represents a portion of the cost of providing distribution system capacity for each account, and increases based on the capacity of the meter.

Figure 3-15. Service Charge Units of Service

Service Size	# of Accounts	Meter Ratings (gpm)	Capacity Multiplier	EMUs
	a	b	c = b ÷ 30	a * c
5/8"	1	20	0.67	1
3/4"	9,571	30	1.00	9,571
1"	2,445	50	1.67	4,075
1.5"	1,254	100	3.33	4,180
2"	450	160	5.33	2,400
3"	18	320	10.67	192
4"	25	500	16.67	417
6"	5	1000	33.33	167
8"	1	1600	53.33	53
Total Accounts	13,770		Total EMUs	21,055
Units Costs (from Figure 3-14)	\$764,453			\$4,034,328
	# of Accounts 13,770		# of EMUs 21,055	
Monthly Cost per Account	\$4.63		Monthly Cost per EMU	\$15.97

Based on AWWA gpm ratings

Figure 3-16 combines the customer service and capacity components into a single Service Charge for each size service and compares proposed rates to the current rates.

Figure 3-16. Proposed Monthly Service Charge Rates – FY 2023-24

Service Size	% of Meters	Account Component	Capacity Component			COS Service Charges (\$/mo.)	FY 2023-24 Increase	Proposed Service Charges (\$/mo.)
		(\$/mo.)	\$/EMU	Capacity Multiplier	Capacity Total			
		a	b	c	d = b * c	e = a + d	f	g = e * (1 + f)
5/8" meters	0.0%	\$4.63	\$15.97	0.67	\$10.64	\$15.27	32.0%	\$20.16
3/4" meters	69.5%	\$4.63	\$15.97	1.00	\$15.97	\$20.59	32.0%	\$27.18
1" meters	17.8%	\$4.63	\$15.97	1.67	\$26.61	\$31.24	32.0%	\$41.23
1 1/2" meters	9.1%	\$4.63	\$15.97	3.33	\$53.22	\$57.85	32.0%	\$76.36
2" meters	3.3%	\$4.63	\$15.97	5.33	\$85.16	\$89.78	32.0%	\$118.52
3" meters	0.1%	\$4.63	\$15.97	10.67	\$170.32	\$174.94	32.0%	\$230.92
4" meters	0.2%	\$4.63	\$15.97	16.67	\$266.12	\$270.75	32.0%	\$357.38
6" meters	0.0%	\$4.63	\$15.97	33.33	\$532.24	\$536.87	32.0%	\$708.66
8" meters	0.0%	\$4.63	\$15.97	53.33	\$851.58	\$856.21	32.0%	\$1,130.20

Figure 3-17 shows the proposed five-year schedule of meter charges.

Figure 3-17. Current and Proposed Monthly Service Charge Rates

Monthly Service Charges						
	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Meter Size	Current Rates	1/1/2024	7/1/2024	7/1/2025	7/1/2026	7/1/2027
5/8" meters	\$26.40	\$20.16	\$21.77	\$23.51	\$25.16	\$27.17
3/4" meters	\$26.40	\$27.18	\$29.36	\$31.71	\$33.93	\$36.64
1" meters	\$28.53	\$41.23	\$44.53	\$48.10	\$51.46	\$55.58
1 1/2" meters	\$44.96	\$76.36	\$82.47	\$89.07	\$95.30	\$102.93
2" meters	\$57.96	\$118.52	\$128.00	\$138.24	\$147.91	\$159.75
3" meters	\$115.98	\$230.92	\$249.40	\$269.35	\$288.20	\$311.26
4" meters	\$191.88	\$357.38	\$385.98	\$416.85	\$446.03	\$481.72
6" meters	\$585.68	\$708.66	\$765.35	\$826.58	\$884.44	\$955.20
8" meters	\$1,464.79	\$1,130.20	\$1,220.61	\$1,318.26	\$1,410.54	\$1,523.38

Consumption Charge Design

Single Family Residential Consumption Charge

Tiered rate structures are well suited to single-family residential quantity charges because of the wide variation in peak demand patterns. The use of three tiers has been in place for the City’s single-family residential customers and continues to be appropriate based on an analysis of actual water use patterns of single-family customers, conducted for this study. With three tiers, we size tiers corresponding average day demand, maximum day demand, and maximum hour peak demand. The size of the tiers is based on the demand pattern for single-family customers using water meter data collected by the City. The proposed breakpoints align the cost associated with each level of demand with the demand in each tier.

The rates for each tier cannot exceed the proportional cost of service for each tier. In the City’s case, a three-tier structure aligns well with the three demand service levels where Tier 1, Tier 2, and Tier 3 correspond with average day, maximum day, and maximum hour demands. Given a three-tier structure, the following describes how the size of the tiers and rate per tier were derived.

It is not the case that all the water is billed at only the rate for the highest block. All metered water use is at least billed the Tier 1 rate. Water use beyond Tier 1 is only billed the Tier 2 rate for the volume of water allocated to Tier 2, and water use beyond the volume of water allocated to Tier 2 is billed at the Tier 3 rate.

The base/extra capacity cost-of-service analysis leads to three distinct levels of demand that are defined by the functions performed by facilities that are designed to provide the service levels. Each service has an average flow that can be used as the divider (i.e., “breakpoint”) between each service level. Based on single family billing data, the breakpoints were calculated as shown in **Figure 3-18**.

Figure 3-18. Single Family Residential Tier Breakpoint Locations

Flow per Customer (hcf per month)	Base Day	Maximum Day	Maximum Hour
Single Family			
hcf per day	3,529	5,646	10,586
hcf per month	105,864	169,383	
# of Accounts	10,768	10,768	
Average flow per Acct (hcf/mo)	10.0	16.0	17+

The breakpoints create the following tiers, which apply to monthly water use:

- Tier 1: 0-10 hcf per month
- Tier 2: 11-16 hcf per month
- Tier 3: 17+ hcf per month

With breakpoints that correspond to the service levels in the cost-of-service analysis, it is possible to calculate the rate per tier by dividing the cost-of-service per tier by the water demand in each tier. The resulting rates represent the unit cost of service for each tier.

Figure 3-19 shows the calculations of the incremental cost per tier. Using the base day service function as an example, \$3,332,147 of the revenue requirement is recovered from Tier 1. All of the water sold, including water in Tiers 2 and 3, benefits from the Tier 1 costs and shares in paying them. Dividing the base day costs by the total demand of 1,288,016 HCF in **Figure 3-19** yields a Tier 1 rate of \$2.59 per HCF.

Demand that does not exceed the 10 hcf Tier 1 breakpoint is only charged the Tier 1 rate. Demand that does not exceed Tier 1 is not responsible for the additional costs of peaking that were allocated to the higher service levels. Bills that exceed Tier 1 pay additional rate increments. The next increment of demand is responsible for the costs allocated to average day service, \$300,478 in **Figure 3-19**. This increment of cost is divided by the demand that exceeds Tier 1, 367,086 hcf, resulting in an incremental Tier 2 rate of \$0.82 per hcf. This incremental increase gets added to the Tier 1 rate to determine the total Tier 2 rate, as shown in **Figure 3-19**.

The calculation of the Tier 3 rate increment proceeds similarly in **Figure 3-19**. It can be seen that the incremental rate for Tier 3 Tier 2. The \$512,343 allocated to the maximum hour service level is only slightly higher, but it is only the highest 168,562 hcf that create the need for this increment of peak capacity, which results in an incremental Tier 3 rate of \$3.04 per hcf. This incremental increase gets added to the Tier 1 and Tier 2 rates to determine the total Tier 3 rate, as shown in **Figure 3-19**.

The incremental rates are additive. In other words, demand in Tier 1 only pays the base day rate. Demand in Tier 2 pays the base day rate plus the average day increment, and so forth. Adding the increments yields the rates per tier. These rates per tier plus a 32% overall rate revenue increase in FY 2023-24 results in the proposed rates per tier in **Figure 3-19**.

Figure 3-19. Incremental Unit Cost – Single Family Residential

Single Family COS per Unit	Base Day	Maximum Day	Maximum Hour
	Tier 1	Tier 2	Tier 3
Single Family COS - Consumption	\$3,332,147	\$300,478	\$512,343
Demand Per Tier			
Tier 1 (0 - 10 hcf)	920,930		
Tier 2 (11 - 16 hcf)	198,524	198,524	
Tier 3 (17+ hcf)	168,562	168,562	168,562
Total hcf per Tier	1,288,016	367,086	168,562
Cost-of-Service per Unit (hcf)	\$2.59	\$0.82	\$3.04
Tier 1 (0 - 10 hcf)	\$2.59	\$2.59	\$2.59
Tier 2 (11 - 16 hcf)		\$0.82	\$0.82
Tier 3 (17+ hcf)			\$3.04
Unit Cost per hcf (by Tier)	\$2.59	\$3.41	\$6.45
<i>FY 2023-24 Rate Increase</i>	<i>32.0%</i>	<i>32.0%</i>	<i>32.0%</i>
Proposed FY 2023-24 Rates	\$3.41	\$4.50	\$8.51

All Other Customers Consumption Charges

It is recommended that the City continue with the same uniform rate structure for all other customers (non-single family residential). The proposed adjustment is intended to increase the uniform rate to re-

align with the cost-of-service for this customer class. The uniform rate is derived by dividing this class's share of the FY 2022-23 revenue requirement by the class's projected annual demand.

Figure 3-20. Calculation All Other Uniform Consumption Charges

All Other Revenue Requirement	\$5,423,826
Projected Demand (hcf)	1,685,411
Uniform Consumption Charge per hcf	\$3.22
<i>FY 2023-24 Rate Increase</i>	<i>32.0%</i>
Proposed FY 2023-24 Rate	\$4.25

Consumption Charge Summary

The five-year schedule of proposed Volume Charge rates for Residential and Non-Residential customers is shown in **Figure 3-21**.

Figure 3-21. Proposed Consumption Charges

Water Consumption Charge (per unit)						
FY 2022-23		FY 2023-24				
Monthly Use	Current Rates	Monthly Use	1/1/2024	7/1/2024	7/1/2025	7/1/2026
Single Family Residential						
Tier 1 (0-6 hcf)	\$2.89	Tier 1 (0 - 10 hcf)	\$3.41	\$3.69	\$3.98	\$4.26
Tier 2 (7-12 hcf)	\$3.15	Tier 2 (11 - 16 hcf)	\$4.50	\$4.86	\$5.24	\$5.61
Tier 3 (13+ hcf)	\$3.37	Tier 3 (17+ hcf)	\$8.51	\$9.19	\$9.92	\$10.62
All Other						
All Consumption	\$3.29	All Consumption	\$4.25	\$4.59	\$4.95	\$5.30

4. SEWER RATE STUDY

A. REVENUE REQUIREMENTS AND FINANCIAL PROJECTIONS

To determine whether additional sewer rate revenue is required, projected operating and capital expenses are compared with projected revenue from current rates. Annual surpluses and deficits are then applied to the reserve funds. Rates are then increased so that the expenses are covered and operating and capital reserves are maintained. The following sections summarize the methodology for determining the annual revenue requirements, the necessary annual revenue increases, and the projected impact these results will have on the Sewer Enterprise fund balance.

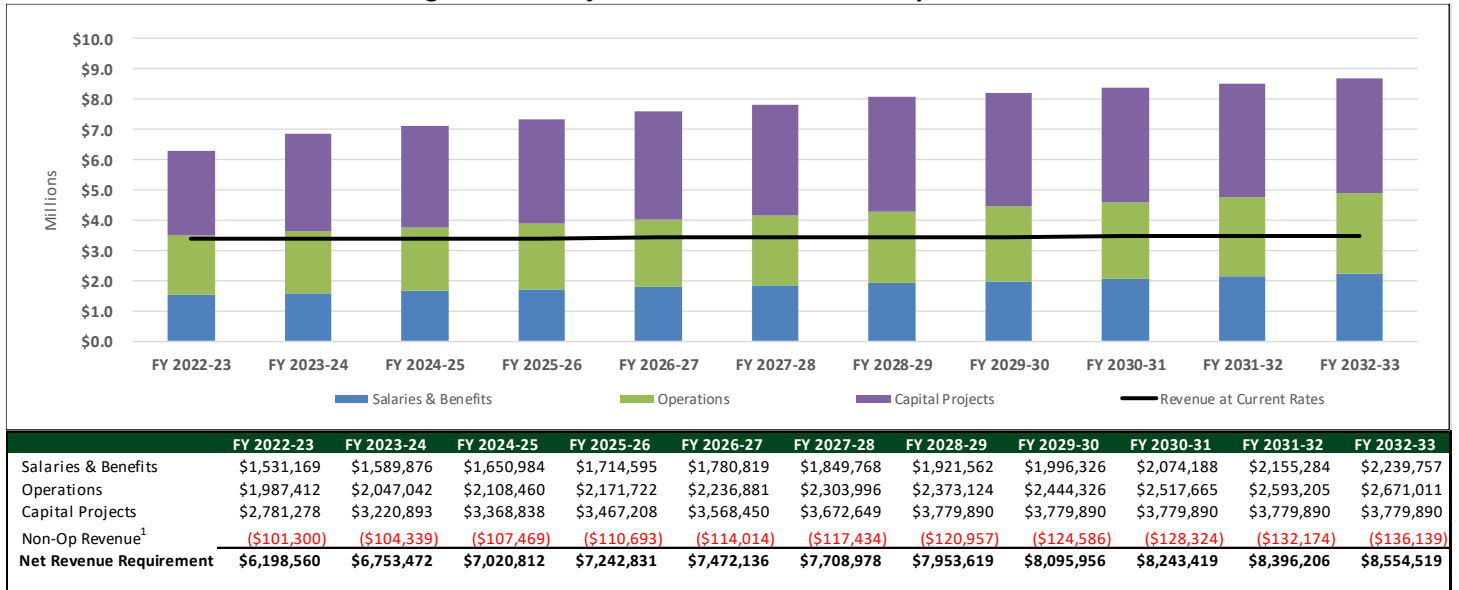
Assumptions

A spreadsheet model was developed to derive revenue requirements for FY 2022-23 through FY 2032-33. The revenue requirements represent the costs that must be covered by revenue from rates and other sources, such as reserves. The City’s Council-approved operating and capital budget for FY 2022-23 served as the starting point for projecting the City’s expenses and revenues over the ten-year financial planning period. We worked with City staff to project beyond FY 2022-23. The assumptions shown in **Figure 4-1** were used to project expenses, account growth, and water demand through FY 2032-33. The application of these assumptions to the O&M and capital expenses are summarized in **Figure 4-2** and are described in more detail below. The revenue from current rates (plus growth) is also shown (dotted black line).

Figure 4-1. Projection Assumptions

	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
Annual Account Growth Rate	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Annual Water Demand Increases	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
General Inflation	Budgeted	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Salaries & Wages	Budgeted	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Benefits	Budgeted	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Utilites	Budgeted	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%
Construction Cost Inflation	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%
Interest on Fund Balance	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%

Figure 4-2. Projected Annual Revenue Requirements



¹ Sewer Non-Operating Revenues include sewer reconstruction fees and the sale of surplus Sewer Enterprise property (e.g., vehicles, computers, equipment) which is not longer needed. These non-operating revenues reduce the necessary revenue that needs to come from rates to cover operating and capital costs.

Revenue Projections

Given the projected O&M and capital costs in **Figure 4-2**, HF&H developed a rate revenue adjustment scenario that maintains adequate fund balances for the ongoing operations of the Sewer Enterprise. These rate revenue adjustments are shown in **Figure 4-3**. **Figure 4-4** shows the projected sewer rate revenue associated with the proposed rate revenue adjustments.

Figure 4-3. Sewer Rate Revenue Adjustments

Fiscal Year	Effective Date	Overall Rate Revenue Increase
FY 2023-24	1/1/2024	40.0%
FY 2024-25	7/1/2024	30.0%
FY 2025-26	7/1/2025	10.0%
FY 2026-27	7/1/2026	10.0%
FY 2027-28	7/1/2027	4.0%
FY 2028-29	7/1/2028	4.0%
FY 2029-30	7/1/2029	3.0%
FY 2030-31	7/1/2030	3.0%
FY 2031-32	7/1/2031	3.0%
FY 2032-33	7/1/2032	3.0%

Figure 4-4. Projected Sewer Rate Revenue

	Months Increase In Effect	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
Sewer Rate Revenue at Current Rates (including growth)		\$3,270,000	\$3,278,175	\$3,286,370	\$3,294,586	\$3,302,822	\$3,311,079	\$3,319,357	\$3,327,655	\$3,335,974	\$3,344,314	\$3,352,675
Increase in Rate Revenue		0.0%	40.0%	30.0%	10.0%	10.0%	5.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Revenue from Rate Increases												
FY 2023-24 (eff. Jan 1, 2024)	6		\$655,635	\$1,314,548	\$1,317,834	\$1,321,129	\$1,324,432	\$1,327,743	\$1,331,062	\$1,334,390	\$1,337,726	\$1,341,070
FY 2024-25 (eff. Jul 1, 2024)	12			\$1,380,275	\$1,383,726	\$1,387,185	\$1,390,653	\$1,394,130	\$1,397,615	\$1,401,109	\$1,404,612	\$1,408,124
FY 2025-26 (eff. Jul 1, 2025)	12				\$599,615	\$601,114	\$602,616	\$604,123	\$605,633	\$607,147	\$608,665	\$610,187
FY 2026-27 (eff. Jul 1, 2026)	12					\$661,225	\$662,878	\$664,535	\$666,197	\$667,862	\$669,532	\$671,206
FY 2027-28 (eff. Jul 1, 2027)	12						\$364,583	\$365,494	\$366,408	\$367,324	\$368,242	\$369,163
FY 2028-29 (eff. Jul 1, 2028)	12							\$230,261	\$230,837	\$231,414	\$231,993	\$232,573
FY 2029-30 (eff. Jul 1, 2029)	12								\$237,762	\$238,357	\$238,953	\$239,550
FY 2030-31 (eff. Jul 1, 2030)	12									\$245,507	\$246,121	\$246,736
FY 2031-32 (eff. Jul 1, 2031)	12										\$253,505	\$254,138
FY 2032-33 (eff. Jul 1, 2032)	12											\$261,763
Total Revenue from Rate Increases		\$0	\$655,635	\$2,694,823	\$3,301,175	\$3,970,653	\$4,345,162	\$4,586,287	\$4,835,514	\$5,093,110	\$5,359,348	\$5,634,509
Total Current Revenue		\$3,270,000	\$3,278,175	\$3,286,370	\$3,294,586	\$3,302,822	\$3,311,079	\$3,319,357	\$3,327,655	\$3,335,974	\$3,344,314	\$3,352,675
Total Revenue with Rate Increases		\$3,270,000	\$3,933,810	\$5,981,193	\$6,595,761	\$7,273,475	\$7,656,241	\$7,905,644	\$8,163,169	\$8,429,084	\$8,703,662	\$8,987,184
Total Revenue Requirement		\$6,198,560	\$6,753,472	\$7,020,812	\$7,242,831	\$7,472,136	\$7,708,978	\$7,953,619	\$8,095,956	\$8,243,419	\$8,396,206	\$8,554,519
Transfer to/(from) Reserves		(\$2,928,560)	(\$2,819,662)	(\$1,039,619)	(\$647,070)	(\$198,661)	(\$52,737)	(\$47,975)	\$67,213	\$185,665	\$307,456	\$432,665

Sewer Reserve Fund Balance Projections

The rate adjustments in **Figure 4-2** were developed by analyzing the City’s projected expenses over the course of the planning period against its projected revenues.

In addition to covering annual expenses, sewer service charges need to generate revenue to maintain adequate operations and capital reserves. To determine what constitutes adequate reserve amounts, the City’s Sewer Enterprise fund balance is divided into operating and capital reserves. Recommended target balances are set to fund each reserve. The resulting cash balances with the recommended revenue increase shown in **Figure 4-2**, is represented by the solid green line in **Figure 4-5**. In addition, **Figure 4-5** shows the projected annual fund balances without the revenue increases (dotted green line). As shown, without any rate increase, the fund balance will be fully depleted sometime before the end of FY 2024-25.

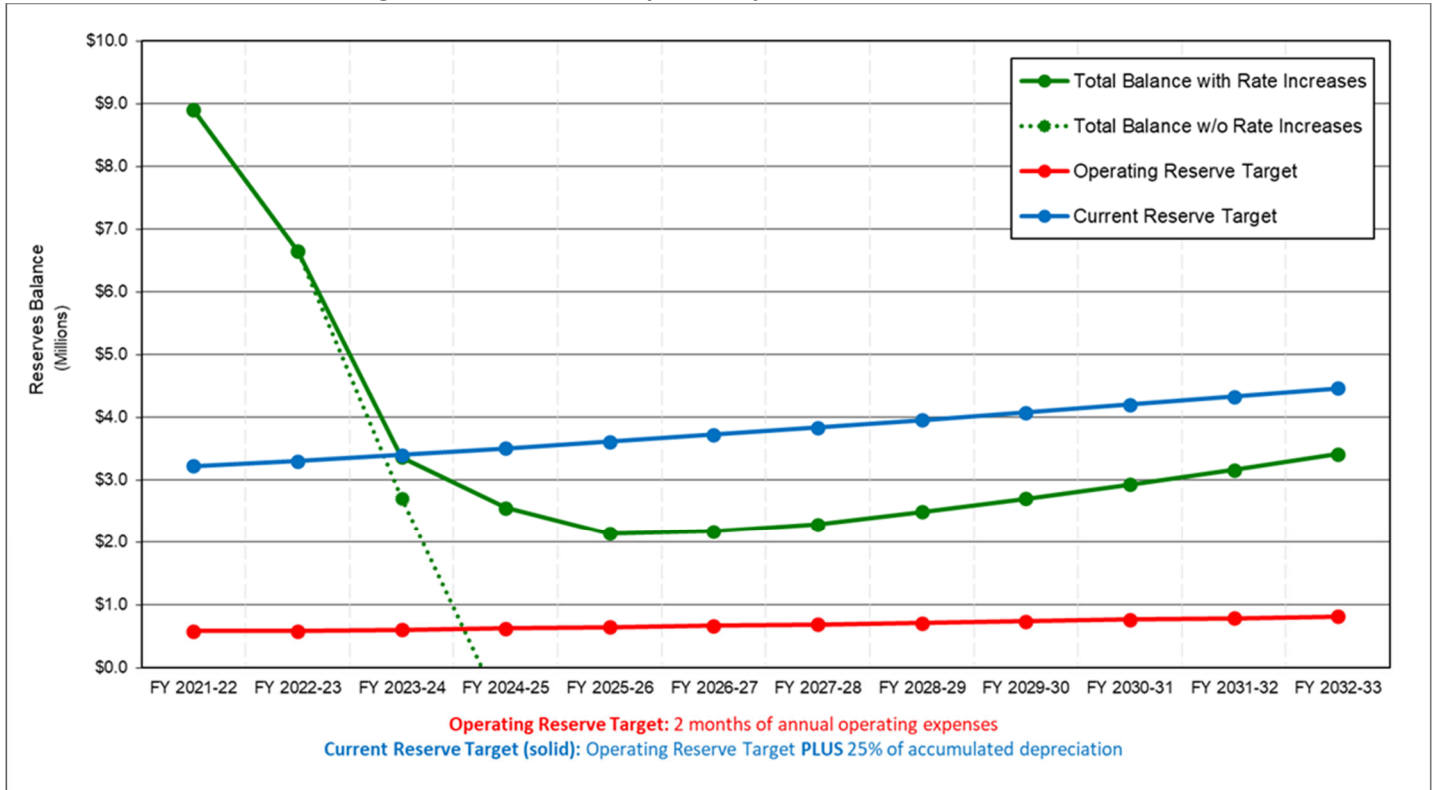
The cash reserve targets used in **Figure 4-5** are as follows:

Operating Reserve. The operating component of the reserves provides working capital for month-to-month O&M expenditures. With sufficient working capital, the City can operate without cash flow constraints. The City’s reserve policy is two months of operating expenses. The City’s reserves should never drop below this minimum balance. The operating reserve target is represented by the red line in **Figure 4-5**.

Capital Reserve. The capital component of the reserves provides working capital for the City’s capital improvement projects. The fund balance needs to be sufficient to at least pay contractors without delays caused by cash flow limitations. The fund balance can be larger so that the City can fund larger construction projects on a pay-as-you-go basis, thereby eliminating financing costs. The City’s reserve policy for the capital reserve is 25% of accumulated depreciation of capital assets.

Total Reserve Target. The total reserve target for the City is the sum of the target balances for the operating reserve and capital reserve. The target balance is represented by the blue line in Figure 4-5.

Figure 4-5. Sewer Enterprise Projected Fund Balance



B. COST-OF-SERVICE ANALYSIS

The total revenue requirement for FY 2022-23 of \$6,198,560, as shown in **Figure 4-2**, was used as the starting point for the cost-of-service and rate design analysis. To reduce rate impacts to consumers, our analysis assumes the use of reserves to partially offset the rate increases to be effective January 1, 2024. The need for additional rate increases to cover operating and capital cost increases, and rebuild reserves, will be spread over the five-year planning period, as shown in **Figure 4-3**.

Analytical Approach

The sewer cost-of-service analysis differs from the water cost-of-service analysis because providing wastewater collection services should only account for the consideration of account versus flow, which is different from providing water service where peak demands and capacity are a primary consideration. The cost-of-service analysis in this report follows wastewater rate-making techniques promulgated by the Water Environment Federation, which is the wastewater industry's equivalent to the American Water Works Association.

The analytical procedure contains the following steps:

1. **Service function cost classification** – The City's budget is summarized into service function cost categories, which is needed for allocating costs that will be used for calculating rates.
2. **Demand service function allocation percentages** – Account and conveyance allocation factors are needed to apportion costs related to the demand service functions and to customer classes.
3. **Service function allocations** – Costs from Step 1 are allocated to the account and conveyance service functions from Step 2.
4. **Customer class allocations** – The costs allocated to the demand service function in Step 3 are further apportioned between three customer classes.

This sequence of steps is further explained below. The steps constitute the cost-of-service analysis, which converts the revenue requirement for FY 2022-23 into the eventual cost-of-service for sewer service charges.

Allocation Factors

Conveyance Services: Collection system O&M and capital costs including lift stations sewer mains.

Customer Accounts: Billing, accounting, customer service, and other costs related to the operations of the sewer system that aren't directly attributable to conveyance/flow.

Composite Services: Indirect allocations for costs that are not directly related to specific service functions: personnel, overhead, non-operating revenue.

The allocation factors that apply to the three different cost categories are summarized in **Figure 4-6**. With these allocation factors, rates can be designed to proportionately charge customers based on their demands.

Figure 4-6. Allocation Factors

Cost Allocation Factors	Accounts	Flow
Conveyance	0%	100%
Accounts	100%	0%
Rev. Req. Composite	15%	85%

Cost Allocations

Figure 4-7 shows the FY 2022-23 net revenue requirement allocated into flow and customer services. Each line item was classified according to the associated function. The allocation factors that are summarized in Figure 4-6 allocate the costs across the services based on the allocation factor column in Figure 4-7.

Figure 4-7. Net Revenue Requirement Allocations

Revenue Requirement Allocation	Rev Req't FY 2022-23	Allocation Type	Cost Allocation		Total
			Accounts	Flow	
Operations & Maintenance					
Revenue Collection	\$186,696	Accounts	\$186,696	\$0	\$186,696
Building & Safety	\$213,808	Accounts	\$213,808	\$0	\$213,808
Sanitary Sewer Maintenance	\$2,465,532	Conveyance	\$0	\$2,465,532	\$2,465,532
Maintenance	\$86,025	Accounts	\$86,025	\$0	\$86,025
Engineering	\$474,969	Accounts	\$474,969	\$0	\$474,969
Post Employment	\$66,929	Accounts	\$66,929	\$0	\$66,929
Storm Drain Maintenance	\$24,622	Conveyance	\$0	\$24,622	\$24,622
Non Operating Revenue	(\$101,300)	Accounts	(\$101,300)	\$0	(\$101,300)
Total O&M	\$3,417,281		\$927,128	\$2,490,153	\$3,417,281
<i>O&M Composite</i>	<i>100%</i>		<i>27%</i>	<i>73%</i>	<i>100%</i>
Capital Improvements	\$2,781,278	Conveyance	\$0	\$2,781,278	\$2,781,278
Total Revenue Requirement	\$6,198,560		\$927,128	\$5,271,432	\$6,198,560
<i>Rev. Req. Composite</i>	<i>100%</i>		<i>15%</i>	<i>85%</i>	<i>100%</i>
Transfer from Operating Reserves	(\$2,928,560)	Rev. Req. Composite	(\$438,029)	(\$2,490,531)	(\$2,928,560)
Net Revenue Requirement	\$3,270,000		\$489,099	\$2,780,901	\$3,270,000

Cost of Service by Customer Class

The results of the cost-of-service allocations are shown in Figure 4-8. Additionally, Figure 4-8 calculates the unit costs of the sewer system on a per account and per hundred cubic feet (HCF; which is 748.052 gallons) of flow basis. The units of service for flow are based on winter water use of each customer class. The unit costs multiplied by the units of service for each customer class results in the revenue that needs to be generated by each customer class.

Figure 4-8. Cost-of-Service Allocation to Customer Classes

				Total
Units of Service by Customer Class		Accounts	Flow (HCF)	
Single Family (accounts/flow)	a	10,615	1,142,472	
Multi Family (dwelling units/flow)	b	8,630	928,998	
Commercial & Institutional (accounts/flow)	c	907	641,766	
	d = a+b+c	20,152	2,713,236	
Functional Costs [1]				
Operations & Maintenance		\$927,128	\$2,490,153	\$3,417,281
Capital Improvements		\$0	\$2,781,278	\$2,781,278
Transfers		(\$438,029)	(\$2,490,531)	(\$2,928,560)
	e	\$489,099	\$2,780,901	\$3,270,000
Unit Cost Calculations				
Units of Service Total	f = d	20,152	2,713,236	
Unit Cost of Service		g = e ÷ f		
		\$24.27	\$1.02	
		per account/ dwelling unit	per HCF	
Cost of Service by Customer Class				
Single Family	h = a * g	\$257,631	\$1,170,964	\$1,428,595
Multi Family	i = b * g	\$209,454	\$952,166	\$1,161,620
Commercial & Institutional	j = c * g	\$22,013	\$657,771	\$679,784
		\$489,099	\$2,780,901	\$3,270,000
		15%	85%	100%

1. Source: Figure 4-7

C. RATE DESIGN

The City's sewer customers currently pay a fixed monthly sewer rate based on water meter size and customer class.

- **Single Family.** Water meter sizes for single family customers range from 5/8" to 1.5". The current monthly sewer service rate increases as the water meter size increases. The size of a customer's water meter is not necessarily indicative of how much water is discharged into the City's sewer collection system. Typically, single family customers only "size up" their water meters for fire protection requirements or for increased flow for outdoor irrigation purposes, neither of which contributes to an increase in wastewater volume. Therefore, we recommend charging single family customers based on a fixed monthly sewer rate regardless of meter size.
- **Multi Family.** Water meter sizes for multi family customers range from 3/4" to 4". The current monthly sewer service rate increases as the water meter size increases. The size of a customer's water meter is not necessarily indicative of how much water is discharged into the City's sewer collection system. Like single family customers, multi family customers may "size up" their water meters for non-wastewater purposes (e.g., irrigation and fire flow) but also to meet the water demands for each dwelling unit. Therefore, we recommend charging multi family customers based on a fixed monthly sewer rate based on the number of dwelling units regardless of meter size.
- **Commercial & Institutional.** Water meter sizes for commercial and institutional (C&I) customers range from 3/4" to 6". The current monthly sewer service rate increases as the water meter size increases. Unlike residential customers, typically C&I customers have separate irrigation and fire flow meters. As such, the City's current rate structure for C&I customers is appropriate. Therefore, we recommend that C&I customers maintain their current rate structure based on meter size.

Fixed and Variable Costs

Since the proposed sewer rates will be a fixed amount per month and not based on the flows of each customer, since sewer water use is not metered, the "flow" portion of the cost-of-service needs to be reallocated to the fixed portion. **Figure 4-9** shows the annual per unit cost for each customer class after the variable costs have been reallocated to be recovered by the fixed monthly charge for each customer class.

Figure 4-9. Unit Costs by Customer Class

Unit Cost by Customer Class	
Customer Class	Total Costs ¹
Single Family	\$1,428,595
Multi Family	\$1,161,620
C&I	\$679,784
Total	\$3,270,000

Customer Class	Units
Single Family (accounts)	10,615
Multi Family (dwelling units)	8,630
C&I (EMUs)	2,898

Unit Costs	Annual Cost per Unit
Single Family	\$134.58
Multi Family	\$134.60
C&I	\$234.57

¹ Source: Figure 4-8

Residential Rate Design

Figure 4-9 calculated the annual per unit rate for each the single family and multi family customer classes. The single family customers will be charged on a per account basis and the multi family customers will be charged on a per dwelling unit basis. Figure 4-10 shows the derivation for the monthly per unit rates for FY 2023-24.

Figure 4-10. Derivation of Monthly Residential Rates

Customer Type	FY 2023-24 Annual Cost per Unit ¹	FY 2022-23 Cost per Month	Rate Revenue Increase ²	FY 2023-24 Proposed Rate
Single Family	\$134.58	\$11.22	40.0%	\$15.70
Multi Family	\$134.60	\$11.22	40.0%	\$15.70

¹ Source: Figure 4-9

² Source: Figure 4-3

Commercial and Institutional Rate Design

Figure 4-9 calculated the annual per unit rate for each the commercial and institutional customer class. This class will be charged on a per EMU basis. Meter size can be used a proxy for water use and therefore wastewater volume. The capacity multipliers are the same multipliers used in the water rates. Figure 4-11 shows the derivation for the monthly per unit rates for FY 2023-24.

Figure 4-11. C&I Monthly Rate Calculation

C&I Meter Size	Capacity Multiplier	Rate per EMU ¹	FY 2022-23		Rate Revenue Increase ²	FY 2023-24 Proposed Rate
			FY 2022-23 Annual Cost	Cost per Month		
3/4" Meters	1.00	\$234.57	\$234.57	\$19.55	40.0%	\$27.37
1" Meters	1.67	\$234.57	\$390.95	\$32.58	40.0%	\$45.61
1.5" Meters	3.33	\$234.57	\$781.90	\$65.16	40.0%	\$91.22
2" Meters	5.33	\$234.57	\$1,251.04	\$104.25	40.0%	\$145.95
3" Meters	10.67	\$234.57	\$2,502.08	\$208.51	40.0%	\$291.91
4" Meters	16.67	\$234.57	\$3,909.50	\$325.79	40.0%	\$456.11
6" Meters	33.33	\$234.57	\$7,819.01	\$651.58	40.0%	\$912.21
8" Meters	53.33	\$234.57	\$12,510.41	\$1,042.53	40.0%	\$1,459.54

¹ Source: Figure 4-9

² Source: Figure 4-3

Proposed Rates

Figure 4-12 shows the summary of the proposed sewer rates through FY 2027-28.

Figure 4-12. Proposed Sewer Rates

Customer Class	Current Units	Monthly Sewer Rates						
		Current FY 2022-23	Proposed Units	Proposed				
				FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Single Family			<i>effective date</i>	1/1/2024	7/1/2024	7/1/2025	7/1/2026	7/1/2027
5/8", 3/4"	account	\$10.17	per account/DU	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
1"	account	\$12.42	per account/DU	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
1 1/2"	account	\$12.86	per account/DU	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
Multi Family								
3/4"	account	\$29.01	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
1"	account	\$34.76	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
1 1/4"	account	\$57.25	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
1 1/2"	account	\$84.15	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
2"	account	\$161.22	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
3"	account	\$413.02	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
4"	account	\$534.30	per dwelling unit	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
Commercial								
3/4"	account	\$27.09	account	\$27.37	\$35.58	\$39.14	\$43.05	\$44.78
1"	account	\$40.68	account	\$45.61	\$59.30	\$65.23	\$71.75	\$74.62
1 1/4"	account	\$40.68	account	\$91.22	\$118.59	\$130.45	\$143.50	\$149.24
1 1/2"	account	\$78.41	account	\$145.95	\$189.74	\$208.71	\$229.58	\$238.76
2"	account	\$198.97	account	\$291.91	\$379.49	\$417.44	\$459.18	\$477.55
3"	account	\$270.68	account	\$456.11	\$592.94	\$652.23	\$717.45	\$746.15
4"	account	\$386.69	account	\$912.21	\$1,185.88	\$1,304.46	\$1,434.91	\$1,492.31
6"	account	\$1,052.20	account	\$1,459.54	\$1,897.40	\$2,087.15	\$2,295.86	\$2,387.69
Institutional								
3/4"	account	\$46.29	account	\$27.37	\$35.58	\$39.14	\$43.05	\$44.78
2"	account	\$68.48	account	\$291.91	\$379.49	\$417.44	\$459.18	\$477.55
3"	account	\$73.29	account	\$456.11	\$592.94	\$652.23	\$717.45	\$746.15
4"	account	\$168.28	account	\$912.21	\$1,185.88	\$1,304.46	\$1,434.91	\$1,492.31

5. CUSTOMER BILL IMPACTS

Note: The following monthly bill comparisons are based on “typical” customers or customers that are most representative of a group of customers. The typical customer is based on the most common meter sizes for the class and the average water use for customers of that type. Customer bills for customers using more or less water than average will see different results.

BILL COMPARISONS

Figure 5-1 shows the comparison of a sample single family residential customer bill (including both water and sewer charges) with a 3/4” meter and using 10 hcf per month, which is the average water use by single family customers.

Figure 5-1. Single Family Residential Combined Monthly Bill Impact

	Current	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Assumptions						
Meter Size	3/4" meter	3/4" meter				
Water Consumption	10	10				
Water						
Fixed Service Charge	\$19.20	\$27.18	\$29.36	\$31.71	\$33.93	\$36.64
Consumption Charge	\$21.76	\$34.15	\$36.88	\$39.83	\$42.62	\$46.03
37.5% Surcharge	\$15.36	n/a	n/a	n/a	n/a	n/a
Total	\$56.32	\$61.33	\$66.24	\$71.54	\$76.55	\$82.67
Increase/(Decrease)		\$5.01	\$4.91	\$5.30	\$5.01	\$6.12
Sewer						
Charge per account	\$10.17	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
Total	\$10.17	\$15.71	\$20.42	\$22.46	\$24.71	\$25.70
Increase/(Decrease)		\$5.54	\$4.71	\$2.04	\$2.25	\$0.99
Total Monthly Bill	\$66.49	\$77.04	\$86.66	\$94.00	\$101.25	\$108.37
Increase/(Decrease)		\$10.55	\$9.62	\$7.34	\$7.25	\$7.11

Figure 5-2 shows the comparison of a sample 10-unit multi family residential customer with a 2” meter and using 90 hcf per month.

Figure 5-2. Multi Family Residential Combined Monthly Bill Impact

	Current	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Assumptions						
Meter Size	2" meter	2" meter				
Water Consumption	90	90				
Dwelling Units	10	10				
Water						
Fixed Service Charge	\$42.15	\$118.52	\$128.00	\$138.24	\$147.91	\$159.75
Consumption Charge	\$215.10	\$382.31	\$412.90	\$445.93	\$477.14	\$515.31
37.5% Surcharge	\$96.47	n/a	n/a	n/a	n/a	n/a
Total	\$353.72	\$500.83	\$540.89	\$584.16	\$625.06	\$675.06
Increase/(Decrease)		\$147.11	\$40.07	\$43.27	\$40.89	\$50.00
Sewer						
Charge per account	\$161.22	\$157.08	\$204.20	\$224.62	\$247.09	\$256.97
Total	\$161.22	\$157.08	\$204.20	\$224.62	\$247.09	\$256.97
Increase/(Decrease)		(\$4.14)	\$47.12	\$20.42	\$22.46	\$9.88
Total Monthly Bill	\$514.94	\$657.91	\$745.10	\$808.79	\$872.14	\$932.03
Total Increase/(Decrease)		\$142.97	\$87.19	\$63.69	\$63.35	\$59.89
Increase/Decrease per DU		\$14.30	\$8.72	\$6.37	\$6.34	\$5.99

Figure 5-3 shows the comparison of a sample commercial or institutional customer with a 1" meter and using 53 hcf per month.

Figure 5-3. Commercial and Institutional Combined Monthly Bill Impact

	Current	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Assumptions						
Meter Size	1" meter	1" meter				
Water Consumption	53	53				
Sewered Flow	53	53				
Water						
Fixed Service Charge	\$20.75	\$41.23	\$44.53	\$48.10	\$51.46	\$55.58
Consumption Charge	\$126.67	\$225.14	\$243.15	\$262.60	\$280.98	\$303.46
37.5% Surcharge	\$55.28	n/a	n/a	n/a	n/a	n/a
Total	\$202.70	\$266.37	\$287.68	\$310.70	\$332.45	\$359.04
Increase/(Decrease)		\$63.67	\$21.31	\$23.01	\$21.75	\$26.60
Sewer						
Charge per account	\$40.68	\$45.61	\$59.30	\$65.23	\$71.75	\$74.62
Total	\$40.68	\$45.61	\$59.30	\$65.23	\$71.75	\$74.62
Increase/(Decrease)		\$4.93	\$13.68	\$5.93	\$6.52	\$2.87
Total Monthly Bill	\$243.38	\$311.98	\$346.98	\$375.92	\$404.19	\$433.66
Increase/(Decrease)		\$68.60	\$34.99	\$28.94	\$28.27	\$29.47

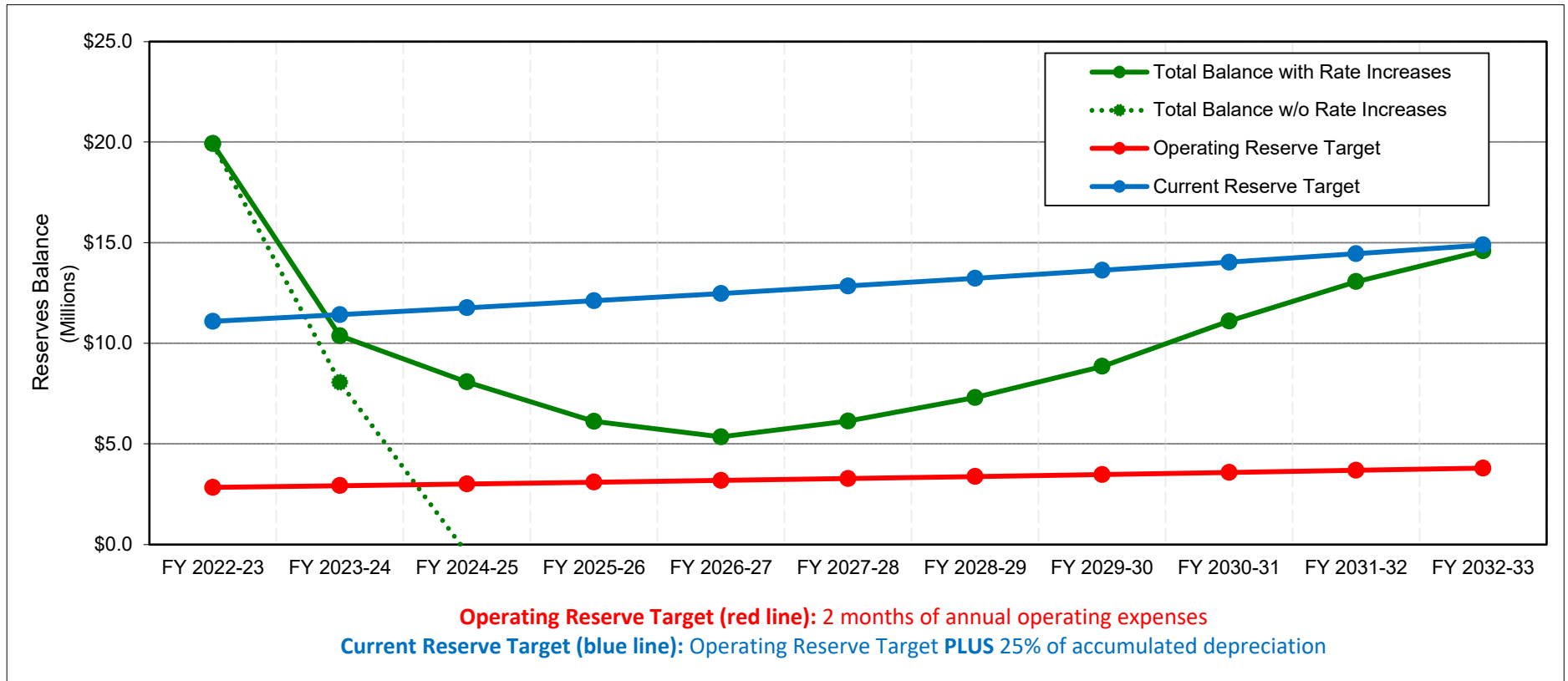


UTILITY RATE STUDY

Appendix A. Water Rate Model
Appendix B. Sewer Rate Model

	A	B	D	E	F	G	H	I	J	K	L	M	N
1	City of Monterey Park												
2	Water Rate Model												
3	1A - Summary												
4													
5	Fiscal year	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33		
6	Eff. Date	1/1/2024	7/1/2024	7/1/2025	7/1/2026	7/1/2027	7/1/2028	7/1/2029	7/1/2030	7/1/2031	7/1/2032		

8	Annual Rate Revenue Increases	32.0%	8.0%	8.0%	7.0%	8.0%	3.0%	3.0%	0.0%	0.0%	0.0%		
9	Cumulative Revenue Increases	32.0%	42.6%	54.0%	64.7%	77.9%	83.3%	88.8%	88.8%	88.8%	88.8%		
10	Parity Debt Coverage	7.63	38.39	36.59	47.44	61.50	65.24	69.19	65.67	N/A	N/A		
11										debt paid off			



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		City of Monterey Park													
2		Water Rate Model													
3		1B - Assumptions													
4															
5															
6															
7	a	Annual Account Growth Rate		0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
8	b	Annual Water Demand Increases		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
9	c	General Inflation	Budgeted	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
10	d	Salaries & Wages	Budgeted	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
11	e	Benefits	Budgeted	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
12	f	Utilities	Budgeted	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%
13	g	Construction Cost Inflation		2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%	2.92%
14	h	Interest on Fund Balance		0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
15	i	Annual SFR conservation reduction		0.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
16	n														

Notes

Estimate; To Tabs 3, 4, 7

ENR CCI Index LA Average annual change 2013 - 2022

To Tab 4

To Tab 3

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	City of Monterey Park													
2	Water Rate Model													
3	2 - Rev Reqmts													
4														
5	Object Description	Inflation Factor	Budgeted FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	Notes
6	Salaries & Benefits													
7	PERMANENT SALARIES	d	\$2,357,744	\$2,428,476	\$2,501,331	\$2,576,371	\$2,653,662	\$2,733,272	\$2,815,270	\$2,899,728	\$2,986,720	\$3,076,321	\$3,168,611	
8	PART TIME SALARIES	d	\$163,399	\$168,301	\$173,350	\$178,550	\$183,907	\$189,424	\$195,107	\$200,960	\$206,989	\$213,198	\$219,594	
9	OVERTIME SALARIES	d	\$85,707	\$88,276	\$90,926	\$93,654	\$96,464	\$99,357	\$102,338	\$105,408	\$108,571	\$111,828	\$115,183	
10	MEDICARE INSURANCE	e	\$36,631	\$38,462	\$40,385	\$42,405	\$44,525	\$46,751	\$49,089	\$51,543	\$54,120	\$56,826	\$59,668	
11	MEDICAL INSURANCE	e	\$447,323	\$469,690	\$493,174	\$517,833	\$543,724	\$570,911	\$599,456	\$629,429	\$660,900	\$693,945	\$728,643	
12	MEDICAL INS RETIREES	e	\$190,260	\$199,773	\$209,762	\$220,250	\$231,262	\$242,825	\$254,967	\$267,715	\$281,101	\$295,156	\$309,913	
13	DENTAL INSURANCE	e	\$34,372	\$36,090	\$37,895	\$39,790	\$41,779	\$43,868	\$46,061	\$48,365	\$50,783	\$53,322	\$55,988	
14	VISION PLAN	e	\$11,715	\$12,301	\$12,916	\$13,562	\$14,240	\$14,952	\$15,700	\$16,485	\$17,309	\$18,174	\$19,083	
15	LONG TERM DISABILITY	e	\$13,504	\$14,180	\$14,889	\$15,633	\$16,415	\$17,235	\$18,097	\$19,002	\$19,952	\$20,950	\$21,997	
16	LIFE INSURANCE	e	\$9,191	\$9,650	\$10,133	\$10,639	\$11,171	\$11,730	\$12,316	\$12,932	\$13,579	\$14,258	\$14,970	
17	RETIREMENT	e	\$255,212	\$267,972	\$281,371	\$295,439	\$310,211	\$325,722	\$342,008	\$359,108	\$377,064	\$395,917	\$415,713	
18	PART TIME RETIREMENT	e	\$3,371	\$3,539	\$3,716	\$3,902	\$4,097	\$4,302	\$4,517	\$4,743	\$4,980	\$5,229	\$5,491	
19	401 DEFERRED COMP	e	\$53,122	\$55,778	\$58,567	\$61,495	\$64,570	\$67,798	\$71,188	\$74,747	\$78,485	\$82,409	\$86,529	
20	SEPARATION BENEFIT	e	\$85,730	\$90,016	\$94,517	\$99,243	\$104,205	\$109,415	\$114,866	\$120,560	\$126,602	\$132,995	\$139,645	
21	PENSION CHARGES	e	\$330,177	\$346,686	\$364,020	\$382,221	\$401,332	\$421,388	\$442,468	\$464,592	\$487,821	\$512,212	\$537,823	
22	OPEB CHARGES	e	\$82,734	\$86,871	\$91,214	\$95,775	\$100,564	\$105,592	\$110,872	\$116,415	\$122,236	\$128,348	\$134,765	
23	WORKERS COMPENSATION	e	\$299,806	\$314,796	\$330,536	\$347,063	\$364,416	\$382,637	\$401,769	\$421,857	\$442,950	\$465,098	\$488,253	
24	Subtotal		\$4,459,996	\$4,630,859	\$4,808,701	\$4,993,824	\$5,186,544	\$5,387,190	\$5,596,100	\$5,813,660	\$6,040,221	\$6,276,186	\$6,521,969	
25														
26	Operations													
27	OTHER GOVT AGENCIES	c	\$73,000	\$75,190	\$77,446	\$79,769	\$82,162	\$84,627	\$87,166	\$89,781	\$92,474	\$95,248	\$98,106	
28	DUES MEMBERSHIPS	c	\$12,800	\$13,184	\$13,580	\$13,987	\$14,407	\$14,839	\$15,284	\$15,742	\$16,215	\$16,701	\$17,202	
29	WEBSITE MAINTENANCE	c	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
30	OTHER PROFESSIONAL SERVICES	c	\$1,157,300	\$1,192,019	\$1,227,780	\$1,264,613	\$1,302,551	\$1,341,628	\$1,381,877	\$1,423,333	\$1,466,030	\$1,510,014	\$1,555,314	
31	DATA PROCESSING	c	\$80,454	\$82,868	\$85,354	\$87,914	\$90,552	\$93,268	\$96,066	\$98,948	\$101,917	\$104,974	\$108,123	
32	SAFETY EDUCATION	c	\$5,700	\$5,871	\$6,047	\$6,229	\$6,415	\$6,608	\$6,806	\$7,010	\$7,221	\$7,437	\$7,660	
33	METER INST ALLATION	c	\$110,000	\$113,300	\$116,699	\$120,200	\$123,806	\$127,520	\$131,346	\$135,286	\$139,345	\$143,525	\$147,831	
34	WATER ASSESSMENT CHARGES	c	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000	
35	LEGAL FEES	c	\$7,500	\$7,725	\$7,957	\$8,195	\$8,441	\$8,695	\$8,955	\$9,224	\$9,501	\$9,786	\$10,079	
36	REPAIR AND MAINT GROUNDS	c	\$60,200	\$62,006	\$63,866	\$65,782	\$67,756	\$69,788	\$71,882	\$74,038	\$76,260	\$78,547	\$80,904	
37	REPAIR AND MAINT BUILDING	c	\$116,239	\$119,727	\$123,318	\$127,018	\$130,829	\$134,753	\$138,796	\$142,960	\$147,249	\$151,666	\$156,216	
38	REPAIR AND MAINT OTHER	c	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510	\$23,185	\$23,881	\$24,597	\$25,335	\$26,095	\$26,878	
39	REPAIR AND MAINT MACHINERY	c	\$221,500	\$228,145	\$234,989	\$242,039	\$249,300	\$256,779	\$264,483	\$272,417	\$280,590	\$289,007	\$297,677	
40	REPAIR AND MAINT SEMPRA	c	\$15,000	\$15,450	\$15,914	\$16,391	\$16,883	\$17,389	\$17,911	\$18,448	\$19,002	\$19,572	\$20,159	
41	DUPLICATING EQUIPMENT RENTAL	c	\$6,750	\$6,953	\$7,161	\$7,376	\$7,597	\$7,825	\$8,060	\$8,302	\$8,551	\$8,807	\$9,071	
42	MTCE EQUIP RENTAL	c	\$4,000	\$4,120	\$4,244	\$4,371	\$4,502	\$4,637	\$4,776	\$4,919	\$5,067	\$5,219	\$5,376	
43	EDUCATION TRAINING	c	\$5,000	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796	\$5,970	\$6,149	\$6,334	\$6,524	\$6,720	
44	CONFERENCES	c	\$1,000	\$1,030	\$1,061	\$1,093	\$1,126	\$1,161	\$1,199	\$1,239	\$1,280	\$1,323	\$1,368	
45	ELECTRICITY	f	\$1,196,200	\$1,244,407	\$1,294,556	\$1,346,727	\$1,401,000	\$1,457,460	\$1,516,196	\$1,577,299	\$1,640,864	\$1,706,991	\$1,775,783	
46	GAS SERVICE	f	\$8,600	\$8,947	\$9,307	\$9,682	\$10,072	\$10,478	\$10,901	\$11,340	\$11,797	\$12,272	\$12,767	
47	WATER SERVICE	c	\$45,000	\$46,350	\$47,741	\$49,173	\$50,648	\$52,167	\$53,722	\$55,314	\$56,943	\$58,611	\$60,319	
48	TELEPHONE	c	\$17,787	\$18,321	\$18,870	\$19,436	\$20,019	\$20,620	\$21,259	\$21,927	\$22,623	\$23,348	\$24,104	
49	SOFTWARE HARDWARE	c	\$15,250	\$15,708	\$16,179	\$16,664	\$17,164	\$17,679	\$18,209	\$18,756	\$19,319	\$19,898	\$20,495	
50	SMALL TOOLS	c	\$22,000	\$22,660	\$23,340	\$24,040	\$24,761	\$25,504	\$26,269	\$27,057	\$27,869	\$28,705	\$29,566	
51	POSTAGE	c	\$77,130	\$79,444	\$81,827	\$84,282	\$86,810	\$89,415	\$92,097	\$94,860	\$97,706	\$100,637	\$103,654	
52	OFFICE PAPER PRODUCTS	c	\$4,750	\$4,893	\$5,039	\$5,190	\$5,346	\$5,507	\$5,672	\$5,842	\$6,017	\$6,198	\$6,384	
53	OTHER OFFICE SUPPLIES	c	\$4,900	\$5,047	\$5,198	\$5,354	\$5,515	\$5,680	\$5,851	\$6,026	\$6,207	\$6,393	\$6,585	
54	CLEANING SUPPLIES	c	\$700	\$721	\$743	\$765	\$788	\$811	\$836	\$861	\$887	\$913	\$941	
55	OTHER OPERATING SUPPLIES	c	\$8,300	\$8,549	\$8,805	\$9,070	\$9,344	\$9,622	\$9,911	\$10,208	\$10,514	\$10,830	\$11,155	
56	UNIFORM	c	\$8,100	\$8,343	\$8,593	\$8,851	\$9,117	\$9,390	\$9,672	\$9,962	\$10,261	\$10,569	\$10,886	
57	ENGINEERING SUPPLIES	c	\$1,000	\$1,030	\$1,061	\$1,093	\$1,126	\$1,161	\$1,199	\$1,239	\$1,280	\$1,323	\$1,368	
58	TRAFFIC SUPPLIES	c	\$7,100	\$7,313	\$7,532	\$7,758	\$7,991	\$8,231	\$8,478	\$8,732	\$8,994	\$9,264	\$9,542	
59	PAINT SUPPLIES	c	\$2,800	\$2,884	\$2,971	\$3,060	\$3,151	\$3,246	\$3,344	\$3,444	\$3,547	\$3,653	\$3,763	
60	OTHER REPAIR MAINT SUPPLIES	c	\$6,300	\$6,489	\$6,684	\$6,884	\$7,091	\$7,303	\$7,523	\$7,748	\$7,981	\$8,220	\$8,467	
61	ROAD REPAIR SUPPLIES	c	\$2,000	\$2,060	\$2,122	\$2,185	\$2,251	\$2,319	\$2,388	\$2,460	\$2,534	\$2,610	\$2,688	
62	EQUIPMENT SUPPLIES	c	\$106,100	\$109,283	\$112,561	\$115,938	\$119,416	\$122,999	\$126,689	\$130,490	\$134,404	\$138,436	\$142,590	
63	ELECTRICAL SUPPLIES	c	\$50,300	\$51,809	\$53,363	\$54,964	\$56,613	\$58,311	\$60,060	\$61,863	\$63,719	\$65,630	\$67,599	
64	WATER SUPPLIES	c	\$1,400,000	\$1,442,000	\$1,485,260	\$1,529,818	\$1,575,712	\$1,622,984	\$1,671,673	\$1,721,823	\$1,773,478	\$1,826,682	\$1,881,483	
65	LANDSCAPING	c	\$2,000	\$2,060	\$2,122	\$2,185	\$2,251	\$2,319	\$2,388	\$2,460	\$2,534	\$2,610	\$2,688	
66	BLUEPRINTS	c	\$500	\$515	\$530	\$546	\$563	\$580	\$597	\$615	\$633	\$652	\$672	
67	PRINTING	c	\$12,600	\$12,978	\$13,367	\$13,768	\$14,181	\$14,607	\$15,045	\$15,496	\$15,961	\$16,440	\$16,933	
68	BOOKS AND SUBSCRIPTIONS	c	\$500	\$515	\$530	\$546	\$563	\$580	\$597	\$615	\$633	\$652	\$672	
69	BROCHURES	c	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
70	UNIFORM	c	\$22,500	\$23,275	\$24,070	\$24,886	\$25,724	\$26,594	\$27,496	\$28,430	\$29,397	\$30,397	\$31,430	
71	ADMINISTRATIVE OVERHEAD	c	\$727,337	\$749,157	\$771,632	\$794,781	\$818,624	\$843,183	\$868,478	\$894,533	\$921,369	\$949,010	\$977,480	
72	TECHNOLOGY CHARGES	c	\$86,251	\$88,839	\$91,504	\$94,249	\$97,076	\$99,989	\$102,988	\$106,078	\$109,260	\$112,538	\$115,914	
73	MOTOR POOL CHARGES	c	\$665,741	\$685,714	\$706,285	\$727,474	\$749,298	\$771,777	\$794,930	\$818,778	\$843,341	\$868,642	\$894,701	
74	GENERAL LIABILITY	c	\$2,074,844	\$2,137,089	\$2,201,202	\$2,267,238	\$2,335,255	\$2,405,313	\$2,477,427	\$2,551,796	\$2,628,350	\$2,707,200	\$2,788,417	
75	OTHER PAYMENTS	c	\$1,726,933	\$1,778,741	\$1,832,103	\$1,887,066	\$1,943,678	\$2,001,989	\$2,062,048	\$2,123,910	\$2,187,627	\$2,253,256	\$2,320,854	
76	Subtotal		\$12,599,966	\$12,918,375	\$13,246,836	\$13,58								

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	City of Monterey Park													
2	Water Rate Model													
3	3A - Rev Increases													
4														
5														
6														
7														
8														
9	Water Rate Revenue		\$14,367,574	\$14,432,107	\$14,539,887	\$14,648,625	\$14,758,330	\$14,869,013	\$14,980,683	\$15,093,350	\$15,207,024	\$15,321,715	\$15,437,433	
10														
11														
12	Increase in Rate Revenue		0.0%	32.0%	8.0%	8.0%	7.0%	8.0%	3.0%	3.0%	0.0%	0.0%	0.0%	From Tab 1B
13														
14														
15	Revenue from Rate Increases													
16														
17														
18	FY 2023-24 (eff. Jan 1, 2024)	6		\$2,309,137	\$4,652,764	\$4,687,560	\$4,722,666	\$4,758,084	\$4,793,819	\$4,829,872	\$4,866,248	\$4,902,949	\$4,939,979	
19	FY 2024-25 (eff. Jul 1, 2024)	12			\$1,535,412	\$1,546,895	\$1,558,480	\$1,570,168	\$1,581,960	\$1,593,858	\$1,605,862	\$1,617,973	\$1,630,193	
20	FY 2025-26 (eff. Jul 1, 2025)	12				\$1,670,646	\$1,683,158	\$1,695,781	\$1,708,517	\$1,721,366	\$1,734,331	\$1,747,411	\$1,760,608	
21	FY 2026-27 (eff. Jul 1, 2026)	12					\$1,590,584	\$1,602,513	\$1,614,549	\$1,626,691	\$1,638,942	\$1,651,303	\$1,663,775	
22	FY 2027-28 (eff. Jul 1, 2027)	12						\$1,959,645	\$1,974,362	\$1,989,211	\$2,004,193	\$2,019,308	\$2,034,559	
23	FY 2028-29 (eff. Jul 1, 2028)	12							\$799,617	\$805,630	\$811,698	\$817,820	\$823,996	
24	FY 2029-30 (eff. Jul 1, 2029)	12								\$829,799	\$836,049	\$842,354	\$848,716	
25	FY 2030-31 (eff. Jul 1, 2030)	12									\$0	\$0	\$0	
26	FY 2031-32 (eff. Jul 1, 2031)	12										\$0	\$0	
27	FY 2032-33 (eff. Jul 1, 2032)	12											\$0	
28														
29	Total Revenue from Rate Increases		\$0	\$2,309,137	\$6,188,176	\$7,905,101	\$9,554,888	\$11,586,191	\$12,472,823	\$13,396,428	\$13,497,322	\$13,599,118	\$13,701,827	
30	Total Current Revenue		\$14,367,574	\$14,432,107	\$14,539,887	\$14,648,625	\$14,758,330	\$14,869,013	\$14,980,683	\$15,093,350	\$15,207,024	\$15,321,715	\$15,437,433	From above
31	Total Revenue with Rate Increases		\$14,367,574	\$16,741,245	\$20,728,063	\$22,553,726	\$24,313,218	\$26,455,205	\$27,453,507	\$28,489,779	\$28,704,346	\$28,920,834	\$29,139,260	To Tab 6
32	Total Revenue Requirement		\$21,966,277	\$23,254,061	\$22,923,279	\$24,867,777	\$25,446,871	\$26,046,526	\$26,290,097	\$26,964,774	\$26,491,604	\$27,019,610	\$27,682,746	
33	Transfer to/(from) Reserves		(\$7,598,702)	(\$6,512,817)	(\$2,195,216)	(\$2,314,051)	(\$1,133,653)	\$408,679	\$1,163,410	\$1,525,005	\$2,212,742	\$1,901,224	\$1,456,513	To Tab 4

	A	B	C	D	E	F	G	H	I	J	K	L	M
1		City of Monterey Park											
2		Water Rate Model											
3		3B - Rev at Current Rates											
4													
5													
6													
7		Water Meter Charge Revenue at Current Rates											
8		Meter Count by Size											
9		5/8" meters	1	1	1	1	1	1	1	1	1	1	1
10		3/4" meters	9,571	9,595	9,619	9,643	9,667	9,691	9,715	9,739	9,763	9,787	9,811
11		1" meters	2,445	2,451	2,457	2,463	2,469	2,475	2,481	2,487	2,493	2,499	2,505
12		1 1/2" meters	1,254	1,257	1,260	1,263	1,266	1,269	1,272	1,275	1,278	1,281	1,284
13		2" meters	450	451	452	453	454	455	456	457	458	459	460
14		3" meters	18	18	18	18	18	18	18	18	18	18	18
15		4" meters	25	25	25	25	25	25	25	25	25	25	25
16		6" meters	5	5	5	5	5	5	5	5	5	5	5
17		8" meters	1	1	1	1	1	1	1	1	1	1	1
18			13,770	13,804	13,838	13,872	13,906	13,940	13,974	14,008	14,042	14,076	14,110
19		Monthly Rate											
20		5/8" meters	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20
21		3/4" meters	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20	\$19.20
22		1" meters	\$20.75	\$20.75	\$20.75	\$20.75	\$20.75	\$20.75	\$20.75	\$20.75	\$20.75	\$20.75	\$20.75
23		1 1/2" meters	\$32.70	\$32.70	\$32.70	\$32.70	\$32.70	\$32.70	\$32.70	\$32.70	\$32.70	\$32.70	\$32.70
24		2" meters	\$42.15	\$42.15	\$42.15	\$42.15	\$42.15	\$42.15	\$42.15	\$42.15	\$42.15	\$42.15	\$42.15
25		3" meters	\$84.35	\$84.35	\$84.35	\$84.35	\$84.35	\$84.35	\$84.35	\$84.35	\$84.35	\$84.35	\$84.35
26		4" meters	\$139.55	\$139.55	\$139.55	\$139.55	\$139.55	\$139.55	\$139.55	\$139.55	\$139.55	\$139.55	\$139.55
27		6" meters	\$425.95	\$425.95	\$425.95	\$425.95	\$425.95	\$425.95	\$425.95	\$425.95	\$425.95	\$425.95	\$425.95
28		8" meters	\$1,065.30	\$1,065.30	\$1,065.30	\$1,065.30	\$1,065.30	\$1,065.30	\$1,065.30	\$1,065.30	\$1,065.30	\$1,065.30	\$1,065.30
29													
30		Annual Revenue											
31		5/8" meters	\$230	\$230	\$230	\$230	\$230	\$230	\$230	\$230	\$230	\$230	\$230
32		3/4" meters	\$2,205,158	\$2,210,688	\$2,216,218	\$2,221,747	\$2,227,277	\$2,232,806	\$2,238,336	\$2,243,866	\$2,249,395	\$2,254,925	\$2,260,454
33		1" meters	\$608,805	\$610,299	\$611,793	\$613,287	\$614,781	\$616,275	\$617,769	\$619,263	\$620,757	\$622,251	\$623,745
34		1 1/2" meters	\$492,070	\$493,247	\$494,424	\$495,601	\$496,778	\$497,955	\$499,133	\$500,310	\$501,487	\$502,664	\$503,842
35		2" meters	\$227,610	\$228,116	\$228,622	\$229,127	\$229,633	\$230,139	\$230,645	\$231,151	\$231,656	\$232,162	\$232,668
36		3" meters	\$18,220	\$18,220	\$18,220	\$18,220	\$18,220	\$18,220	\$18,220	\$18,220	\$18,220	\$18,220	\$18,220
37		4" meters	\$41,865	\$41,865	\$41,865	\$41,865	\$41,865	\$41,865	\$41,865	\$41,865	\$41,865	\$41,865	\$41,865
38		6" meters	\$25,557	\$25,557	\$25,557	\$25,557	\$25,557	\$25,557	\$25,557	\$25,557	\$25,557	\$25,557	\$25,557
39		8" meters	\$12,784	\$12,784	\$12,784	\$12,784	\$12,784	\$12,784	\$12,784	\$12,784	\$12,784	\$12,784	\$12,784
40		Total Service Charge Revenue	\$3,632,299	\$3,641,005	\$3,649,712	\$3,658,418	\$3,667,125	\$3,675,832	\$3,684,538	\$3,693,245	\$3,701,951	\$3,710,658	\$3,719,365
41													
42													
43		Total Water Meter Charge Revenue	\$3,632,299	\$3,641,005	\$3,649,712	\$3,658,418	\$3,667,125	\$3,675,832	\$3,684,538	\$3,693,245	\$3,701,951	\$3,710,658	\$3,719,365
44													
45													
46		Water Consumption Charge Revenue at Current Rates											
47		Single Family											
48		Tier 1 Usage	650,257	656,760	663,327	669,960	676,660	683,427	690,261	697,164	704,135	711,177	718,288
49		Tier 2 Usage	358,139	361,720	365,338	368,991	372,681	376,408	380,172	383,973	387,813	391,691	395,608
50		Tier 3 Usage	279,620	282,416	285,240	288,093	290,974	293,883	296,822	299,790	302,788	305,816	308,874
51													
52		Tier 1 Rate	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10	\$2.10
53		Tier 2 Rate	\$2.29	\$2.29	\$2.29	\$2.29	\$2.29	\$2.29	\$2.29	\$2.29	\$2.29	\$2.29	\$2.29
54		Tier 3 Rate	\$2.45	\$2.45	\$2.45	\$2.45	\$2.45	\$2.45	\$2.45	\$2.45	\$2.45	\$2.45	\$2.45
55													
56		Tier 1 Revenue	\$1,365,540	\$1,379,195	\$1,392,987	\$1,406,917	\$1,420,986	\$1,435,196	\$1,449,548	\$1,464,043	\$1,478,684	\$1,493,471	\$1,508,405
57		Tier 2 Revenue	\$820,138	\$828,340	\$836,623	\$844,989	\$853,439	\$861,974	\$870,593	\$879,299	\$888,092	\$896,973	\$905,943
58		Tier 3 Revenue	\$685,069	\$691,920	\$698,839	\$705,827	\$712,886	\$720,014	\$727,215	\$734,487	\$741,832	\$749,250	\$756,742
59		Residential Consumption Charge Revenue	\$2,870,747	\$2,899,454	\$2,928,449	\$2,957,734	\$2,987,311	\$3,017,184	\$3,047,356	\$3,077,829	\$3,108,608	\$3,139,694	\$3,171,091
60													
61		Non SFR											
62		Total Usage	1,685,411	1,702,265	1,719,288	1,736,481	1,753,845	1,771,384	1,789,098	1,806,989	1,825,059	1,843,309	1,861,742
63		Uniform Rate	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39	\$2.39
64		Institutional Consumption Charge Revenue	\$4,028,132	\$4,068,414	\$4,109,098	\$4,150,189	\$4,191,691	\$4,233,608	\$4,275,944	\$4,318,703	\$4,361,890	\$4,405,509	\$4,449,564
65													
66		Life Line Customer Discount											
67		Customer Discount	\$12.60	\$12.60	\$12.60	\$12.60	\$12.60	\$12.60	\$12.60	\$12.60	\$12.60	\$12.60	\$12.60
68		Number of Customers	746	746	746	746	746	746	746	746	746	746	746
69			\$112,795	\$112,795	\$112,795	\$112,795	\$112,795	\$112,795	\$112,795	\$112,795	\$112,795	\$112,795	\$112,795
70													
71		Revenue Recap											
72		Meter Charge Revenue	\$3,632,299	\$3,641,005	\$3,649,712	\$3,658,418	\$3,667,125	\$3,675,832	\$3,684,538	\$3,693,245	\$3,701,951	\$3,710,658	\$3,719,365
73		Consumption Revenue - Single Family	\$2,870,747	\$2,899,454	\$2,928,449	\$2,957,734	\$2,987,311	\$3,017,184	\$3,047,356	\$3,077,829	\$3,108,608	\$3,139,694	\$3,171,091
74		Consumption Revenue - Non SFR	\$4,028,132	\$4,068,414	\$4,109,098	\$4,150,189	\$4,191,691	\$4,233,608	\$4,275,944	\$4,318,703	\$4,361,890	\$4,405,509	\$4,449,564
75		Life Line Customer Discount	(\$112,795)	(\$112,795)	(\$112,795)	(\$112,795)	(\$112,795)	(\$112,795)	(\$112,795)	(\$112,795)	(\$112,795)	(\$112,795)	(\$112,795)
76		Water Treatment Charge Revenue - 37.5%	\$3,949,192	\$3,936,029	\$3,965,424	\$3,995,080	\$4,024,999	\$4,055,185	\$4,085,641	\$4,116,368	\$4,147,370	\$4,178,650	\$4,210,209
77			\$14,367,574	\$14,432,107	\$14,539,887	\$14,648,625	\$14,758,330	\$14,869,013	\$14,980,683	\$15,093,350	\$15,207,024	\$15,321,715	\$15,437,433
78		Annual Change	\$64,533	\$107,780	\$108,738	\$109,736	\$109,730	\$110,683	\$111,670	\$112,667	\$113,674	\$114,691	\$115,718
79		du to growth		0.4%	0.7%	0.7%	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%

	A	B	C	D	E	F	G	H	I	J	K	L	M
1		City of Monterey Park											
2		Water Rate Model											
3		3C - Rev at Proposed Rates											
4													
5			FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
6		Water Meter Charge Revenue at Current Rates											
7		Meter Count by Size											
8		5/8" meters	1	1	1	1	1	1	1	1	1	1	1
9		3/4" meters	9,571	9,595	9,619	9,643	9,667	9,691	9,715	9,739	9,763	9,787	9,811
10		1" meters	2,445	2,451	2,457	2,463	2,469	2,475	2,481	2,487	2,493	2,499	2,505
11		1 1/2" meters	1,254	1,257	1,260	1,263	1,266	1,269	1,272	1,275	1,278	1,281	1,284
12		2" meters	450	451	452	453	454	455	456	457	458	459	460
13		3" meters	18	18	18	18	18	18	18	18	18	18	18
14		4" meters	25	25	25	25	25	25	25	25	25	25	25
15		6" meters	5	5	5	5	5	5	5	5	5	5	5
16		8" meters	1	1	1	1	1	1	1	1	1	1	1
17			13,770	13,804	13,838	13,872	13,906	13,940	13,974	14,008	14,042	14,076	14,110
18													
19		Monthly Rate											
20		5/8" meters	\$15.27	\$20.16	\$21.77	\$23.51	\$25.16	\$27.17	\$27.99	\$28.83	\$28.83	\$28.83	\$28.83
21		3/4" meters	\$20.59	\$27.18	\$29.36	\$31.71	\$33.93	\$36.64	\$37.74	\$38.87	\$38.87	\$38.87	\$38.87
22		1" meters	\$31.24	\$41.23	\$44.53	\$48.10	\$51.46	\$55.58	\$57.25	\$58.96	\$58.96	\$58.96	\$58.96
23		1 1/2" meters	\$57.85	\$76.36	\$82.47	\$89.07	\$95.30	\$102.93	\$106.02	\$109.20	\$109.20	\$109.20	\$109.20
24		2" meters	\$89.78	\$118.52	\$128.00	\$138.24	\$147.91	\$159.75	\$164.54	\$169.47	\$169.47	\$169.47	\$169.47
25		3" meters	\$174.94	\$230.92	\$249.40	\$269.35	\$288.20	\$311.26	\$320.60	\$330.22	\$330.22	\$330.22	\$330.22
26		4" meters	\$270.75	\$357.38	\$385.98	\$416.85	\$446.03	\$481.72	\$496.17	\$511.05	\$511.05	\$511.05	\$511.05
27		6" meters	\$536.87	\$708.66	\$765.35	\$826.58	\$884.44	\$955.20	\$983.86	\$1,013.37	\$1,013.37	\$1,013.37	\$1,013.37
28		8" meters	\$856.21	\$1,130.20	\$1,220.61	\$1,318.26	\$1,410.54	\$1,523.38	\$1,569.08	\$1,616.15	\$1,616.15	\$1,616.15	\$1,616.15
29													
30		Annual Revenue											
31		5/8" meters	\$183	\$242	\$261	\$282	\$302	\$326	\$336	\$346	\$346	\$346	\$346
32		3/4" meters	\$2,365,203	\$3,129,896	\$3,388,743	\$3,668,974	\$3,935,573	\$4,260,971	\$4,399,670	\$4,542,855	\$4,554,050	\$4,565,245	\$4,576,440
33		1" meters	\$916,531	\$1,212,789	\$1,313,019	\$1,421,523	\$1,524,735	\$1,650,716	\$1,704,359	\$1,759,735	\$1,763,980	\$1,768,226	\$1,772,471
34		1 1/2" meters	\$870,530	\$1,151,848	\$1,246,965	\$1,349,929	\$1,447,855	\$1,567,389	\$1,618,227	\$1,670,705	\$1,674,636	\$1,678,567	\$1,682,498
35		2" meters	\$484,836	\$641,406	\$694,255	\$751,454	\$805,831	\$872,214	\$900,355	\$929,399	\$931,433	\$933,467	\$935,500
36		3" meters	\$37,788	\$49,880	\$53,870	\$58,180	\$62,252	\$67,232	\$69,249	\$71,327	\$71,327	\$71,327	\$71,327
37		4" meters	\$81,224	\$107,215	\$115,793	\$125,056	\$133,810	\$144,515	\$148,850	\$153,316	\$153,316	\$153,316	\$153,316
38		6" meters	\$32,212	\$42,520	\$45,921	\$49,595	\$53,067	\$57,312	\$59,031	\$60,802	\$60,802	\$60,802	\$60,802
39		8" meters	\$10,275	\$13,562	\$14,647	\$15,819	\$16,926	\$18,281	\$18,829	\$19,394	\$19,394	\$19,394	\$19,394
40		Total Service Charge Revenue	\$4,798,781	\$6,349,359	\$6,873,474	\$7,440,812	\$7,980,351	\$8,638,956	\$8,918,906	\$9,207,878	\$9,229,284	\$9,250,689	\$9,272,094
41													
42													
43		Total Water Meter Charge Revenue	\$4,798,781	\$6,349,359	\$6,873,474	\$7,440,812	\$7,980,351	\$8,638,956	\$8,918,906	\$9,207,878	\$9,229,284	\$9,250,689	\$9,272,094
44													
45			FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
46		Water Consumption Charge Revenue at Current Rates											
47		Single Family											
48		Tier 1 Usage	920,930	930,139	939,441	948,835	958,323	967,907	977,586	987,362	997,235	1,007,208	1,017,280
49		Tier 2 Usage	198,524	200,509	202,514	204,539	206,585	208,651	210,737	212,845	214,973	217,123	219,294
50		Tier 3 Usage	168,562	170,248	171,950	173,670	175,406	177,160	178,932	180,721	182,528	184,354	186,197
51													
52		Tier 1 Rate	\$2.59	\$3.41	\$3.69	\$3.98	\$4.26	\$4.60	\$4.74	\$4.88	\$4.88	\$4.88	\$4.88
53		Tier 2 Rate	\$3.41	\$4.50	\$4.86	\$5.24	\$5.61	\$6.06	\$6.24	\$6.43	\$6.43	\$6.43	\$6.43
54		Tier 3 Rate	\$6.45	\$8.51	\$9.19	\$9.92	\$10.62	\$11.47	\$11.81	\$12.17	\$12.17	\$12.17	\$12.17
55													
56		Tier 1 Revenue	\$2,382,481	\$3,176,324	\$3,464,735	\$3,779,332	\$4,084,325	\$4,455,181	\$4,634,725	\$4,821,504	\$4,869,720	\$4,918,417	\$4,967,601
57		Tier 2 Revenue	\$676,091	\$901,364	\$983,208	\$1,072,483	\$1,159,033	\$1,264,273	\$1,315,223	\$1,368,227	\$1,381,909	\$1,395,728	\$1,409,685
58		Tier 3 Revenue	\$1,086,396	\$1,448,383	\$1,579,896	\$1,723,351	\$1,862,425	\$2,031,533	\$2,113,404	\$2,198,574	\$2,220,560	\$2,242,765	\$2,265,193
59		Residential Consumption Charge Revenue	\$4,144,968	\$5,526,071	\$6,027,839	\$6,575,166	\$7,105,782	\$7,750,987	\$8,063,352	\$8,388,305	\$8,472,188	\$8,556,910	\$8,642,479
60													
61		Non SFR											
62		Total Usage	1,685,411	1,702,265	1,719,288	1,736,481	1,753,845	1,771,384	1,789,098	1,806,989	1,825,059	1,843,309	1,861,742
63		Uniform Rate	\$3.22	\$4.25	\$4.59	\$4.95	\$5.30	\$5.73	\$5.90	\$6.07	\$6.07	\$6.07	\$6.07
64		Institutional Consumption Charge Revenue	\$5,423,826	\$7,231,045	\$7,887,624	\$8,603,820	\$9,298,148	\$10,142,420	\$10,551,159	\$10,976,371	\$11,086,135	\$11,196,996	\$11,308,966
65													
66		Revenue Recap											
67		Meter Charge Revenue	\$4,798,781	\$6,349,359	\$6,873,474	\$7,440,812	\$7,980,351	\$8,638,956	\$8,918,906	\$9,207,878	\$9,229,284	\$9,250,689	\$9,272,094
68		Consumption Revenue - Single Family	\$4,144,968	\$5,526,071	\$6,027,839	\$6,575,166	\$7,105,782	\$7,750,987	\$8,063,352	\$8,388,305	\$8,472,188	\$8,556,910	\$8,642,479
69		Consumption Revenue - Non SFR	\$5,423,826	\$7,231,045	\$7,887,624	\$8,603,820	\$9,298,148	\$10,142,420	\$10,551,159	\$10,976,371	\$11,086,135	\$11,196,996	\$11,308,966
70			\$14,367,574	\$19,106,475	\$20,788,937	\$22,619,798	\$24,384,281	\$26,532,363	\$27,533,417	\$28,572,555	\$28,787,607	\$29,004,595	\$29,223,539
71		Annual Change		\$4,738,901	\$1,682,461	\$1,830,862	\$1,764,483	\$2,148,081	\$1,001,055	\$1,017,058	\$1,033,061	\$1,049,064	\$1,065,067
72				33.0%	8.8%	6 of 13 8.8%	7.8%	8.8%	3.8%	3.8%	3.8%	0.8%	0.8%

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	City of Monterey Park													
2	Water Rate Model													
3	4 - Reserves													
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
32														
33														
34														
35														
36														
37														
38														
39														
40														
41														
42														
43														
44														
45														
46														
47														
48														
49														
50														
51														
52														
53														
54														
55														
56														
57														

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		City of Monterey Park												
2		Water Rate Model												
3		5 - CIP												
4														
5														
6		Project Description	Budgeted											
7			FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	Project Costs
8		Water Master Plan	\$286,810	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$286,810
9		Groundwater Treatment System	\$105,541	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105,541
10		Groundwater Treatment System	\$2,140,237	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,140,237
11		Water Main Replacement - Northeast Phase 2	\$446,550	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$446,550
12		Mira Valle Water Project	\$0	\$1,080,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,080,000
13		Mpk Golf Course Water Main Extension	\$0	\$1,260,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,260,000
14		Russell Street Reservoir	\$0	\$2,400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,400,000
15		N. Atlantic Water Improvement	\$1,668,753	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,668,753
16		Plc Upgrade	\$387,341	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$387,341
17		Water Main Replacement - Northeast	\$112,491	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$112,491
18		Water Main Replacement - Northeast	\$2,437,305	\$2,400,000	\$2,700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,537,305
19		Water Meter Replacements	\$1,000,000	\$7,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,000,000
20		Monterey Pass Rd Water Main Improvements	\$6,500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,500,000
21		Public Works Vehicle (Water)	\$70,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70,000
22		Miscellaneous Projects	\$0	\$0	\$3,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$43,000,000
23		Subtotal, Projects	\$15,155,029	\$14,140,000	\$6,700,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$75,995,029
24		(Less) deferred projects	(\$10,419,406)	(\$4,740,000)	(\$1,132,129)	\$0	\$0	\$0						(\$16,291,535)
25		Net Projects to be funded	\$4,735,623	\$9,400,000	\$5,567,871	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$59,703,494
26		Debt Funded Projects												\$0
27		PAYGo Funded Project Costs	\$4,735,623	\$9,400,000	\$5,567,871	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$59,703,494

¹ Deferred projects will be completed in subsequent years and are included in the Miscellaneous projects line item in future years. The timing of which projects will be deferred is not yet known.

	Project	Allocation	Base	Maximum	Maximum	Customer
	Costs	Factor	Day	Day	Hour	Accounts
						Capacity
31	Water Master Plan	Accounts	\$0	\$0	\$0	\$286,810
32	Groundwater Treatment System	Base Day	\$105,541	\$0	\$0	\$0
33	Groundwater Treatment System	Base Day	\$2,140,237	\$0	\$0	\$0
34	Water Main Replacement - Northeast Phase 2	Capacity	\$0	\$0	\$0	\$446,550
35	Mira Valle Water Project	Max Day	\$675,000	\$405,000	\$0	\$0
36	Mpk Golf Course Water Main Extension	Capacity	\$0	\$0	\$0	\$1,260,000
37	Russell Street Reservoir	Max Hour	\$800,000	\$480,000	\$1,120,000	\$0
38	N. Atlantic Water Improvement	Max Day	\$1,042,971	\$625,783	\$0	\$0
39	Plc Upgrade	Max Day	\$242,088	\$145,253	\$0	\$0
40	Water Main Replacement - Northeast	Capacity	\$0	\$0	\$0	\$112,491
41	Water Main Replacement - Northeast	Capacity	\$0	\$0	\$0	\$7,537,305
42	Water Meter Replacements	Capacity	\$0	\$0	\$0	\$9,000,000
43	Monterey Pass Rd Water Main Improvements	Capacity	\$0	\$0	\$0	\$6,500,000
44	Public Works Vehicle (Water)	Base Day	\$70,000	\$0	\$0	\$0
45	Miscellaneous Projects	Capacity	\$0	\$0	\$0	\$18,000,000
46			\$5,075,837	\$1,656,035	\$1,120,000	\$286,810
47			10.0%	3.2%	2.2%	\$42,856,346

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	City of Monterey Park												
2	Water Rate Model												
3	6 - Debt												
4													
5		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	Notes
6	Siemens (85% to Water Enterprise)												
7	Principal	\$585,792	\$646,403	\$711,354	\$769,269	\$831,670	\$897,540	\$967,745	\$1,073,151	\$0	\$0	\$0	
8	Interest	\$175,407	\$158,448	\$139,595	\$119,072	\$96,881	\$72,907	\$47,043	\$18,689	\$0	\$0	\$0	
9	Total	\$761,199	\$804,851	\$850,949	\$888,341	\$928,551	\$970,446	\$1,014,788	\$1,091,840	\$0	\$0	\$0	
10													
11	Water Production - iBank												
12	Principal	\$77,933	\$77,933	\$77,933	\$77,933	\$77,933	\$77,933	\$77,933	\$77,933	\$77,933			
13	Interest	\$32,078	\$32,078	\$32,078	\$32,078	\$32,078	\$32,078	\$32,078	\$32,078	\$32,078			
14	Annual Fee	\$2,481	\$2,481	\$2,481	\$2,481	\$2,481	\$2,481	\$2,481	\$2,481	\$2,481			
15	Total	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$0	\$0	
16													
17	New Debt Service - San Gabriel Valley Water	\$0	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	
18	New Debt Service - FY 2024 Issuance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
19													
20	Total Debt Service	\$873,691	\$1,317,343	\$1,363,441	\$1,400,833	\$1,441,043	\$1,482,938	\$1,527,280	\$1,604,332	\$512,492	\$400,000	\$400,000	
21													
22	Debt Coverage Calculation												
23	Funds Available for Debt Service												
24	Rate revenue - Service Charges	\$14,367,574	\$16,741,245	\$20,728,063	\$22,553,726	\$24,313,218	\$26,455,205	\$27,453,507	\$28,489,779	\$28,704,346	\$28,920,834	\$29,139,260	From Tab 3
25	Non-Rate Revenue Income	\$703,000	\$1,606,090	\$1,609,273	\$112,551	\$115,927	\$119,405	\$122,987	\$126,677	\$130,477	\$134,392	\$138,423	From Tab 2
26	Interest income	\$93,919	\$60,477	\$36,834	\$29,741	\$28,687	\$26,668	\$26,827	\$32,246	\$39,828	\$48,236	\$55,210	From Tab 4
27	Total Funds Available	\$15,164,494	\$18,407,811	\$22,374,170	\$22,696,018	\$24,457,833	\$26,601,278	\$27,603,321	\$28,648,702	\$28,874,651	\$29,103,461	\$29,332,893	To below
28													
29	Expenses												
30	O&M	\$17,059,963	\$17,549,234	\$18,055,537	\$18,579,495	\$19,121,755	\$19,682,992	\$20,263,905	\$20,865,219	\$21,487,689	\$22,132,101	\$22,799,270	From Tab 2
31	Total Expenses	\$17,059,963	\$17,549,234	\$18,055,537	\$18,579,495	\$19,121,755	\$19,682,992	\$20,263,905	\$20,865,219	\$21,487,689	\$22,132,101	\$22,799,270	
32													
33	Net Revenue	(\$1,895,469)	\$858,577	\$4,318,633	\$4,116,523	\$5,336,078	\$6,918,286	\$7,339,416	\$7,783,483	\$7,386,962	\$6,971,360	\$6,533,624	Funds Available less Expenses
34													
35	New Debt Service - iBank Loan	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$0	\$0	From Row 15 above
36	New Debt Service - FY 2024 Issuance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	From Tab 6
37	Parity Debt Service	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$0	\$0	
38													
39	Parity Debt Coverage Ratio	(16.85)	7.63	38.39	36.59	47.44	61.50	65.24	69.19	65.67	N/A	N/A	
40													
41	Net Funds Available	(\$2,007,961)	\$746,085	\$4,206,141	\$4,004,031	\$5,223,586	\$6,805,794	\$7,226,924	\$7,670,991	\$7,274,470	\$6,971,360	\$6,533,624	
42	Subordinate Debt Service (Siemens, San Gabriel)	\$761,199	\$1,204,851	\$1,250,949	\$1,288,341	\$1,328,551	\$1,370,446	\$1,414,788	\$1,491,840	\$400,000	\$400,000	\$400,000	
43													
44	Subordinate Debt Coverage Ratio	(2.64)	0.62	3.36	3.11	3.93	4.97	5.11	5.14	18.19	17.43	16.33	
45													
46													
47		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	
48	Siemens	\$761,199	\$804,851	\$850,949	\$888,341	\$928,551	\$970,446	\$1,014,788	\$1,091,840	\$0	\$0	\$0	
49	I-Bank Loan	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$112,492	\$0	\$0	
50	San Gabriel Valley Water	\$0	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	
51		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
52	Total Debt Service	\$873,691	\$1,317,343	\$1,363,441	\$1,400,833	\$1,441,043	\$1,482,938	\$1,527,280	\$1,604,332	\$512,492	\$400,000	\$400,000	
53													

	A	B	C	D	E	F	G
1		City of Monterey Park					
2		Water Rate Model					
3		7 - Load Factors					
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							
61							
62							
63							
64							
65							
66							
67							
68							
69							
70							
71							
72							
73							
74							

Water Use (HCF)			
Month	Single Family	Non SFR	Total
July	7 111,263	101,220	212,483
August	8 100,092	165,673	265,765
September	9 123,960	114,947	238,907
October	10 109,491	188,910	298,401
November	11 121,901	121,769	243,670
December	12 98,760	172,122	270,882
January	1 124,475	113,299	237,774
February	2 86,707	156,439	243,146
March	3 103,705	115,329	219,034
April	4 96,273	157,128	253,401
May	5 118,702	112,633	231,335
June	6 92,687	165,942	258,629
Total	1,288,016	1,685,411	2,973,427

Levels of Demand			
	Base Day	Maximum Day	Maximum Hour
Demand by Customer Category			
Single Family Residential	3,529	5,646	10,586
All Other	4,618	7,388	13,853
Total	8,146	13,034	24,439
Ratio of Flows to Base Day			
Single Family Residential	1.00	1.60	3.00
All Other	1.00	1.60	3.00
Total	1.00	1.60	3.00
Level of Service	8,146	13,034	24,439
Base Day Demand	8,146	8,146	8,146
Ratio of Level of Service to Base Day	1.00	1.60	3.00

Base Day: Average of February and March Billed Usage Annualized
Maximum Day: Per 1-5 of 2012 Master Plan
Maximum Hour: Per 1-5 of 2012 Master Plan

Demand Service Levels					
Allocation Basis	Load Factors	Base Day	Maximum Day	Maximum Hour	Totals
Base Day	1.00	1.00			1.00
Allocation %		100%			100%
Maximum Day	1.60	1.00	0.60		1.60
Allocation %		63%	38%		100%
Maximum Hour	3.00	1.00	0.60	1.40	3.00
Allocation %		33%	20%	47%	100%

Flow per Customer (hcf per month)			
	Base Day	Maximum Day	Maximum Hour
Single Family			
hcf per day	3,529	5,646	10,586
hcf per month	105,864	169,383	
# of Accounts	10,768	10,768	
Average flow per Acct (hcf/mo)	10.0	16.0	17+
All Other			
hcf per day	4,618	7,388	13,853
hcf per month	138,527	221,643	
# of Accounts	3,002	3,002	
Average flow per Acct (hcf/mo)	46.0	74.0	74+
Combined			
hcf per day	8,146	13,034	24,439
hcf per month	244,391	391,026	
# of Accounts	13,770	13,770	
Average flow per Acct (hcf/mo)	18.0	28.0	28+

x 30 days
hcf per month ÷ Monthly bills

	A	B	C	D	E	F	G	H	I
1		City of Monterey Park							
2		Water Rate Model							
3		8 - Allocations							
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									
61									
62									
63									
64									
65									
66									
67									

	A	B	C	D	E	F	G	H
1	City of Monterey Park							
2	Water Rate Model							
3	9 - Consumption Charges							
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
29								
41								
46								
47								
48								
49								
50								
51								
52								
53								
54								
55								
56								
57								
58								
59								
60								
61								
62								
63								
64								
65								
66								
67								
68								
69								
70								
71								
72								
73								
74								
75								
76								
77								
78								
79								
80								
81								
82								
83								
84								
85								
86								
87								
88								
89								
90								
91								
92								
93								
94								
95								

Consumption Charge Cost-of-Service	Base Day	Max Day	Max Hour	Total
Operations & Maintenance	\$13,275,818	\$992,592	\$1,983,296	\$16,251,706
Capital Expenses (PayGo)	\$471,365	\$153,787	\$104,008	\$729,159
Non-Operating Revenue	(\$1,927)	(\$161)	(\$293)	(\$2,380)
Transfers to/(from) Reserves	(\$6,052,885)	(\$452,555)	(\$904,250)	(\$7,409,691)
Total Consumption Charge COS	\$7,692,370	\$693,662	\$1,182,761	\$9,568,794

Units of Service (hcf)	Base Day	Max Day	Max Hour
Single Family Residential	3,529	5,646	10,586
All Other	4,618	7,388	13,853
	8,146	13,034	24,439

Proportional Allocation Factors	Base Day	Max Day	Max Hour
Single Family Residential	43.32%	43.32%	43.32%
All Other	56.68%	56.68%	56.68%
	100.00%	100.00%	100.00%

Total COS - Residential	\$3,332,147	\$300,478	\$512,343	\$4,144,968
Total COS - All Other	\$4,360,223	\$393,185	\$670,418	\$5,423,826
Grand Total Consumption Charge COS	\$7,692,370	\$693,662	\$1,182,761	\$9,568,794
	\$0.00	\$0.00	\$0.00	\$0.00

Components of Rate Structure	Revenue at		Cost of Service		Difference	
	Current Rates	FY 2022-23	FY 2022-23	FY 2022-23	COS Minus Current	
Single Family Residential						
Consumption Charge Revenue	\$3,834,482	52%	\$4,144,968	57%	\$310,486	8.1%
Meter Charge Revenue	\$3,570,143	48%	\$3,094,356	43%	(\$475,787)	-13.3%
Subtotal - SFR	\$7,404,625	100%	\$7,239,324	100%	(\$165,301)	-2.2%
All Other						
Consumption Charge Revenue	\$5,538,682	80%	\$5,423,826	76%	(\$114,856)	-2.1%
Meter Charge Revenue	\$1,424,268	20%	\$1,704,424	24%	\$280,157	19.7%
Subtotal - All Other	\$6,962,950	100%	\$7,128,250	100%	\$165,301	2.4%
Total						
Consumption Charge Revenue	\$9,373,164	65%	\$9,568,794	67%	\$195,630	2.1%
Meter Charge Revenue	\$4,994,411	35%	\$4,798,781	33%	(\$195,630)	-3.9%
Total	\$14,367,574	100%	\$14,367,574	100%	(\$0)	0.0%

Residential ONLY				
Tiered Consumption Rates	Tier 1	Tier 2	Tier 3	Total
Demand Condition	Base Day	Max Day	Max Hour	
Tier Structure				
Volume per tier (hcf)	0 - 10 hcf	11 - 16 hcf	17+ hcf	
hcf by Tier	920,930	198,524	168,562	1,288,016
Cost of Service by Tier	\$3,332,147	\$300,478	\$512,343	\$4,144,968

Single Family COS per Unit	Base Day	Maximum Day	Maximum Hour	
	Tier 1	Tier 2	Tier 3	
Single Family COS - Consumption	\$3,332,147	\$300,478	\$512,343	\$4,144,968
Demand Per Tier				
Tier 1 (0 - 10 hcf)	920,930			
Tier 2 (11 - 16 hcf)	198,524	198,524		
Tier 3 (17+ hcf)	168,562	168,562	168,562	
Total hcf per Tier	1,288,016	367,086	168,562	
Cost-of-Service per Unit (hcf)	\$2.59	\$0.82	\$3.04	
Tier 1 (0 - 10 hcf)	\$2.59	\$2.59	\$2.59	
Tier 2 (11 - 16 hcf)		\$0.82	\$0.82	
Tier 3 (17+ hcf)			\$3.04	
Unit Cost per hcf (by Tier)	\$2.59	\$3.41	\$6.45	
<i>FY 2023-24 Rate Increase</i>	<i>32.0%</i>	<i>32.0%</i>	<i>32.0%</i>	
Proposed FY 2023-24 Rates	\$3.41	\$4.50	\$8.51	

1 City of Monterey Park
 2 Water Rate Model
 3 10 - Fixed Monthly Charges

6 Account and EMU Summary

Service Size	# of Accounts	Meter Ratings (gpm)	Capacity Multiplier	EMUs	
	a	b	c = b ÷ 30	a * c	
5/8"	1	20	0.67	1	Displacement Type
3/4"	9,571	30	1.00	9,571	Displacement Type
1"	2,445	50	1.67	4,075	Displacement Type
1.5"	1,254	100	3.33	4,180	Displacement Type
2"	450	160	5.33	2,400	Displacement Type
3"	18	320	10.67	192	Singlejet Type
4"	25	500	16.67	417	Singlejet Type
6"	5	1000	33.33	167	Singlejet Type
8"	1	1600	53.33	53	Compound Type, Class I
Total Accounts	13,770		Total EMUs	21,055	
Units Costs (from Figure 3-14)	\$764,453			\$4,034,328	
# of Accounts	13,770		# of EMUs	21,055	
Monthly Cost per Account	\$4.63		Monthly Cost per EMU	\$15.97	

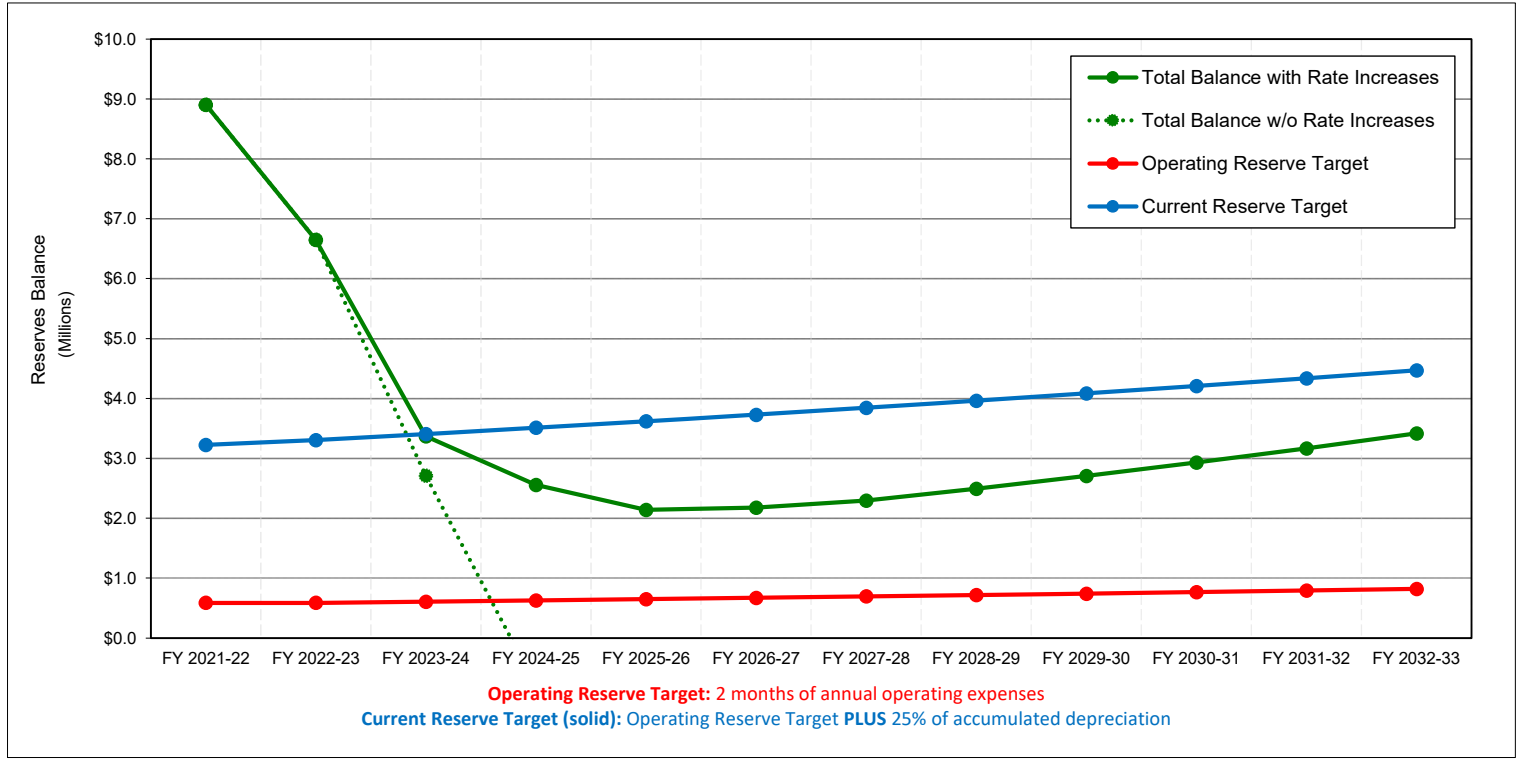
25 Based on AWWA gpm ratings

29 Service Charge Component Calculation

Service Size	% of Meters	Account Component (\$/mo.)	Capacity Component		COS Service Charges (\$/mo.)	FY 2023-24 Increase	Proposed Service Charges (\$/mo.)	Total		
			\$/EMU	Capacity Multiplier				Capacity Total	Current Charge	\$ Difference
		a	b	c	d = b * c	e = a + d	f	g = e * (1 + f)	h	i = e - h
5/8" meters	0.0%	\$4.63	\$15.97	0.67	\$10.64	\$15.27	32.0%	\$20.16	\$19.20	(\$3.93)
3/4" meters	69.5%	\$4.63	\$15.97	1.00	\$15.97	\$20.59	32.0%	\$27.18	\$19.20	\$1.39
1" meters	17.8%	\$4.63	\$15.97	1.67	\$26.61	\$31.24	32.0%	\$41.23	\$20.75	\$10.49
1 1/2" meters	9.1%	\$4.63	\$15.97	3.33	\$53.22	\$57.85	32.0%	\$76.36	\$32.70	\$25.15
2" meters	3.3%	\$4.63	\$15.97	5.33	\$85.16	\$89.78	32.0%	\$118.52	\$42.15	\$47.63
3" meters	0.1%	\$4.63	\$15.97	10.67	\$170.32	\$174.94	32.0%	\$230.92	\$84.35	\$90.59
4" meters	0.2%	\$4.63	\$15.97	16.67	\$266.12	\$270.75	32.0%	\$357.38	\$139.55	\$131.20
6" meters	0.0%	\$4.63	\$15.97	33.33	\$532.24	\$536.87	32.0%	\$708.66	\$425.95	\$110.92
8" meters	0.0%	\$4.63	\$15.97	53.33	\$851.58	\$856.21	32.0%	\$1,130.20	\$1,065.30	(\$209.09)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	City of Monterey Park													
2	Sewer Rate Model													
3	1A - Summary													
4														
5		Fiscal year	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	Notes
6		Eff. Date	7/1/2022	7/1/2023	7/1/2024	7/1/2025	7/1/2026	7/1/2027	7/1/2028	7/1/2029	7/1/2030	7/1/2031	7/1/2032	

8	Annual Rate Revenue Increases	0.0%	40.0%	30.0%	10.0%	10.0%	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%	To Tables 3, 4, 6
9	Cumulative Revenue Increases		40.0%	82.0%	100.2%	120.2%	129.0%	138.2%	145.3%	152.7%	160.3%	168.1%	



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		City of Monterey Park													
2		Sewer Rate Model													
3		1B - Assumptions													
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	City of Monterey Park													
2	Sewer Rate Model													
3	2 - Rev Reqmts													
4														
5	Object Description	Inflation Factor	Budgeted FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	Notes
6	Salaries & Benefits													
7	PERMANENT SALARIES	d	\$844,174	\$869,500	\$895,585	\$922,452	\$950,126	\$978,629	\$1,007,988	\$1,038,228	\$1,069,375	\$1,101,456	\$1,134,500	
8	PART TIME SALARIES	d	\$36,295	\$37,384	\$38,505	\$39,660	\$40,850	\$42,076	\$43,338	\$44,638	\$45,977	\$47,356	\$48,777	
9	OVERTIME SALARIES	d	\$12,075	\$12,437	\$12,810	\$13,195	\$13,591	\$13,998	\$14,418	\$14,851	\$15,296	\$15,755	\$16,228	
10	SEPARATION BENEFITS	e	\$29,847	\$31,339	\$32,906	\$34,552	\$36,279	\$38,093	\$39,998	\$41,998	\$44,098	\$46,303	\$48,618	
11	Medicare Insurance	e	\$11,845	\$12,437	\$13,059	\$13,712	\$14,398	\$15,117	\$15,873	\$16,667	\$17,500	\$18,375	\$19,294	
12	MEDICAL INSURANCE	e	\$166,162	\$174,470	\$183,193	\$192,353	\$201,971	\$212,069	\$222,673	\$233,806	\$245,497	\$257,772	\$270,660	
13	MEDICAL INS_RETIREES	e	\$58,800	\$61,740	\$64,827	\$68,068	\$71,472	\$75,045	\$78,798	\$82,738	\$86,874	\$91,218	\$95,779	
14	DENTAL INSURANCE	e	\$14,090	\$14,794	\$15,534	\$16,311	\$17,126	\$17,983	\$18,882	\$19,826	\$20,817	\$21,858	\$22,951	
15	VISION PLAN	e	\$4,227	\$4,438	\$4,660	\$4,893	\$5,138	\$5,395	\$5,665	\$5,948	\$6,245	\$6,557	\$6,885	
16	LONG TERM DISABILITY	e	\$4,675	\$4,908	\$5,154	\$5,411	\$5,682	\$5,966	\$6,264	\$6,578	\$6,906	\$7,252	\$7,614	
17	LIFE INSURANCE	e	\$3,778	\$3,967	\$4,165	\$4,374	\$4,592	\$4,822	\$5,063	\$5,316	\$5,582	\$5,861	\$6,154	
18	RETIREMENT	e	\$85,272	\$89,536	\$94,013	\$98,713	\$103,649	\$108,831	\$114,273	\$119,986	\$125,986	\$132,285	\$138,899	
19	PART TIME RETIREMENT	e	\$311	\$327	\$343	\$360	\$378	\$397	\$417	\$438	\$460	\$483	\$507	
20	CITY 401k Plan	e	\$11,483	\$12,057	\$12,660	\$13,293	\$13,958	\$14,656	\$15,388	\$16,158	\$16,966	\$17,814	\$18,705	
21	OPEB CHARGES	e	\$28,804	\$30,244	\$31,757	\$33,344	\$35,012	\$36,762	\$38,600	\$40,530	\$42,557	\$44,685	\$46,919	
22	PENSION CHARGES	e	\$114,952	\$120,700	\$126,735	\$133,072	\$139,725	\$146,711	\$154,047	\$161,749	\$169,837	\$178,329	\$187,245	
23	Worker's COMPENSATION CHARGES	e	\$104,379	\$109,598	\$115,077	\$120,831	\$126,873	\$133,217	\$139,877	\$146,871	\$154,215	\$161,926	\$170,022	
24			\$1,531,169	\$1,589,876	\$1,650,984	\$1,714,595	\$1,780,819	\$1,849,768	\$1,921,562	\$1,996,326	\$2,074,188	\$2,155,284	\$2,239,757	
25														
26														
27	OTHER PROFESSIONAL SERVICES	c	\$132,000	\$135,960	\$140,039	\$144,240	\$148,567	\$153,024	\$157,615	\$162,343	\$167,214	\$172,230	\$177,397	
28	DATA PROCESSING	c	\$21,141	\$21,775	\$22,428	\$23,101	\$23,794	\$24,508	\$25,243	\$26,001	\$26,781	\$27,584	\$28,412	
29	REPAIR AND MAINT MACHINERY	c	\$5,100	\$5,253	\$5,411	\$5,573	\$5,740	\$5,912	\$6,090	\$6,272	\$6,461	\$6,654	\$6,854	
30	EDUCATION_TRAINING COSTS	c	\$750	\$773	\$796	\$820	\$844	\$869	\$896	\$922	\$950	\$979	\$1,008	
31	TELEPHONE	f	\$675	\$702	\$731	\$760	\$791	\$822	\$856	\$890	\$926	\$963	\$1,002	
32	BARRICADES LIGHTS SIGNS	c	\$6,000	\$6,180	\$6,365	\$6,556	\$6,753	\$6,956	\$7,164	\$7,379	\$7,601	\$7,829	\$8,063	
33	EQUIPMENT SUPPLIES	c	\$18,000	\$18,540	\$19,096	\$19,669	\$20,259	\$20,867	\$21,493	\$22,138	\$22,802	\$23,486	\$24,190	
34	ADMIN OVERHEAD	c	\$419,080	\$431,652	\$444,601	\$457,939	\$471,678	\$485,828	\$500,403	\$515,415	\$530,877	\$546,804	\$563,208	
35	TECHNOLOGY CHARGES	c	\$29,645	\$30,534	\$31,450	\$32,394	\$33,366	\$34,367	\$35,398	\$36,460	\$37,553	\$38,680	\$39,840	
36	MOTOR POOL CHARGES	c	\$144,966	\$149,315	\$153,794	\$158,408	\$163,160	\$168,055	\$173,097	\$178,289	\$183,638	\$189,147	\$194,822	
37	GENERAL LIABILITY	c	\$878,906	\$905,273	\$932,432	\$960,405	\$989,217	\$1,018,893	\$1,049,460	\$1,080,944	\$1,113,372	\$1,146,773	\$1,181,177	
38	OTHER PAYMENTS	c	\$331,150	\$341,085	\$351,317	\$361,857	\$372,712	\$383,894	\$395,410	\$407,273	\$419,491	\$432,076	\$445,038	
39	Subtotal		\$1,987,412	\$2,047,042	\$2,108,460	\$2,171,722	\$2,236,881	\$2,303,996	\$2,373,124	\$2,444,326	\$2,517,665	\$2,593,205	\$2,671,011	
40														
41	Total Operations & Maintenance		\$3,518,581	\$3,636,918	\$3,759,444	\$3,886,316	\$4,017,700	\$4,153,764	\$4,294,686	\$4,440,652	\$4,591,853	\$4,748,489	\$4,910,768	
42				3.36%	3.37%	3.37%	3.38%	3.39%	3.39%	3.40%	3.40%	3.41%	3.42%	
43	Non-Operating Revenue													
44	SEWER RECONSTRUCTION FEE	c	(\$1,300)	(\$1,339)	(\$1,379)	(\$1,421)	(\$1,463)	(\$1,507)	(\$1,552)	(\$1,599)	(\$1,647)	(\$1,696)	(\$1,747)	
45	SALE OF SURPLUS PROPERTY	c	(\$100,000)	(\$103,000)	(\$106,090)	(\$109,273)	(\$112,551)	(\$115,927)	(\$119,405)	(\$122,987)	(\$126,677)	(\$130,477)	(\$134,392)	
46	Total Non-Rate Revenue		(\$101,300)	(\$104,339)	(\$107,469)	(\$110,693)	(\$114,014)	(\$117,434)	(\$120,957)	(\$124,586)	(\$128,324)	(\$132,174)	(\$136,139)	
47														
48	Subtotal		\$3,417,281	\$3,532,579	\$3,651,975	\$3,775,623	\$3,903,686	\$4,036,329	\$4,173,729	\$4,316,066	\$4,463,529	\$4,616,315	\$4,774,629	
49	Debt Service													
50	Interfund Loan		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
51	Total Debt Service		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
52	Transfers to/(from):													
53	Operating Reserves		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	From Table 4
54	Capital Reserves		\$2,781,278	\$3,220,893	\$3,368,838	\$3,467,208	\$3,568,450	\$3,672,649	\$3,779,890	\$3,779,890	\$3,779,890	\$3,779,890	\$3,779,890	From Table 4
55	Total Transfers		\$2,781,278	\$3,220,893	\$3,368,838	\$3,467,208	\$3,568,450	\$3,672,649	\$3,779,890	\$3,779,890	\$3,779,890	\$3,779,890	\$3,779,890	
56														
57	Total Revenue Requirement		\$6,198,560	\$6,753,472	\$7,020,812	\$7,242,831	\$7,472,136	\$7,708,978	\$7,953,619	\$8,095,956	\$8,243,419	\$8,396,206	\$8,554,519	To Table 3
58	Annual Change		0.0%	9.0%	4.0%	3.2%	3.2%	3.2%	3.2%	1.8%	1.8%	1.9%	1.9%	

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	City of Monterey Park													
2	Sewer Rate Model													
3	3A - Rev Increases													
4														
5	Months													
6	Increase													
7	In Effect													
8		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	Notes	
9	Sewer Rate Revenue at Current Rates	\$3,270,000	\$3,278,175	\$3,286,370	\$3,294,586	\$3,302,822	\$3,311,079	\$3,319,357	\$3,327,655	\$3,335,974	\$3,344,314	\$3,352,675	From Table 3b	
10	(including growth)													
11														
12														
13	Increase in Rate Revenue	0.0%	40.0%	30.0%	10.0%	10.0%	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%	From Table 1B	
14														
15														
16														
17														
18	Revenue from Rate Increases													
19	FY 2023-24 (eff. Jan 1, 2024)	6	\$655,635	\$1,314,548	\$1,317,834	\$1,321,129	\$1,324,432	\$1,327,743	\$1,331,062	\$1,334,390	\$1,337,726	\$1,341,070		
20	FY 2024-25 (eff. Jul 1, 2024)	12		\$1,380,275	\$1,383,726	\$1,387,185	\$1,390,653	\$1,394,130	\$1,397,615	\$1,401,109	\$1,404,612	\$1,408,124		
21	FY 2025-26 (eff. Jul 1, 2025)	12			\$599,615	\$601,114	\$602,616	\$604,123	\$605,633	\$607,147	\$608,665	\$610,187		
22	FY 2026-27 (eff. Jul 1, 2026)	12				\$661,225	\$662,878	\$664,535	\$666,197	\$667,862	\$669,532	\$671,206		
23	FY 2027-28 (eff. Jul 1, 2027)	12					\$291,666	\$292,396	\$293,126	\$293,859	\$294,594	\$295,330		
24	FY 2028-29 (eff. Jul 1, 2028)	12						\$304,091	\$304,852	\$305,614	\$306,378	\$307,144		
25	FY 2029-30 (eff. Jul 1, 2029)	12							\$237,784	\$238,379	\$238,975	\$239,572		
26	FY 2030-31 (eff. Jul 1, 2030)	12								\$245,530	\$246,144	\$246,759		
27	FY 2031-32 (eff. Jul 1, 2031)	12									\$253,528	\$254,162		
28	FY 2032-33 (eff. Jul 1, 2032)	12										\$261,787		
29														
30	Total Revenue from Rate Increases		\$0	\$655,635	\$2,694,823	\$3,301,175	\$3,970,653	\$4,272,246	\$4,587,018	\$4,836,269	\$5,093,890	\$5,360,152	\$5,635,340	
31	Total Current Revenue		\$3,270,000	\$3,278,175	\$3,286,370	\$3,294,586	\$3,302,822	\$3,311,079	\$3,319,357	\$3,327,655	\$3,335,974	\$3,344,314	\$3,352,675	From above
32	Total Revenue with Rate Increases		\$3,270,000	\$3,933,810	\$5,981,193	\$6,595,761	\$7,273,475	\$7,583,325	\$7,906,375	\$8,163,924	\$8,429,864	\$8,704,466	\$8,988,015	To Table 6
33	Total Revenue Requirement		\$6,198,560	\$6,753,472	\$7,020,812	\$7,242,831	\$7,472,136	\$7,708,978	\$7,953,619	\$8,095,956	\$8,243,419	\$8,396,206	\$8,554,519	From Table 2
34	Transfer to/(from) Reserves		(\$2,928,560)	(\$2,819,662)	(\$1,039,619)	(\$647,070)	(\$198,661)	(\$125,654)	(\$47,244)	\$67,968	\$186,444	\$308,261	\$433,496	To Table 4
35														
36	Transfer to/(from) Reserves w/o rate increas		(\$2,928,560)	(\$3,475,297)	(\$3,734,442)	(\$3,948,245)	(\$4,169,314)	(\$4,397,899)	(\$4,634,262)	(\$4,768,301)	(\$4,907,445)	(\$5,051,892)	(\$5,201,844)	To Table 4

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	City of Monterey Park													
2	Sewer Rate Model													
3	3B - Rev at Current Rates													
4														
5														
6	Sewer Service Charge Revenue at Current Rates													
7			FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
8	Meter Count by Size													
9	City Meter													
10	W- 3/4"		17	17	17	17	17	17	17	17	17	17	17	17
11	W- 1 1/2"		9	9	9	9	9	9	9	9	9	9	9	9
12	W- 1"		13	13	13	13	13	13	13	13	13	13	13	13
13	W- 2"		32	32	32	32	32	32	32	33	33	33	33	33
14	W- 3"		2	2	2	2	2	2	2	2	2	2	2	2
15	W-City Meters		4	4	4	4	4	4	4	4	4	4	4	4
16	W- 4"		4	4	4	4	4	4	4	4	4	4	4	4
17	Commercial													
18	F-2" Line		21	21	21	21	21	21	21	21	21	21	22	22
19	F-4" Line		72	72	72	73	73	73	73	73	73	74	74	74
20	F-6" Line		64	64	64	64	65	65	65	65	65	65	66	66
21	F-8" Line		39	39	39	39	39	39	40	40	40	40	40	40
22	W- 3/4" (categorized as Single-Family)		81	81	81	82	82	82	82	82	83	83	83	83
23	W- 3/4"		254	255	255	256	257	257	258	258	259	260	260	261
24	W- 1 1/2"		180	180	181	181	182	182	183	183	184	184	185	185
25	W- 1.5" Combo Meter (categorized as single-family)		1	1	1	1	1	1	1	1	1	1	1	1
26	W- 1"		212	213	213	214	214	215	215	216	216	217	217	218
27	W- 1" Combo Meter		3	3	3	3	3	3	3	3	3	3	3	3
28	W- 1" (categorized as single-family)		24	24	24	24	24	24	24	24	24	25	25	25
29	W- 1" Combo Meter (categorized as single-family)		16	16	16	16	16	16	16	16	16	16	16	16
30	W- 2"		155	155	156	156	157	157	157	158	158	159	159	159
31	W- 2" Combo Meter		1	1	1	1	1	1	1	1	1	1	1	1
32	W- 2" Combo Meter (categorized as single-family)		1	1	1	1	1	1	1	1	1	1	1	1
33	W- 3"		11	11	11	11	11	11	11	11	11	11	11	11
34	W- 4"		9	9	9	9	9	9	9	9	9	9	9	9
35	W- 6"		7	7	7	7	7	7	7	7	7	7	7	7
36	W-City Meters		1	1	1	1	1	1	1	1	1	1	1	1
37	xW- 1 1/4"		4	4	4	4	4	4	4	4	4	4	4	4
38	Institutional													
39	F-8" Line		1	1	1	1	1	1	1	1	1	1	1	1
40	W- 1 1/2"		1	1	1	1	1	1	1	1	1	1	1	1
41	W- 2"		3	3	3	3	3	3	3	3	3	3	3	3
42	W- 4"		3	3	3	3	3	3	3	3	3	3	3	3
43	W- 8"		1	1	1	1	1	1	1	1	1	1	1	1
44	Life Line													
45	F-2" Line		2	2	2	2	2	2	2	2	2	2	2	2
46	W- 3/4"		4	4	4	4	4	4	4	4	4	4	4	4
47	W- 3/4" SF		11	11	11	11	11	11	11	11	11	11	11	11
48	W-Lifeline 1"		25	25	25	25	25	25	25	25	26	26	26	26
49	W-Lifeline 1.5"		2	2	2	2	2	2	2	2	2	2	2	2
50	W-Lifeline 1.5" Combo		3	3	3	3	3	3	3	3	3	3	3	3
51	W-Lifeline 3/4"		414	415	416	417	418	419	420	421	422	423	424	426
52	W-Lifeline 1" (categorized as single-family)		2	2	2	2	2	2	2	2	2	2	2	2
53	W-Lifeline 3/4" (categorized as single-family)		20	20	20	20	20	20	20	20	20	20	21	21
54	Multi-Family W/O Trash													
55	W- 3/4"		2	2	2	2	2	2	2	2	2	2	2	2

A	B	C	D	E	F	G	H	I	J	K	L	M	N
56	W- 1"	16	16	16	16	16	16	16	16	16	16	16	16
57	W- 2"	1	1	1	1	1	1	1	1	1	1	1	1
58	Multiple Family												
59	F-2" Line	148	148	149	149	149	150	150	151	151	151	152	152
60	F-4" Line	28	28	28	28	28	28	28	28	29	29	29	29
61	F-6" Line	5	5	5	5	5	5	5	5	5	5	5	5
62	F-8" Line	3	3	3	3	3	3	3	3	3	3	3	3
63	W- 3/4"	380	381	382	383	384	385	386	387	388	389	390	391
64	W- 5/8"	1	1	1	1	1	1	1	1	1	1	1	1
65	W- 1 1/2"	396	397	398	399	400	401	402	403	404	405	406	407
66	W- 1"	523	524	526	527	528	530	531	532	534	535	536	538
67	W- 1" Combo Meter	1	1	1	1	1	1	1	1	1	1	1	1
68	W- 2"	147	147	148	148	148	149	149	150	150	150	151	151
69	W- 2" Combo Meter	1	1	1	1	1	1	1	1	1	1	1	1
70	W- 3"	2	2	2	2	2	2	2	2	2	2	2	2
71	W- 4"	10	10	10	10	10	10	10	10	10	10	10	10
72	xW- 1 1/4"	8	8	8	8	8	8	8	8	8	8	8	8
73	O-Business												
74	F-2" Line	1	1	1	1	1	1	1	1	1	1	1	1
75	F-4" Line	1	1	1	1	1	1	1	1	1	1	1	1
76	W- 2"	3	3	3	3	3	3	3	3	3	3	3	3
77	Single Family												
78	F-2" Line	24	24	24	24	24	24	24	24	24	25	25	25
79	F-4" Line	1	1	1	1	1	1	1	1	1	1	1	1
80	Sewer- SF 3/4"	2	2	2	2	2	2	2	2	2	2	2	2
81	W- 3/4" SF	8,129	8,149	8,170	8,190	8,211	8,231	8,252	8,272	8,293	8,314	8,335	8,355
82	W- 3/4" SF (Commercial)	1	1	1	1	1	1	1	1	1	1	1	1
83	W- 5/8" SF	14	14	14	14	14	14	14	14	14	14	14	14
84	W- 1 1/2"	5	5	5	5	5	5	5	5	5	5	5	5
85	W- 1 1/2" SF	60	60	60	60	61	61	61	61	61	61	62	62
86	W- 1" Combo Meter SF	428	429	430	431	432	433	434	436	437	438	439	440
87	W- 1" SF	1,329	1,332	1,336	1,339	1,342	1,346	1,349	1,352	1,356	1,359	1,363	1,366
88	W- 1.5" Combo Meter SF	7	7	7	7	7	7	7	7	7	7	7	7
89	W- 2" SF	9	9	9	9	9	9	9	9	9	9	9	9
90	W- 2" Combo Meter SF	26	26	26	26	26	26	26	26	27	27	27	27
91		13,441	13,475	13,508	13,542	13,576	13,610	13,644	13,678	13,712	13,746	13,781	13,815
92													
93		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
94	Monthly Rate												
95	City Meter												
96	W- 3/4"	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09
97	W- 1 1/2"	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41
98	W- 1"	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68
99	W- 2"	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97
100	W- 3"	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68
101	W-City Meters	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
102	W- 4"	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69
103	Commercial												
104	F-2" Line	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
105	F-4" Line	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
106	F-6" Line	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
107	F-8" Line												
108	W- 3/4" (Single-Family)	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09
109	W- 3/4"	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09	\$27.09
110	W- 1 1/2"	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41

A	B	C	D	E	F	G	H	I	J	K	L	M	N
111	W- 1.5" Combo Meter (single-family)	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41	\$78.41
112	W- 1"	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68
113	W- 1" Combo Meter	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68
114	W- 1" (single-family)	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68
115	W- 1" Combo Meter (single-family)	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68
116	W- 2"	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97
117	W- 2" Combo Meter	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97
118	W- 2" Combo Meter (single-family)	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97
119	W- 3"	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68	\$270.68
120	W- 4"	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69	\$386.69
121	W- 6"	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20
122	W-City Meters		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
123	xW- 1 1/4"	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68	\$40.68
124	Institutional												
125	F-8" Line	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
126	W- 1 1/2"	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48
127	W- 2"	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48	\$68.48
128	W- 4"	\$168.28	\$168.28	\$168.28	\$168.28	\$168.28	\$168.28	\$168.28	\$168.28	\$168.28	\$168.28	\$168.28	\$168.28
129	W- 8"	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20	\$1,052.20
130	Life Line												
131	F-2" Line	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
132	W- 3/4"	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
133	W- 3/4" SF		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
134	W-Lifeline 1"	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
135	W-Lifeline 1.5"	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
136	W-Lifeline 1.5" Combo	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
137	W-Lifeline 3/4"		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
138	W-Lifeline 1" (single-family)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
139	W-Lifeline 3/4" (single-family)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
140	Multi-Family W/O Trash												
141	W- 3/4"	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01
142	W- 1"	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76
143	W- 2"	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22
144	Multiple Family												
145	F-2" Line		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
146	F-4" Line		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
147	F-6" Line		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
148	F-8" Line		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
149	W- 3/4"	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01
150	W- 5/8"	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01	\$29.01
151	W- 1 1/2"	\$84.15	\$84.15	\$84.15	\$84.15	\$84.15	\$84.15	\$84.15	\$84.15	\$84.15	\$84.15	\$84.15	\$84.15
152	W- 1"	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76
153	W- 1" Combo Meter	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76	\$34.76
154	W- 2"	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22
155	W- 2" Combo Meter	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22	\$161.22
156	W- 3"	\$413.02	\$413.02	\$413.02	\$413.02	\$413.02	\$413.02	\$413.02	\$413.02	\$413.02	\$413.02	\$413.02	\$413.02
157	W- 4"	\$534.30	\$534.30	\$534.30	\$534.30	\$534.30	\$534.30	\$534.30	\$534.30	\$534.30	\$534.30	\$534.30	\$534.30
158	xW- 1 1/4"	\$57.25	\$57.25	\$57.25	\$57.25	\$57.25	\$57.25	\$57.25	\$57.25	\$57.25	\$57.25	\$57.25	\$57.25
159	O-Business												
160	F-2" Line		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
161	F-4" Line		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
162	W- 2"	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97	\$198.97
163	Single Family												
164	F-2" Line		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
165	F-4" Line		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

A	B	C	D	E	F	G	H	I	J	K	L	M	N
166	Sewer- SF 3/4"	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17
167	W- 3/4" SF	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17
168	W- 3/4" SF (Commercial)	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17
169	W- 5/8" SF	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17	\$10.17
170	W- 1 1/2"	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86
171	W- 1 1/2" SF	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86
172	W- 1" Combo Meter SF	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42
173	W- 1" SF	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42	\$12.42
174	W- 1.5" Combo Meter SF	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86
175	W- 2" SF	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86
176	W- 2" Combo Meter SF	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86	\$12.86
177													
178	Number of Bills Annually	12											
179													
180		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33
181	Annual Revenue												
182	City Meter												
183	W- 3/4"	\$5,526	\$5,540	\$5,554	\$5,568	\$5,582	\$5,596	\$5,610	\$5,624	\$5,638	\$5,652	\$5,666	\$5,680
184	W- 1 1/2"	\$8,468	\$8,489	\$8,511	\$8,532	\$8,553	\$8,575	\$8,596	\$8,618	\$8,639	\$8,661	\$8,682	\$8,704
185	W- 1"	\$6,346	\$6,362	\$6,378	\$6,394	\$6,410	\$6,426	\$6,442	\$6,458	\$6,474	\$6,490	\$6,507	\$6,523
186	W- 2"	\$76,404	\$76,595	\$76,787	\$76,979	\$77,171	\$77,364	\$77,558	\$77,752	\$77,946	\$78,141	\$78,336	\$78,532
187	W- 3"	\$6,496	\$6,513	\$6,529	\$6,545	\$6,562	\$6,578	\$6,594	\$6,611	\$6,627	\$6,644	\$6,661	\$6,677
188	W-City Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
189	W- 4"	\$18,561	\$18,608	\$18,654	\$18,701	\$18,747	\$18,794	\$18,841	\$18,888	\$18,936	\$18,983	\$19,030	\$19,078
190	Commercial	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
191	F-2" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
192	F-4" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
193	F-6" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
194	F-8" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
195	W- 3/4" (Single-Family)	\$26,331	\$26,397	\$26,463	\$26,529	\$26,596	\$26,662	\$26,729	\$26,796	\$26,863	\$26,930	\$26,997	\$27,065
196	W- 3/4"	\$82,570	\$82,777	\$82,984	\$83,191	\$83,399	\$83,608	\$83,817	\$84,026	\$84,236	\$84,447	\$84,658	\$84,870
197	W- 1 1/2"	\$169,366	\$169,789	\$170,213	\$170,639	\$171,066	\$171,493	\$171,922	\$172,352	\$172,783	\$173,215	\$173,648	\$174,082
198	W- 1.5" Combo Meter (single-family)	\$941	\$943	\$946	\$948	\$950	\$953	\$955	\$958	\$960	\$962	\$965	\$967
199	W- 1"	\$103,490	\$103,749	\$104,008	\$104,268	\$104,529	\$104,790	\$105,052	\$105,315	\$105,578	\$105,842	\$106,106	\$106,372
200	W- 1" Combo Meter	\$1,464	\$1,468	\$1,472	\$1,475	\$1,479	\$1,483	\$1,487	\$1,490	\$1,494	\$1,498	\$1,502	\$1,505
201	W- 1" (single-family)	\$11,716	\$11,745	\$11,774	\$11,804	\$11,833	\$11,863	\$11,893	\$11,922	\$11,952	\$11,982	\$12,012	\$12,042
202	W- 1" Combo Meter (single-family)	\$7,811	\$7,830	\$7,850	\$7,869	\$7,889	\$7,909	\$7,928	\$7,948	\$7,968	\$7,988	\$8,008	\$8,028
203	W- 2"	\$370,084	\$371,009	\$371,937	\$372,867	\$373,799	\$374,733	\$375,670	\$376,609	\$377,551	\$378,495	\$379,441	\$380,390
204	W- 2" Combo Meter	\$2,388	\$2,394	\$2,400	\$2,406	\$2,412	\$2,418	\$2,424	\$2,430	\$2,436	\$2,442	\$2,448	\$2,454
205	W- 2" Combo Meter (single-family)	\$2,388	\$2,394	\$2,400	\$2,406	\$2,412	\$2,418	\$2,424	\$2,430	\$2,436	\$2,442	\$2,448	\$2,454
206	W- 3"	\$35,730	\$35,819	\$35,909	\$35,998	\$36,088	\$36,179	\$36,269	\$36,360	\$36,451	\$36,542	\$36,633	\$36,725
207	W- 4"	\$41,763	\$41,867	\$41,972	\$42,077	\$42,182	\$42,287	\$42,393	\$42,499	\$42,605	\$42,712	\$42,818	\$42,925
208	W- 6"	\$88,385	\$88,606	\$88,827	\$89,049	\$89,272	\$89,495	\$89,719	\$89,943	\$90,168	\$90,393	\$90,619	\$90,846
209	W-City Meters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
210	xW- 1 1/4"	\$1,953	\$1,958	\$1,962	\$1,967	\$1,972	\$1,977	\$1,982	\$1,987	\$1,992	\$1,997	\$2,002	\$2,007
211	Institutional	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
212	F-8" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
213	W- 1 1/2"	\$822	\$824	\$826	\$828	\$830	\$832	\$834	\$836	\$838	\$840	\$843	\$845
214	W- 2"	\$2,465	\$2,471	\$2,478	\$2,484	\$2,490	\$2,496	\$2,502	\$2,509	\$2,515	\$2,521	\$2,528	\$2,534
215	W- 4"	\$6,058	\$6,073	\$6,088	\$6,104	\$6,119	\$6,134	\$6,150	\$6,165	\$6,180	\$6,196	\$6,211	\$6,227
216	W- 8"	\$12,626	\$12,658	\$12,690	\$12,721	\$12,753	\$12,785	\$12,817	\$12,849	\$12,881	\$12,913	\$12,946	\$12,978
217	Life Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
218	F-2" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
219	W- 3/4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
220	W- 3/4" SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

A	B	C	D	E	F	G	H	I	J	K	L	M	N
221	W-Lifeline 1"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
222	W-Lifeline 1.5"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
223	W-Lifeline 1.5" Combo	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
224	W-Lifeline 3/4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
225	W-Lifeline 1" (single-family)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
226	W-Lifeline 3/4" (single-family)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
227	Multi-Family W/O Trash												
228	W- 3/4"	\$696	\$698	\$700	\$701	\$703	\$705	\$707	\$709	\$710	\$712	\$714	\$716
229	W- 1"	\$6,674	\$6,691	\$6,707	\$6,724	\$6,741	\$6,758	\$6,775	\$6,792	\$6,809	\$6,826	\$6,843	\$6,860
230	W- 2"	\$1,935	\$1,939	\$1,944	\$1,949	\$1,954	\$1,959	\$1,964	\$1,969	\$1,974	\$1,979	\$1,984	\$1,989
231	Multiple Family												
232	F-2" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
233	F-4" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
234	F-6" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
235	F-8" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
236	W- 3/4"	\$132,286	\$132,616	\$132,948	\$133,280	\$133,613	\$133,947	\$134,282	\$134,618	\$134,955	\$135,292	\$135,630	\$135,969
237	W- 5/8"	\$348	\$349	\$350	\$351	\$352	\$353	\$354	\$355	\$356	\$357	\$358	\$359
238	W- 1 1/2"	\$399,881	\$400,881	\$401,883	\$402,887	\$403,895	\$404,904	\$405,917	\$406,931	\$407,949	\$408,969	\$409,991	\$411,016
239	W- 1"	\$218,154	\$218,699	\$219,246	\$219,794	\$220,343	\$220,894	\$221,447	\$222,000	\$222,555	\$223,112	\$223,669	\$224,229
240	W- 1" Combo Meter	\$417	\$418	\$419	\$420	\$421	\$422	\$423	\$424	\$426	\$427	\$428	\$429
241	W- 2"	\$284,392	\$285,103	\$285,816	\$286,530	\$287,247	\$287,965	\$288,685	\$289,406	\$290,130	\$290,855	\$291,582	\$292,311
242	W- 2" Combo Meter	\$1,935	\$1,939	\$1,944	\$1,949	\$1,954	\$1,959	\$1,964	\$1,969	\$1,974	\$1,979	\$1,984	\$1,989
243	W- 3"	\$9,912	\$9,937	\$9,962	\$9,987	\$10,012	\$10,037	\$10,062	\$10,087	\$10,112	\$10,138	\$10,163	\$10,189
244	W- 4"	\$64,116	\$64,276	\$64,437	\$64,598	\$64,760	\$64,921	\$65,084	\$65,246	\$65,410	\$65,573	\$65,737	\$65,901
245	xW- 1 1/4"	\$5,496	\$5,510	\$5,524	\$5,537	\$5,551	\$5,565	\$5,579	\$5,593	\$5,607	\$5,621	\$5,635	\$5,649
246	O-Business												
247	F-2" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
248	F-4" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
249	W- 2"	\$7,163	\$7,181	\$7,199	\$7,217	\$7,235	\$7,253	\$7,271	\$7,289	\$7,307	\$7,326	\$7,344	\$7,362
250	Single Family	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
251	F-2" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
252	F-4" Line	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
253	Sewer- SF 3/4"	\$244	\$245	\$245	\$246	\$247	\$247	\$248	\$248	\$249	\$250	\$250	\$251
254	W- 3/4" SF	\$992,063	\$994,543	\$997,030	\$999,522	\$1,002,021	\$1,004,526	\$1,007,037	\$1,009,555	\$1,012,079	\$1,014,609	\$1,017,146	\$1,019,688
255	W- 3/4" SF (Commercial)	\$122	\$122	\$123	\$123	\$123	\$124	\$124	\$124	\$125	\$125	\$125	\$125
256	W- 5/8" SF	\$1,709	\$1,713	\$1,717	\$1,721	\$1,726	\$1,730	\$1,734	\$1,739	\$1,743	\$1,747	\$1,752	\$1,756
257	W- 1 1/2"	\$772	\$774	\$775	\$777	\$779	\$781	\$783	\$785	\$787	\$789	\$791	\$793
258	W- 1 1/2" SF	\$9,259	\$9,282	\$9,306	\$9,329	\$9,352	\$9,376	\$9,399	\$9,422	\$9,446	\$9,470	\$9,493	\$9,517
259	W- 1" Combo Meter SF	\$63,789	\$63,949	\$64,108	\$64,269	\$64,429	\$64,590	\$64,752	\$64,914	\$65,076	\$65,239	\$65,402	\$65,565
260	W- 1" SF	\$198,074	\$198,569	\$199,066	\$199,563	\$200,062	\$200,562	\$201,064	\$201,567	\$202,070	\$202,576	\$203,082	\$203,590
261	W- 1.5" Combo Meter SF	\$1,080	\$1,083	\$1,086	\$1,088	\$1,091	\$1,094	\$1,097	\$1,099	\$1,102	\$1,105	\$1,108	\$1,110
262	W- 2" SF	\$1,389	\$1,392	\$1,396	\$1,399	\$1,403	\$1,406	\$1,410	\$1,413	\$1,417	\$1,420	\$1,424	\$1,428
263	W- 2" Combo Meter SF	\$4,012	\$4,022	\$4,032	\$4,042	\$4,053	\$4,063	\$4,073	\$4,083	\$4,093	\$4,104	\$4,114	\$4,124
264	Total Revenue	\$3,496,070	\$3,504,810	\$3,513,572	\$3,522,356	\$3,531,162	\$3,539,990	\$3,548,840	\$3,557,712	\$3,566,606	\$3,575,523	\$3,584,462	\$3,593,423

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	City of Monterey Park													
2	Sewer Rate Model													
3	4 - Reserves													
4														
5	Fiscal Year	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32	FY 2032-33	Notes
6														
7	Operating Reserve													
8	Beginning Balance		\$6,905,697	\$3,998,903	\$1,189,598	\$653,658	\$709,309	\$713,488	\$690,637	\$746,261	\$817,350	\$807,036	\$818,542	
9	Transfers													
10	(to/from) Operations		(\$2,928,560)	(\$2,819,662)	(\$1,039,619)	(\$647,070)	(\$198,661)	(\$125,654)	(\$47,244)	\$67,968	\$186,444	\$308,261	\$433,496	From Table 3
11	(to/from) Rev. Requirements													To Table 2
12	(to/from) Capital Reserve				\$500,000	\$700,000	\$200,000	\$100,000	\$100,000		(\$200,000)	(\$300,000)	(\$400,000)	To below
13														
14	Fund Subtotal		\$3,977,138	\$1,179,242	\$649,979	\$706,588	\$710,648	\$687,834	\$743,393	\$814,229	\$803,794	\$815,297	\$852,037	
15	Estimated Interest Earnings		\$21,766	\$10,356	\$3,679	\$2,720	\$2,840	\$2,803	\$2,868	\$3,121	\$3,242	\$3,245	\$3,341	Avg. Bal. * Table 1A assumption f.
16	Ending Balance with Rate Increase	\$6,905,697	\$3,998,903	\$1,189,598	\$653,658	\$709,309	\$713,488	\$690,637	\$746,261	\$817,350	\$807,036	\$815,542	\$855,379	Page 1 of FY 2021-22 Budget
17	Target Balance	\$586,430	\$586,430	\$606,153	\$626,574	\$647,719	\$669,617	\$692,294	\$715,781	\$740,109	\$765,309	\$791,415	\$818,461	2 months annual operating expenses
18	Fund Balance Compared to Target		682%	196%	104%	110%	107%	100%	104%	110%	105%	103%	105%	
19														
20														
21	Capital Reserve													
22	Beginning Balance		\$2,000,000	\$2,649,318	\$2,179,101	\$1,902,328	\$1,429,637	\$1,461,810	\$1,600,234	\$1,745,306	\$1,886,838	\$2,121,969	\$2,347,738	
23	(less) Capital Carryover		(\$898,975)	(\$898,975)										
24	Revenues													
25	(to)/from Rev. Requirements		\$2,781,278	\$3,220,893	\$3,368,838	\$3,467,208	\$3,568,450	\$3,672,649	\$3,779,890	\$3,779,890	\$3,779,890	\$3,779,890	\$3,779,890	
26	(to)/from Operating Fund		\$0	\$0	(\$500,000)	(\$700,000)	(\$200,000)	(\$100,000)	(\$100,000)	\$0	\$200,000	\$300,000	\$400,000	
27	Development Impact Fees		\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	
28	Cash Funded CIP Expenditures		(\$1,266,266)	(\$2,825,772)	(\$3,177,758)	(\$3,270,548)	(\$3,366,048)	(\$3,464,337)	(\$3,565,496)	(\$3,669,608)	(\$3,776,761)	(\$3,887,042)	(\$4,000,544)	From Table 5
29	Interfund Loan/(Payments)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
30	Fund Subtotal		\$2,640,038	\$2,169,464	\$1,894,181	\$1,422,987	\$1,456,039	\$1,594,122	\$1,738,628	\$1,879,588	\$2,113,967	\$2,338,817	\$2,551,085	
31	Estimated Interest Earnings		\$9,280	\$9,638	\$8,147	\$6,651	\$5,771	\$6,112	\$6,678	\$7,250	\$8,002	\$8,922	\$9,798	Avg. Bal. * Table 1A assumption f.
32	Ending Balance	\$2,000,000	\$2,649,318	\$2,179,101	\$1,902,328	\$1,429,637	\$1,461,810	\$1,600,234	\$1,745,306	\$1,886,838	\$2,121,969	\$2,347,738	\$2,560,882	Page 1 of FY 2021-22 Budget
33	Target Balance	\$2,637,460	\$2,716,584	\$2,798,082	\$2,882,024	\$2,968,485	\$3,057,539	\$3,149,265	\$3,243,743	\$3,341,056	\$3,441,287	\$3,544,526	\$3,650,862	25% of accumulated depreciation
34	Fund Balance Compared to Target		76%	98%	78%	66%	48%	48%	51%	54%	56%	62%	70%	
35														
36														
37														
38														
39	Operating Fund w/o Rate Increases													
40	Beginning Balance		\$6,905,697	\$3,998,903	\$532,652	(\$2,701,791)	(\$5,950,036)	(\$9,919,349)	(\$14,217,248)	(\$18,751,510)	(\$23,519,811)	(\$28,627,257)	(\$33,979,148)	
41	Transfers													
42	(to/from) Operations		(\$2,928,560)	(\$3,475,297)	(\$3,734,442)	(\$3,948,245)	(\$4,169,314)	(\$4,397,899)	(\$4,634,262)	(\$4,768,301)	(\$4,907,445)	(\$5,051,892)	(\$5,201,844)	
43	(to/from) Rev. Requirements		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
44	(to/from) Capital Reserve		\$0	\$0	\$500,000	\$700,000	\$200,000	\$100,000	\$100,000	\$0	(\$200,000)	(\$300,000)	(\$400,000)	
45	Fund Subtotal		\$3,977,138	\$523,607	(\$2,701,791)	(\$5,950,036)	(\$9,919,349)	(\$14,217,248)	(\$18,751,510)	(\$23,519,811)	(\$28,627,257)	(\$33,979,148)	(\$39,580,993)	
46	Estimated Interest Earnings		\$21,766	\$9,045	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
47	Ending Balance without Rate Increase	\$6,905,697	\$3,998,903	\$532,652	(\$2,701,791)	(\$5,950,036)	(\$9,919,349)	(\$14,217,248)	(\$18,751,510)	(\$23,519,811)	(\$28,627,257)	(\$33,979,148)	(\$39,580,993)	
48	Target Balance	\$586,430	\$586,430	\$606,153	\$626,574	\$647,719	\$669,617	\$692,294	\$715,781	\$740,109	\$765,309	\$791,415	\$818,461	
49	Fund Balance Compared to Target		1178%	682%	88%	-431%	-919%	-1481%	-2054%	-2620%	-3178%	-3741%	-4836%	
50														
51														
52	Reserve Funds Summary													
53	Total Balance with Rate Increases	\$8,905,697	\$6,648,221	\$3,368,699	\$2,555,986	\$2,138,946	\$2,175,298	\$2,290,871	\$2,491,567	\$2,704,187	\$2,929,005	\$3,166,280	\$3,416,261	To Table 1B Graph
54	Total Balance w/o Rate Increases	\$8,905,697	\$6,648,221	\$2,711,753	(\$799,463)	(\$4,520,398)	(\$8,457,539)	(\$12,617,014)	(\$17,006,204)	(\$21,632,974)	(\$26,505,288)	(\$31,631,410)	(\$37,020,111)	
55														
56	Operating Reserve Target	\$586,430	\$586,430	\$606,153	\$626,574	\$647,719	\$669,617	\$692,294	\$715,781	\$740,109	\$765,309	\$791,415	\$818,461	To Table 1B Graph
57	Capital Reserve Target	\$2,637,460	\$2,716,584	\$2,798,082	\$2,882,024	\$2,968,485	\$3,057,539	\$3,149,265	\$3,243,743	\$3,341,056	\$3,441,287	\$3,544,526	\$3,650,862	25% of accumulated depreciation
58	Current Reserve Target	\$3,223,890	\$3,303,014	\$3,404,235	\$3,508,598	\$3,616,204	\$3,727,156	\$3,841,559	\$3,959,524	\$4,081,164	\$4,206,596	\$4,335,941	\$4,469,323	To Table 1B Graph

A	B	C	D	E	F	G	H	N
1	City of Monterey Park							
2	Sewer Rate Model							
3	5 - CIP							
4								
5								
6	Project Description	Budgeted FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	6-Year Project Costs FY 2023 through FY 2028
7	1 Update Emergency Overflow Response Plan	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
8	2 Allowance for Regular Hot Spot Maintenance	\$230,000	\$230,000	\$230,000	\$230,000	\$230,000	\$230,000	\$1,380,000
9	3 Pipe Replacement - Grandridge from alley E/O Isabella to Arlight	\$0	\$333,600	\$0	\$0	\$0	\$0	\$333,600
10	4 Upgrade Field Equipment(CCTV)	\$38,168	\$0	\$0	\$0	\$0	\$0	\$38,168
11	5 Staff Training	\$11,500	\$11,500	\$11,500	\$11,500	\$11,500	\$11,500	\$69,000
12	6 Annual Allowance for Pipeline Repairs found by CCTV work	\$400,000	\$620,000	\$1,100,000	\$1,200,000	\$1,200,000	\$1,200,000	\$5,720,000
13	7 Pipeline Replacement - Easement from Cipriano to Alley West of El Mercado, Alley from Easement to El Portal	\$0	\$0	\$0	\$247,900	\$0	\$0	\$247,900
14	8 Geographic Positioning Survey to Inventory Sewer System	\$0	\$0	\$0	\$115,000	\$0	\$0	\$115,000
15	9 Pipeline Replacement - Briarcliff Way	\$0	\$67,000	\$0	\$0	\$0	\$0	\$67,000
16	10 Pipeline Replacement - Alpine Terrace	\$0	\$96,700	\$0	\$0	\$0	\$0	\$96,700
17	11 Annual CCTV Videotaping	\$221,800	\$221,800	\$221,800	\$221,800	\$221,800	\$221,800	\$1,330,800
18	12 Cured-in-Place Pipe Relining - Various Locations	\$887,000	\$600,000	\$950,000	\$1,200,000	\$1,200,000	\$1,200,000	\$6,037,000
19	13 Pipeline Replacement - Chandler from Harding to 300' north	\$160,000	\$0	\$0	\$0	\$0	\$0	\$160,000
20	14 Utility Rate Study	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21	15 Pipeline Replacement - Gladys from Emersone to End	\$310,000	\$0	\$0	\$0	\$0	\$0	\$310,000
22	16 Spot Repairs - Various Locations	\$1,282,000	\$450,000	\$500,000	\$300,000	\$300,000	\$300,000	\$3,132,000
23	17 Develop Sewer Atlas Map Book	\$0	\$115,000	\$0	\$0	\$0	\$0	\$115,000
24	18 Emerson Ave Parallel Pipeline	\$615,000	\$0	\$0	\$0	\$0	\$0	\$615,000
25	19 Emerson Ave Pipeline Relining	\$245,000	\$0	\$0	\$0	\$0	\$0	\$245,000
26	20 Vac Truck purchase	\$555,000	\$0	\$0	\$0	\$0	\$0	\$555,000
27	21 Sewer Master Plan (Fund 411 and 419)	\$221,177	\$0	\$0	\$0	\$0	\$0	\$221,177
28	22 N. Atlantic Sewer Improvement	\$538,533	\$0	\$0	\$0	\$0	\$0	\$538,533
29	23 Sewer Repairs and Pipe Relining	\$609,325	\$0	\$0	\$0	\$0	\$0	\$609,325
30	24 Miscellaneous Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0
31	25 Subtotal, Projects	\$6,374,503	\$2,745,600	\$3,013,300	\$3,526,200	\$3,163,300	\$3,163,300	\$21,986,203
32	26 (Less) deferred projects ¹	(\$5,108,237)	\$0	(\$13,300)	(\$526,200)	(\$163,300)	(\$163,300)	(\$5,974,337)
33	Total Projects	\$1,266,266	\$2,745,600	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$16,011,866
34	ENR Multiplier	1.000	1.029	1.059	1.090	1.122	1.155	
35	Project Costs Escalated	\$1,266,266	\$2,825,772	\$3,177,758	\$3,270,548	\$3,366,048	\$3,464,337	\$36,270,180
36	¹ Deferred projects will be completed in subsequent years and are included in the Miscellaneous projects line item in future years. The timing of which projects will be deferred is not yet known.							

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1		City of Monterey Park																
2		Sewer Rate Model																
3		7 - Customer Data																
4																		
5		Customer Class	Accounts															
6		Single Family	10,615															
7		Multi Family	1,487															
8		Commercial	828															
9		Institutional	79															
10		Not Sewered	109															
11			13,118															
12																		
13		Customer Class Consumption	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	FY 2020-21 Total	% of Total	Winter Water Use	Annualized
14		Single Family	111,263	100,092	123,960	109,491	121,901	98,760	124,475	86,707	103,705	96,273	118,702	92,687	1,288,016	43.3%	190,412	1,142,472
15		Multi Family	70,203	78,804	77,483	88,813	82,654	81,421	77,746	79,540	75,293	76,231	74,575	71,401	934,164	31.4%	154,833	928,998
16		Commercial	20,882	69,026	25,782	80,125	28,620	69,930	26,292	60,990	25,064	66,253	29,052	72,421	574,437	19.3%	86,054	516,324
17		Institutional	6,910	5,682	7,364	6,136	6,343	9,279	5,145	7,790	13,117	6,698	6,442	11,175	93,081	3.1%	20,907	125,442
18		Not Sewered	3,225	12,161	4,318	13,836	4,152	11,492	3,116	8,119	1,855	7,946	2,564	10,945	83,729	2.8%	9,974	59,844
19		Total	212,483	265,765	238,907	298,401	243,670	270,882	237,774	243,146	219,034	253,401	231,335	258,629	2,973,427	100.0%	462,180	2,773,080

	A	B	C	D	E	F	G
1	City of Monterey Park						
2	Sewer Rate Model						
3	8 - COS - Allocations						
4							
5							
6							
7	Revenue Requirement Allocation		Rev Req't	Allocation	Cost Allocation		
8			FY 2022-23	Type	Accounts	Flow	Total
9	Operations & Maintenance						
10	Revenue Collection		\$186,696	Accounts	\$186,696	\$0	\$186,696
11	Building & Safety		\$213,808	Accounts	\$213,808	\$0	\$213,808
12	Sanitary Sewer Maintenance		\$2,465,532	Conveyance	\$0	\$2,465,532	\$2,465,532
13	Maintenance		\$86,025	Accounts	\$86,025	\$0	\$86,025
14	Engineering		\$474,969	Accounts	\$474,969	\$0	\$474,969
15	Post Employment		\$66,929	Accounts	\$66,929	\$0	\$66,929
16	Storm Drain Maintenance		\$24,622	Conveyance	\$0	\$24,622	\$24,622
17	Non Operating Revenue		(\$101,300)	Accounts	(\$101,300)	\$0	(\$101,300)
18	Total O&M		\$3,417,281		\$927,128	\$2,490,153	\$3,417,281
19	<i>O&M Composite</i>		<i>100%</i>		<i>27%</i>	<i>73%</i>	<i>100%</i>
20	Capital Improvements		\$2,781,278	<i>Conveyance</i>	\$0	\$2,781,278	\$2,781,278
21							
22	Total Revenue Requirement		\$6,198,560		\$927,128	\$5,271,432	\$6,198,560
23	<i>Rev. Req. Composite</i>		<i>100%</i>		<i>15%</i>	<i>85%</i>	<i>100%</i>
24							
25	Transfer from Operating Reserves		(\$2,928,560)	<i>Rev. Req. Composite</i>	(\$438,029)	(\$2,490,531)	(\$2,928,560)
26							
27	Net Revenue Requirement		\$3,270,000		\$489,099	\$2,780,901	\$3,270,000
28							
29							
30							
31							
32							
33							
34							
35							
36							

Cost Allocation Factors	Total	Accounts	Flow	Total
Conveyance	100%	0%	100%	100%
Accounts	100%	100%	0%	100%
Rev. Req. Composite	100%	15%	85%	100%

	A	B	C	D	E	F	G	H	I
1	City of Monterey Park								
2	Sewer Rate Model								
3	9 - COS - Rate Calcs								
4									
5									
6									
7	Units of Service by Customer Class			Accounts	Flow (HCF)	Total			
8		Single Family (accounts/flow)	a	10,615	1,142,472				
9		Multi Family (dwelling units/flow)	b	8,630	928,998				
10		Commercial & Institutional (accounts/flow)	c	907	641,766				
11			d = a+b+c	20,152	2,713,236				
12									
13	Functional Costs [1]								
14		Operations & Maintenance		\$927,128	\$2,490,153	\$3,417,281			
15		Capital Improvements		\$0	\$2,781,278	\$2,781,278			
16		Transfers		(\$438,029)	(\$2,490,531)	(\$2,928,560)			
17			e	\$489,099	\$2,780,901	\$3,270,000			
18	Unit Cost Calculations								
19		Units of Service Total	f = d	20,152	2,713,236				
20	Unit Cost of Service			g = e ÷ f	\$24.27	\$1.02			
21				per account/ dwelling unit	per HCF				
22									
23	Cost of Service by Customer Class								
24		Single Family	h = a * g	\$257,631	\$1,170,964	\$1,428,595			
25		Multi Family	i = b * g	\$209,454	\$952,166	\$1,161,620			
26		Commercial & Institutional	j = c * g	\$22,013	\$657,771	\$679,784			
27				\$489,099	\$2,780,901	\$3,270,000	\$4,578,000		
28				15%	85%	100%			
29									
30	Reallocation between Fixed/Variable								
31		Single Family		\$1,428,595	\$1,428,595				
32		Multi Family		\$1,161,620	\$1,161,620				
33		C&I		\$679,784	\$679,784				
34		Total		\$3,270,000	\$3,270,000				
35									
36	Percent Allocation			Fixed Portion	Variable Portion				
37		Single Family		100%	0%				
38		Multi Family		100%	0%				
39		C&I		100%	0%				
40									
41	Reallocated Costs			Fixed Cost	Variable Cost				
42		Single Family		\$1,428,595	\$0				
43		Multi Family		\$1,161,620	\$0				
44		C&I		\$679,784	\$0				
45				\$3,270,000	\$0				
46									
47									

	A	B	C	D	E	F	G	H	I
48		Unit Cost by Customer Class							
49		Customer Class		Total Costs¹	Variable Costs				
50		Single Family		\$1,428,595	\$0				
51		Multi Family		\$1,161,620	\$0				
52		C&I		\$679,784	\$0				
53		Total		\$3,270,000	\$0				
54									
55		Customer Class		Units	HCF				
56		Single Family (accounts)		10,615	1,142,472				
57		Multi Family (dwelling units)		8,630	928,998				
58		C&I (EMUs)		2,898	641,766				
59									
60		Unit Costs		Annual Cost per U	per HCF				
61		Single Family		\$134.58	\$0.00				
62		Multi Family		\$134.60	\$0.00				
63		C&I		\$234.57	\$0.00				
64									
65									
66		Commercial & Industrial by Meter Size							
67		C&I Meter Size	Capacity Multiplier	Rate per EMU¹	FY 2022-23 Annual Cost	FY 2022-23 Cost per Month	Rate Revenue Increase²	FY 2023-24 Proposed Rate	
68		3/4" Meters	1.00	\$234.57	\$234.57	\$19.55	40.0%	\$27.37	
69		1" Meters	1.67	\$234.57	\$390.95	\$32.58	40.0%	\$45.61	
70		1.5" Meters	3.33	\$234.57	\$781.90	\$65.16	40.0%	\$91.22	
71		2" Meters	5.33	\$234.57	\$1,251.04	\$104.25	40.0%	\$145.95	
72		3" Meters	10.67	\$234.57	\$2,502.08	\$208.51	40.0%	\$291.91	
73		4" Meters	16.67	\$234.57	\$3,909.50	\$325.79	40.0%	\$456.11	
74		6" Meters	33.33	\$234.57	\$7,819.01	\$651.58	40.0%	\$912.21	
75		8" Meters	53.33	\$234.57	\$12,510.41	\$1,042.53	40.0%	\$1,459.54	
76									
77									
78		Customer Type	FY 2023-24 Annual Cost per Unit¹	FY 2022-23 Cost per Month	Rate Revenue Increase²	FY 2023-24 Proposed Rate			
79		Single Family	\$134.58	\$11.22	40.0%	\$15.70			
80		Multi Family	\$134.60	\$11.22	40.0%	\$15.70			
81									
82									